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# Teacher Workload Research Report 2024

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1	Introduction	5
2	Background - teacher workload in context	6
2.1	Introduction	6
2.2	Teachers' working time	6
2.3	Teacher and support staff numbers	8
2.4	Professional capacity	9
2.5	Diverse learner needs	9
2.6	Behaviour	10
2.7	Unproductive workload	11
2.8	Summary	11
3	Research literature – scoping review	13
3.1	Introduction	13
3.2	Approaches to workload research	13
3.3	Workload intensification & time poverty	14
3.4	Summary	15
4	Research approach	16
4.1	Methods	16
4.2	Sample	17
4.3	Analysis	18
4.4	Limitations	18
5	Findings	19
5.1	Work within contracted hours	19
5	.1.1 Face-to-face teaching activities	20
5	.1.2 Preparation and Administration	23
5	.1.3 Student wellbeing responsibilities	29
5	.1.4 Other activities outside class contact	31
5.2	Working time outside contracted hours	33
5	.2.1 Morning and evening	34
5	.2.2 Weekend	37
5.3	Teacher responses to perceived stress scale	41
5.4	Job satisfaction & career intentions	42
6	Conclusion	45
Apper	dix 1: Participant characteristics	49
Apper	dix 2: Time use diary & survey	55
Apper	dix 3: Interview topic guide	79
Refere	ences	80
Techn	ical Annex	87

# List of tables

Table 1: Number of hours spent on overall face-to-face teaching	. 20
Table 2: Pairwise comparison on overall face-to-face contact hours differences	. 20
Table 3: Number of hours spent on overall preparation and admin tasks within contracted	J
time	. 24
Table 4: Pairwise comparison on overall preparation contact hours differences	. 25
Table 5: Number of hours spent on wellbeing tasks overall within contract time	
Table 6: Pairwise comparison on overall wellbeing contact hours differences	
Table 7: Activities outside lessons by role.	
Table 8: Pairwise comparison on overall activities outside school contact hours difference	
Table 6. Fall who companion on everall activities satisfact contest contact hours amoretice	. 32
Table 9: Percentage of total number of hours spent in the morning & evening outside	. 02
contracted hours.	34
Table 10: Overall number of hours spent in the weekend outside contracted hours	
Table 11: Regression model Perceived Stress	
Table 12: Correlations between the number of hours spent on different tasks and job	. 42
	. 42
Table 13: Total number of survey respondents by school position	
Table 14: Survey respondents by sector	
Table 15: Previous experience: number of schools	
Table 16: Primary teacher respondents by year group	
Table 17: Secondary respondents by subject(s) taught	
Table 18: Location of school settings of survey respondents	
Table 19: Survey respondents by local authority	
Table 20: Interview sample by role and sector.	
Table 21: Number of hours spent on overall face-to-face teaching for collapsed positions.	
Table 22: Pairwise comparison on overall face-to-face contact hours differences collapse	
	. 87
Table 23: Number of hours spent on overall preparation and admin tasks within contracte	
	. 87
Table 24: Pairwise comparison on overall preparation contact hours differences by collap	
<u> </u>	. 87
Table 25: Number of hours spent on overall wellbeing contract hours by collapsed positio	n88
Table 26: Pairwise comparison on overall wellbeing contract hours by collapsed position.	. 88
Table 27: Number of hours spent on other activities outside class contact by collapsed	
position	. 88
Table 28: Pairwise comparison on overall other activities contact hours differences	. 88
Table 29: Mean, median and standard deviation values for overtime working by contract.	. 96
Table 30: Predictors of year long workload	
Table 31: Pairwise comparison on overall face-to-face contact hours differences, restricte	
Table 32: Pairwise comparison on overall preparation contact hours differences, restricted	
Table 33: Pairwise comparison on overall wellbeing contact hours differences, restricted.	. 98
Table 34: Pairwise comparison on overall activities outside class-contact hours difference	
restricted	
Table 35: Regression model Perceived Stress	. 99

# List of figures

Figure 1: The research process	17
Figure 2: Number of hours face-to-face teaching activity spent by category and teacher ro	ole
	21
Figure 3: Percentage of time spent in face-to-face teaching by category and role	
Figure 4: Number of hours on preparation & administration outside class activity by categ	jory
& role	24
Figure 5: Percentage time on preparation & administration outside class by category & ro	ole
Figure 6: Number of hours spent on pupil wellbeing by category and role	
Figure 7: Percentage of hours spent on pupil wellbeing by category and role	
Figure 8: Percentage time spent on pupil wellbeing activities by sector	
Figure 9: Percentage of activity outside class contact by role	
Figure 10: Mean values for the number of hours worked in mornings and evenings	
Figure 11: Mean number of hours for mornings & evenings by time use category and role	
Figure 12: Mean number of hours worked beyond contracted hours at the weekend	
Figure 13: Mean hours spent at weekend by category and teacher role	
Figure 14: Mean age of survey participants by gender	
Figure 15: Mean age of survey participants by ethnicity	49
Figure 16: Median values for hours worked outside contracted hours during the working	00
week	89
Figure 17: Mean value for hours worked outside contracted hours during the working wee	
Figure 40. Madian name and bases and at the considered	
Figure 18: Median number of hours worked at the weekend	
Figure 19: Mean number of hours worked at the weekend	
Figure 20: Percentage hours spent on tasks in the morning and evening outside contractor	
hours by category and sector	91
Figure 21: Percentage hours spent on tasks at weekend outside contracted hours by	വാ
category and sector	
Figure 22: Percentage hours spent on tasks in the morning and evening outside contract hours by category and contract type	ea 94
Figure 23: Percentage hours spent on tasks in the weekend outside contracted hours by	-
category and contract type	95
category and contract type	55

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### **Acronyms and abbreviations**

ASL Additional support for learning
ASN Additional support needs
CfE Curriculum for Excellence

CPD Continuing professional development
EBSNA Emotionally based school non-attendance

EIS Educational Institute of Scotland

FTE Full time equivalent

GTCS General Teaching Council for Scotland

IT Information technology ITE Initial Teacher Education

LA Local authority

OECD Organisation for Economic Co-operation and Development

PGDE Postgraduate diploma in education

PT Principal teacher
SLT Senior leadership team

SNCT Scottish Negotiating Committee for Teachers

SNP Scottish National Party
TSF Teaching Scotland's Future

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### 1 Introduction

This report presents the findings of independent research on teacher workload in Scotland. It was commissioned by the Educational Institute of Scotland (EIS), the largest teacher trade union in Scotland, which represents over 80% of all teachers across nursery, primary and secondary education. The research fulfils a resolution adopted at the 2022 EIS Annual General Meeting to contract 'independent research that considers the workload of teachers, the extra hours they work beyond their contractual hours as a consequence of their workload, and the main reasons for the failure to achieve a 35-hour working week for teachers'.

The 35-hour working week for teachers in Scotland's schools should consist of 22.5 hours class contact time, plus 7.5 hours preparation and correction (SNCT, 2007). The remaining five hours are set aside for locally negotiated collegiate activities. It is intended that the individual and collective work of teachers should be capable of being undertaken within the 35-hour working week. This research examines to what extent teachers are working above the contracted 35 hours, whether they are undertaking activities out with the stipulated range of duties for teachers, the key influences that shape teachers' time use, and the impact of this on the profession.

Following a competitive tendering process, a consortium from the University of the West of Scotland, Birmingham City University and Cardiff Metropolitan University was appointed to undertake this study. An EIS Steering Group and two teacher panels advised the research team. The research was conducted between January and April 2024.

A sequential mixed-method design using an online time use diary and semi-structured individual interviews was deployed to the address the following research questions:

- What are the main activities that constitute teacher workload?
- What is the balance of this workload over the working week?
- What extra hours do teachers work beyond their contractual hours?
- Where do workload demands come from, out with class contact time?
- What are the main reasons for failure to achieve a 35-hour working week for teachers?

The report is structured in five sections. The first section places teacher workload in context through an overview of the policy background in Scotland. The second section presents a concise overview of international research on teacher workload: approaches, key findings and knowledge gaps. This review helped to inform the design of the research instruments. The third section outlines the methodological approach and analysis strategy used in the study. The fourth section presents key findings from analysis of the quantitative and qualitative data. The final section discusses the findings in relation current policy and extant research. Appendices contain a detailed breakdown of teacher characteristics and project documentation. A Technical Annex provides additional data tables and more detailed results.

# 2 Background - teacher workload in context

### **Key points summary**

- A Teaching Profession for the 21st Century (SEED, 2001) and Teaching Scotland's Future (Donaldson, 2011) set out a progressive model of extended professionalism for teachers in Scotland.
- The professional capacity of teachers to shape educational change is connected to teachers' conditions of service. Opportunities for teachers to undertake continuing professional development (CPD) to develop their professional skills is connected to workload.
- Workload is affected by teacher and support staff numbers. There has been a slight decrease in the total number of schoolteachers in Scotland between 2022 and 2023. Recruitment to secondary Initial Teacher Education programmes has fallen annually from 2020-21.
- Between 2010 and 2023, the proportion of pupils with an identified additional support need rose from 10% of all pupils (69,587 individuals) to 37% (259,036 individuals) (Pupil Census, 2023). Over the same period, the number of ASN teachers in Scotland fell from 3,524 to 2,898. Average spending per pupil on additional support for learning (ASL) by local authorities fell from £5,698 in 2012/13 to £3,764 in 2022/23, which represents a 33.9% drop.
- Teachers report a decline in pupil behaviour and an increase in classroom disengagement behaviours, and low level and serious disruptive behaviours (BISSR, 2023; EIS, 2023a).
- Several reports draw attention to the need to simplify the curriculum, streamline guidance for teachers, and tackle unnecessary bureaucracy. These actions are needed to create sufficient time and space in teachers' working week for curriculum planning, monitoring achievement and moderation of assessment outcomes.
- Reports identify adequate support for teachers as integral to the future success of curriculum, qualifications and assessment reform. This includes 'additional, dedicated and ring-fenced time for all teachers ... to lead, plan and support Curriculum for Excellence at the school level' (OECD, 2021, p.125).
- The 2021 Manifesto pledge to recruit 3,500 additional teachers and classroom assistants and reduce teachers' contact time by an hour and a half per week is yet to be accomplished.

### 2.1 Introduction

How teachers use their time is influenced by teachers' conditions of service and the model of professionalism that underpins their work. This section of the 2024 Teacher Workload report outlines key developments in advancing professionalism in teaching in Scotland in regard to working time and professional growth and reflects on progress towards these laudable aims. It addresses the influences on teachers' time use in terms of the relationship between teacher and support staff numbers and the escalating job demands that are made of teachers. These include professional capacity to shape the curriculum, and to address diverse needs through personalised planning that promotes learner engagement and positive behaviour. Consideration is also afforded to the negative impact of unnecessary bureaucracy, or 'unproductive' workload, on teachers' working lives.

### 2.2 Teachers' working time

A Teaching Profession for the 21st Century (SEED, 2001) did much to enhance the professional status of teaching in Scotland. The Agreement sought to enhance teacher

autonomy and professional responsibility so that teachers might focus on leading learning. Outcomes included improved pay and conditions for Scotland's teachers, a new career structure (including the introduction of chartered teacher status and principal teacher (PT) posts in primaries), a structured system of teacher induction and a national framework for continuing professional development (CPD).

In relation to working hours, this landmark agreement introduced:

- A 35-hour working week for teachers in Scotland from August 2001 (with pro rata arrangements for teachers on part-time contracts).
- Maximum class-contact time of 22.5 hours a week across primary, secondary and special school sectors from 2006 (and 18.5 hours for teachers on the national Teacher Induction Scheme).
- 7.5 hours personal allowance for preparation and correction, the remaining contractual time to be agreed at school-level.
- An entitlement to 35 hours a year of CPD linked to an annual approved CPD plan.
- Specification of Administrative and Other Non-Teaching Tasks that should 'not be routinely carried out by teachers' (Annex E, pp.32-33)<sup>1</sup> and the creation of 3,500 additional support staff posts to remove non-teaching duties (including bursar, administrative and ICT support, and classroom assistants in secondary schools).

A decade later, the Donaldson review of teacher education in Scotland from Initial Teacher Education (ITE) to headship, *Teaching Scotland's Future* (TSF) acknowledged the important contribution of the Teachers' Agreement in laying the foundations for 'twenty-first century professionalism' (Donaldson 2011, p.4). The Donaldson Report (2011) noted that the most successful education systems, 'invest in developing their teachers as reflective, accomplished and enquiring professionals who have the capacity to engage fully with the complexities of education and to be key actors in shaping and leading educational change' (p.4). The fifty recommendations contained within TSF were intended 'to build the professional capacity of our teachers and ultimately to improve the learning of the young people of Scotland' (p.iii). The Scottish Government (2011) accepted the TSF recommendations in full, partly or in principle. These influential reports acknowledge the interrelationship between conditions of service, professional capacity, and the quality of education in Scotland's publicly funded schools. Significantly, they acknowledge the imperative of investment in teacher development to the realisation of curriculum goals and improved outcomes.

Progress towards enhancing the time and space available for teachers to concentrate on their core role as educators, and to grow professionally over the career course, has been uneven. Teacher Working Time Research conducted by the University of Glasgow in 2005-2006 found main grade teachers routinely worked beyond the 35-hour working week and senior managers worked well above a 35-hour week (Menter et al., 2006, p. 13). Five years after *A Teaching Profession for the 21st Century* (SEED, 2001) the average number of hours worked across roles was 45 hours per week (ibid, p.22). The development of career pathways in teaching, through promotion or laterally through specialisms, has also faltered. The chartered teacher scheme ended in 2012<sup>2</sup> and the movement to faculty structures in some in local authorities reduced the number of subject PTs in secondary schools. The reduction in primary working hours from 25 to 22.5 hours brought new contributions from specialist staff and new challenges for senior leaders where supply cover was limited. Staff release in primaries was often covered by visiting specialists in music, art, physical education, and information technology (IT). An

<sup>2</sup> A move partly addressed by the subsequent (re-)introduction of 'specialist roles in curricular, pedagogical and policy delivery' through the creation of the Lead Teacher post (Scottish Government, 2019, p. 4).

<sup>&</sup>lt;sup>1</sup> The activities listed in Annex E were subsequently removed following the McCormac (2011) review of teacher conditions (p.16).

Audit Scotland (2006) report observed, 'Reductions in class contact time (time spent in class) are working well for classroom teachers but have contributed to an increased workload for headteachers' (p.16). Changes to supply teachers' conditions in 2011, which were later reversed, exacerbated emerging teacher shortages in some regions and subject areas. Continuing workload pressures, the impact of multiple concurrent initiatives, and contracting local authority resources were identified as key obstacles limiting opportunities for teachers to pursue CPD and fulfil their role as leaders of learning (Scottish Government, 2016).

# 2.3 Teacher and support staff numbers

Balancing teacher supply and demand while maintaining educational standards and a sustainable workload for teachers is challenging. Concern expressed about recruitment to teaching before the Teachers' Agreement (SEED, 2001) continues to be relevant. If recruitment to Initial Teacher Education (ITE) programmes is an indicator of the status and attractiveness of teaching as a career, there is recent cause for concern in the secondary sector in Scotland. Recruitment to secondary Initial Teacher Education programmes has fallen year-on-year from 2020. In 2023-24 50% of secondary postgraduate diploma in education (PGDE) places were filled, compared with 61% in 2022-23, 85% 2021-22 and 92% in 2020-21 (Seith, 2024). The total number of schoolteachers (primary, secondary, special and centrally employed) decreased slightly by 128 across 17 local authorities between 2022 and 2023 (Scottish Government, 2023). Contraction of teacher numbers has been attributed to reductions in some local authorities (LAs) of Scottish Attainment Challenge funding, the impact of inflationary pressures on the Pupil Equity Fund and increased staffing costs. Budgetary constraints on local authorities are contributing to employment insecurity among new teachers, especially primary post-probationers. In 2022-23, the percentage of post-induction scheme teachers in permanent full-time employment in schools in Scotland according to the Teacher Census fell to 28.8%, the lowest level since 2012 (Scottish Government, 2023).

The Scottish National Party (SNP) 2021 Manifesto pledged to 'recruit at least 3,500 additional teachers and classroom assistants and reduce teachers' contact time by an hour and a half per week' (p.62). This pledge was incorporated in the Scottish Government Programme for Government 2021-22.

Over the course of the Parliament, we will provide funding to support the recruitment of at least 3,500 teachers and 500 classroom assistants - over and above the 1,400 recruited during the pandemic - with further funding to enable councils to make these posts permanent. This will give teachers the capacity to reduce contact time by an hour and a half a week which they can use to prepare for lessons, raise standards and undertake professional development. (Scottish Government, 2021, p.43).

Financial pressure on local authorities has increased in the ensuing years. Audit Scotland (2024) notes that, 'Councils are facing an estimated cumulative budget gap of £780 million by 2026/27 which represents five per cent of councils' revenue budget' (p.4). Consideration of teacher numbers, and the implications of this for teacher workload, proceed in the context of an expected decline in the school-age population over the next decade (Office for National Statistics, 2023). Rather than expand teacher numbers to alleviate workload pressures, a recent WPI Economics Report for the Scottish Government suggests holding teacher numbers steady to enable a staggered reduction in class contact time to be achieved by 2028. If implemented, this recommendation would prolong rather than alleviate higher workload.

Focussing on the implications from projected demographic changes – and in the context of constrained public sector budgets – our modelling suggests that a constant, rather than increasing, teacher stock could more closely match expected teacher resourcing needs over the next decade. This could avoid sudden excesses in teacher numbers relative to resourcing needs, while meeting the policy commitment to reduce contact time to 21 hours, albeit by 2028, two years later than planned (Scottish Government 2024, p.4).

# 2.4 Professional capacity

The introduction of the 3-18 Curriculum for Excellence (CfE) moved the locus of curriculum design into schools. The professional challenges this raised were not unrecognised. Research by Baumfield et al. (2010) for the Scottish Government during the engagement year (prior to full implementation) noted, 'Uppermost among teachers' concerns was the need for time and space to support appropriate school-level development opportunities' (p.63). Devolving responsibility for teacher CPD to the local level created an additional challenge, particularly where local authorities were already facing staffing difficulties and a commitment to keep class sizes low. More recent national reviews continue to show concern regarding professional capacity and a need for conditions that better support teachers' professional growth. The Independent Panel on Career Pathways for Teachers (Scottish Government, 2019) noted that 'All teachers should be supported in pursuit of agreed professional learning for their career development with time and opportunity' (p.6). The OECD (2021) Review of Curriculum for Excellence highlighted a need to build curriculum capacity and strengthen support for teachers, recommending, 'provision of additional dedicated and ring-fenced time for all teachers, for curriculum planning, for monitoring of student achievement and in support of moderation of assessment outcomes'. A decade after the Donaldson Report, Kennedy and Bell (2023) note, 'we are no closer to a national system for supporting teacher learning in schools' (p.503). The General Teaching Council for Scotland's (GTCS) submission to the Muir review of Scottish education argued that the professional learning needs of both experienced teachers and new teachers were not being met. The GTCS (2021) called for 'a fundamental rethink of teaching commitments to consider the time and space needed for... teacher learning' (p.11). Workload was also cited in relation to concerns around moderation in the rapid review of National Qualifications (Priestley et al., 2020).

The demands made of the teaching workforce in Scotland are likely to increase as key areas of policy are under active development. Large-scale changes to assessment and examinations (at senior secondary level) are signalled in the Hayward review of qualifications and assessment, *It's Our Future* (Hayward, 2023). The Muir report, which recommends replacing SQA and Education Scotland, acknowledges calls from the profession for 'a wider range of quality learning and teaching materials produced centrally to reduce workload' (Muir, 2022, p.19). The formal positioning of teachers as curriculum makers is only empowering in the extent to which these enhanced responsibilities can be accomplished within the time and resource available to those charged with their enactment.

### 2.5 Diverse learner needs

Inclusive education requires skilled teachers who are equipped to meet diverse learner needs. This can include cultural diversity, linguistic diversity (including pupils for whom English is an Additional Language), cognitive and neurodiversity (including highly able). An inclusive learning environment attends to the needs of all pupils regardless of ethnic or linguistic background, gender, socioeconomic status, or additional support needs arising from disability and health, family circumstances, or social and emotional factors. Inclusive education requires differentiated instruction, culturally responsive teaching and personalised planning that attends to individual needs. As needs multiply, teachers require time and support to sustain adaptive strategies.

The number of pupils in Scotland with an identified additional support need has increased significantly due, in part, to improvements in recording. Escalating rates of ASN, and an increase in complex needs, are also influenced by child poverty, increases in poor mental

<sup>3</sup> https://www.oecd-ilibrary.org/sites/bf624417-en/index.html?itemId=/content/publication/bf624417-en& csp =51c450f180c5a8837f5b133c929c2dfe&itemIGO=oecd&itemContentType=book#

health, and social, emotional and behavioural issues that were evident before and deepened with the Covid-19 pandemic and associated lockdowns (Scottish Parliament, 2024a). The rate of emotionally based school non-attendance (EBSNA) has risen in the post pandemic period (Scottish Parliament, 2024b, p.6). In 2010, 10% of all pupils (69,587 individuals) had an identified additional support need. 4 By 2023, this had risen to 37% of all pupils (259,036 individuals) (Pupil Census, 2023). Over the same period, the number of ASN teachers in Scotland fell from 3,524 in 2010 to 2,898 in 2023 (Scotlish Government, 2023). In 2013, each ASN teacher was supporting 40 pupils with ASN, by 2023 this figure had risen to 89 pupils (Scottish Children's Services Coalition, 2024). While spending on ASL by local authorities peaked in 2022-23 at £926m, average spending per pupil on additional support for learning (ASL) by local authorities (primary, secondary and special education) has fallen from £5,698 in 2012/13 to £3,764 in 2022/23, which represents a 33.9% drop in spending per ASL-pupil (Scottish Parliament, 2024c).<sup>5</sup> The presumption to mainstream education requires teachers and pupil support workers to enhance their professional skills to provide responsive and targeted support for individual needs. This commitment in the context of declining access to support for learning experts and classroom assistants increases teacher workload.

### 2.6 Behaviour

The ability to effectively organise and manage learning is a core professional skill of teachers. The amount of time committed to managing pupil behaviour (within class and on school premises) has changed over time. The importance of 'positive and purposeful relationships to provide and ensure a safe and secure environment for all learners' is embedded in the Standard for Full Registration for Teachers in Scotland (GTCS, 2021, p.5). The Behaviour in Scottish Schools Research (BISSR) (Scottish Government, 2023) found most teachers reported 'generally good behaviour among most or all pupils in the classroom (65%) and around the school (85%)' (p.5). However, teachers reported a perceived decline in pupil behaviour since the last survey in 2016 and since the COVID-19 pandemic restrictions from March 2020. Teachers across sectors reported increases in classroom disengagement behaviours, and low level and serious disruptive behaviours. Among research participants, 86% had encountered low level disruptive behaviour at least once a day in the last week, 67% had encountered general verbal abuse, 59% physical aggression and 43% physical violence between pupils in the classroom in the last week. Sixteen percent had experienced physical aggression and 11% physical violence towards themselves or other staff in the classroom in the last week (Scottish Government, 2023, pp.5-6). Survey returns from 875 EIS branches also record significant increases in violence and aggression towards teachers with "82.7% of branches responding that there are incidents of 'violence and aggression' every week. Over 72% of branches stated that the amount of 'violence and aggression' had grown in the last four years – from levels before the Covid pandemic" (EIS, 2023a, p.3).6

Twelve per cent of primary and secondary teachers who participated in the BISSR (2023) reported spending over three hours each week dealing with the same pupils who present challenging behaviour; 38% of primary teachers and 48% of secondary teachers spent between one and three hours dealing with the same pupils who present challenging behaviour (p.160). A perceived decline in pupil behaviour was associated with deprivation, trauma,

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<sup>&</sup>lt;sup>4</sup> Statistics on additional support needs include pupils in special schools and those in mainstream schools who are assessed or declared disabled, or have a Co-ordinated Support Plan (CSP), Individualised Education Programme (IEP), Child Plan or another type of support. Pupils may have more than one type of ASN.

<sup>&</sup>lt;sup>5</sup> https://www.parliament.scot/chamber-and-committees/questions-and-answers/question?ref=S6W-26184

<sup>&</sup>lt;sup>6</sup> The EIS defines violence and aggression as 'any incident in which a person is abused, threatened or assaulted in circumstances relating to their work. The term 'violence and aggression' goes beyond violence and includes aggression which may be exhibited verbally, in writing, by gesture as well as by physical means' (EIS, 2023a, p.2).

adverse childhood experiences, and unmet additional support needs. Reported negative behaviour was more prevalent in urban schools, particularly primary schools. Most support staff reported that they do not have sufficient time within their contracted hours to discuss classroom planning or meet with colleagues/SLT/class teachers (p.168). The promotion of positive behaviour strategies was broadly welcome, if properly resourced. The BISSR (2023) notes that, 'school staff were generally supportive of more nurturing and restorative approaches to managing discipline, with the caveat that time and support were needed to integrate these fully within the school' (p.194).

# 2.7 Unproductive workload

Tackling unnecessary bureaucracy in teaching has been a persistent challenge. Unnecessary bureaucracy is defined as, 'excessive paperwork or electronic form-filling, leading to unproductive workload for staff in schools' (Education Scotland, 2016, p.2). The *Curriculum for Excellence Working Group on Tackling Bureaucracy* (Scottish Government, 2013) identified the following drivers of excessive bureaucracy: over-detailed planning processes, assessment, tracking and reporting systems that are not fit-for-purpose, inflexible adoption of practices rather than adapting to local circumstances, and excessive detail for auditing and accountability purposes (p. 2). These were reiterated in the Scottish Government (2015) *Curriculum for Excellence Working Group on Tackling Bureaucracy – Follow Up Report* and the Education Scotland (2016) *Review of local authorities' actions to tackle unnecessary bureaucracy and undue workload in schools*, which again pointed to curriculum development requirements associated with CfE, SQA arrangements in relation to national qualifications, and the volume of guidance documents issued by national education agencies. Reducing teacher workload, while working to close a persistent attainment gap, was a prominent feature of the 2016 Education Delivery Plan (Scottish Government, 2016).

We will de-clutter the curriculum and strip away anything that creates unnecessary workload for teachers and learners, and we will take forward a new programme of reducing workload in schools. I will directly oversee this activity supported by a panel of teachers whose voice and experience will inform what is taken forward. (John Swinney, Deputy First Minister and Cabinet Secretary for Education, 28 June 2016)<sup>7</sup>

Workload concerns remained a recurring theme within the records of the Teacher Panel from 2016 to 2023. The first meeting of the Teacher Panel, held on 10 August 2016, asserts its key role in 'providing views on de-cluttering, workload and bureaucracy'. The report of the Education Governance review (Scottish Government 2017) noted that, 'Too much bureaucracy means that teachers and headteachers spend too much of their time on paperwork and not enough time leading their schools and focusing on learning and teaching' (p.16). The OECD (2021) report noted that successive waves of education initiatives with accompanying 'guidance' challenge policy coherence and create competing pressures, giving rise to an impression of 'a busy policy landscape' and 'a system in constant reactive mode' (p.105).

### 2.8 Summary

The above review provides an overview of the national policy context in Scotland in regard to teacher workload over the last two decades. Successive policy documents have espoused a progressive model of professionalism that places learners and learning at the centre. An ambitious programme of change asks more of teachers at a time of contracting resource. Some challenges pertain to particular geographic locations, school subjects, and school organisational arrangements. In general, teachers' work has been affected by a growing

<sup>&</sup>lt;sup>7</sup> https://www.gov.scot/news/education-delivery-plan-published/

<sup>8</sup> https://www.gov.scot/groups/teacher-panel/

recognition of the need for personalised planning, an increase in identified ASN, a perceived decline in pupil behaviour, a progressive reduction in specialist support and concomitant increase in accountability processes. The following section moves beyond Scotland to present a concise summary of international research on teacher workload. The concepts of workload intensity and time poverty are introduced, and the impact of prolonged working hours on teacher wellbeing is examined.

# 3 Research literature – scoping review

### **Key points summary**

- The evidence base on teacher workload largely draws on data from crosssectional surveys. More research is needed that interrogates teacher working time and teacher wellbeing by individual, classroom and organisational factors.
- Workload research is typically informed by Job-Demands-Resources (JD-R) theory, which focuses on the balance between the demands made of individuals and the organisational support available to them.
- Research in English-speaking education systems routinely records a marked divergence between teachers' actual working time and the time that is recognised by their employers.
- Recent workload research considers both the volume of working hours and the relative demands of different components of workload.
- Data work is an increasing component of teachers' time. Non-teaching tasks, with indirect links to educational benefit for learners, are perceived as contributing to workload burden.
- The teaching profession in the UK, North America and Australia has been subject to workload intensification over recent years. Disruptive behaviour and the need to respond to increasingly diverse learner needs are associated with higher work-related stress, emotional exhaustion and burnout.

### 3.1 Introduction

This section of the report presents key findings from international research in comparable jurisdictions on teacher workload, the drivers of teachers' time use, and the impact of extended working hours on wellbeing. Teacher wellbeing is defined as, 'teachers' responses to the cognitive, emotional, health and social conditions pertaining to their work and their profession' (Viac and Fraser, 2020, p.18).

# 3.2 Approaches to workload research

Most extant empirical research is based on cross-sectional surveys (self-report questionnaires and interviews) and uses job demand-resource (JD-R) theory (Crawford et al., 2010). Workload surveys commissioned by national professional associations reveal long working hours (above fifty hours), increasing time pressure, and poor work-related wellbeing (EIS, 2023; INTO, 2022; EWC 2021; AITSL, 2021). Teacher workload research in English-speaking education systems shows a marked divergence between actual working time and the time that is 'recognised, regulated or recorded' by employers (Boeskens and Nusche, 2021, p. 10). Working hours and the conditions that influence time use are strongly associated with job satisfaction and occupational wellbeing, which in turn is related to turnover and attrition (leaving rates) (Green, 2021; Sims and Jerrim, 2020; Perryman and Calvert, 2020; Adams et al., 2023). In comparison with alternative graduate-entry professions, teaching offers lower earnings potential and limited employment flexibility, including negligible access to hybrid working (McLean et al., 2024).

The impact of working hours on wellbeing requires attention to individual, classroom and organisational factors. Despite this, few studies address the significance of location context (rural, urban) and school-level characteristics on teacher workload, or mediation effects (i.e., coping strategies) between groups (Kingsford-Smith, 2023; Collie and Mansfield, 2022; Hoppe

at al., 2023; Pan et al., 2023; Kreuzfeld and Seibt, 2022). Such nuance is necessary as the work of teachers is complex and multifaceted.

An emerging body of research extends approaches to workload beyond a narrow focus on working hours (i.e., volume) to consider the relative demands of different components of workload, and perceptions of workload intensity (Jerrim and Sims, 2021). Workload intensification is associated with an expansion of educators' responsibilities accompanied by a reduction in teacher autonomy and self-efficacy (Thomson, 2021; Sandmeier et al., 2022). This intensification is a noted change in the extent, pace and pressure of teachers' working time (Stacey et al., 2022). Data from the UK Skills and Employment Survey 1992-2017 shows that 'compared to other professional workers and all other occupations, teachers work more intensively during their work hours, and their work intensity has risen to unprecedented levels' (Green, 2021, p.298).

# 3.3 Workload intensification & time poverty

Increased time pressures are associated with 'time poverty' i.e., 'the relationship between (a) the amount of work a teacher does, or perceives that they have to do, and (b) the intensity of that work, which may be expressed as the number, complexity or stakes associated with decisions that need to be made over a given time period' (Creagh et al, 2023, p. 16). Teachers' 'time poverty', or workload manageability, has been identified as a critical factor affecting the development of teachers, students, and schools (Liu et al., 2023). In an Australian context, research by MacGrath et al. (2018) noted, 'a 'blanketing' of administrative demands encroaching on the work of teachers, impeding their capacity to focus on tasks directly related to their teaching and to students' learning' (p.4). Data work is an increasing component of teachers' time and work-related availability has increased with greater use of information and communication technology. Boundaries between work and private life have become more permeable as teachers are increasingly deemed available outside conventional school hours (Reid and Creed, 2021; Selwyn et al., 2017). The development of digital infrastructure has accelerated processes of 'datafication' and the rise of the 'platformised' school (i.e., increased use of software, apps and platforms for teaching and administration) (Pangrazio et al., 2023; Selwyn 2022). Research has associated increased 'dataveillance' (constant monitoring) with a diminution of professional agency and erosion of trust in teachers (Stacey et al., 2023; Lewis and Hartong, 2021).

In-class pressures also contribute to workload intensification. Disruptive behaviour is positively correlated with higher work stress and emotional exhaustion (Baeriswyl et al., 2021). Student behaviour problems, combined with the need for differentiated instruction to address diverse learning needs, are drivers of work-related stress, particularly in low-income urban settings (Elliott et al., 2024). Outside class contact time, reporting and monitoring processes associated with test-based accountability and a deepening concern for pupil wellbeing (attendance, engagement, achievement, social and emotional health) extend working hours and educator responsibilities (Jerrim and Sims, 2022; Skinner et al., 2021). The professional values held by teachers means that is often difficult to place limits around working hours. As the UK Education Support (2023) survey report notes, 'It is not in the current culture of the teaching profession to boundary the service offered. If children have a need, the reflexive response is to respond again and again' (p.16).

Growing awareness of the negative impact of higher workload on teacher wellbeing, recruitment and retention has directed attention to school-level strategies to manage workload. Research suggests teachers want to protect time for valued activities such as planning and communication with parents/ carers and reduce time spent on administrative activities through more efficient data management (Martin et al., 2023). Analysis of survey data from teachers in England found that changes to marking and feedback polices produced the greatest gains in workload reduction (Martin et al., 2023). Making time for traditional forms

of marking and feedback is strongly associated with workload stress and reduced teacher wellbeing among teachers in five English speaking education systems (England, Australia, Alberta-Canada, New Zealand, United States) (Jerrim and Sims, 2021). There is some evidence that reducing extensive 'after the school day' marking with alternative forms of feedback, including more direct feedback in the classroom, may improve student outcomes (Churches et al., 2022).

Workload reduction initiatives have tended to place primary responsibility on educators, rather than the institutional and policy context in which they work (Spicksley, 2022). For example, Hoppe et al., (2023) associate 'dispositional perfectionism' (i.e., perfectionistic strivings and concerns) with extended weekly working hours. Behaviours that extend and intensify working hours, such as skipping breaks, working into evenings and on weekends are described as 'self-endangering' because they reduce recuperation time (op cit., p.298). In contrast, socialecological approaches emphasise the importance of context in shaping the capacity of teachers to respond well to occupational stressors (Ainsworth and Oldfield, 2019; Oldfield and Ainsworth, 2022). Emerging research investigates the interaction between teacher-level (personal resources and interpersonal differences in coping strategies) and school-level stressors (Collie and Mansfield, 2022; Nwoko et al., 2023). From this perspective, teacher wellbeing is associated with perceived levels of organisational support and working time quality (Viac and Fraser, 2020; OECD 2023; Churches and Fitzpatrick, 2023). At an organisational level, UK research by Ostermeier et al. (2023) found strong evidence that job security, autonomy and employee voice increase the subjective wellbeing of teachers. Conversely, precarity and performativity pressures exert a negative influence. In Australia. Stacey et al. (2021) report that many temporary teachers feel that they "must work harder than permanent teachers in order to 'prove themselves' to school executive" (p.1). Research in England has identified insufficient funding and staff capacity as key barriers to workload reduction, and increased funding and higher levels of staffing as key enablers (Martin et al., 2023, p.4).

# 3.4 Summary

In summary, research on teachers' working hours and the factors that influence teachers' time use have drawn attention to the changing nature of teachers' work and the impact of this on their professional identity i.e., subjective understandings of what it means to be a teacher. Teachers in comparable jurisdictions report reform fatigue, emotional exhaustion and burnout (Lawrence et al., 2019; Heffernan et al., 2022) and a reduction in autonomy over the use of time in face-to-face and non-teaching tasks (i.e., working time inflexibility, limited task discretion). The fragmentation of tasks and escalation of routine administrative activity impinges on the time available for relationship building and pastoral care that are core components of caring professionalism (Beck, 2017). Examining the 'juridification' of education, Murphy (2022) contends 'the relational bonds that make teaching effective, as well as the discretionary powers of teachers that underpin these bonds are in danger of being damaged' (p.11). Non-teaching tasks, with fewer direct links to educational benefit for learners, are more likely to be perceived as contributing to workload burden (Lawrence at et al., 2019), reducing time available for core activities and professional learning (Jerrim and Sims, 2021; Mulholland et al., 2017). Consequently, many teachers feel compelled to engage in a form of educational 'triage' as they contend with difficult choices and considerable ambiguity between what constitutes high value core work and what might constitute 'unnecessary' workload (Stacey et al., 2022, p.778).

The scoping review of research reported above informed the design and development of the research instruments for this study. The literature supported initial development of categories of time use and signalled the importance of time poverty and occupational stress. The following section outlines the methodological approach adopted in investigating teacher workload in Scotland.

# 4 Research approach

### 4.1 Methods

The main methods of data collection were an online time use diary completed retrospectively for the calendar week 4<sup>th</sup> to 11<sup>th</sup> March 2024, followed by semi-structured remote interviews with a demographically rich sample.

A link to a time use diary, generated by the QuestionPro online survey platform, was distributed on 11 March 2024 via email to members of the Educational Institute of Scotland (EIS) currently employed in schools in Scotland. Participants recorded the full range of work-related activities undertaken over the preceding working days (including evenings) and weekend (i.e., the hours they must work, the hours they do work, and the nature and drivers of work-related activity). In addition, the survey components included a validated perceived stress scale (Cohen et al., 1983), a job satisfaction scale (Mullis et al., 2020) and a teacher time poverty scale (Liu et al., 2023). The research team worked closely with the EIS Steering Group on an active recruitment strategy to raise the profile of the research with the teaching workforce (e.g. via social media and email). Awareness raising was important because response rates to teacher workload surveys can be low, typically around 10% (Allen at al., 2023). Advance information about the survey and the designated week were circulated by the EIS on 21 February 2024. An alert that the designated week had commenced was sent on 4 March, followed by reminders to complete returns before 18 March 2024.

Digital diaries were preferred to paper leave-behind diaries because they are cost-effective, permit stronger communication with participants and make completion as easy as possible for busy professionals (Sullivan et al., 2020). This method allowed for as close-to-real-time registration of activities without placing an undue burden on participants (te Braak et al., 2023). Online diaries show no more social desirability issues than offline surveys (Dodou, & de Winter, 2014). A self-completed electronic diary was preferred to a telephone recall diary to eliminate potential for interviewer bias (Allan et al., 2020). Comparison of the quality of data obtained through time-use diaries and direct observation has shown that teachers can reliably self-report their working time retrospectively (Vannest and Hagan-Burke, 2010).

The inclusion of the professional voice was important in the co-design and validation of the survey instrument. Pre-coded activities in the time use diary were generated in consultation with two volunteer teacher panels. Panel meetings moderated by two researchers were convened online using Zoom video technology and did not exceed ninety minutes duration. The first teacher panel was held on 25 January 2024 and involved 12 teachers from four local authorities with a range of roles and varied length of experience. At this meeting, panel members conducted accuracy checks on the teacher and school characteristics to be collected, provided feedback on the proposed categories of time use, the layout and response options, accessibility of language, anticipated completion times and timing of distribution for optimal completion rates. A second teacher panel comprised of ten EIS local association representatives was held online on 7 February 2024. At this meeting feedback was sought on the content and format of the prototype online instrument, in addition to revisiting the clarity, wording and relevance of the proposed activities, and the ease of completion for busy teachers. The iterative involvement of teacher panels in the design and peer review process reduced the risk of partial completion by respondents and validated the data collection instrument. A complete copy of the final instrument can be found in Appendix 2.

The time-use diaries included a request for permission to contact for a follow-up interview. Phase two of the research involved semi-structured remote interviews of 45 minutes duration with teachers who volunteered to deepen the analysis beyond the number of working hours to factors that explain composition of work patterns.

Figure 1: The research process



# 4.2 Sample

# Time use diary

The time use diary and survey questions were completed by 1,834 teachers employed across the 32 local authorities in Scotland. Of these 1518 (82%) respondents were female, 303 (16.5%) male, 5 non-binary and 8 preferred not to say. The mean age of participants was 40 years. The self-identified ethnic breakdown of the participants was 1794 White (97%), 22 mixed or multiple ethnicities, 11 Asian, 3 Black, and 4 others. Teachers from a BAME background comprise 2% of the sample, which reflects the general teaching population in Scotland (Scottish Government, 2023). Participants were employed across the full range of roles from probationer to headteacher. The majority were main grade teachers (1440, 78.5%), followed by principal teachers (273,14.9%). A smaller number of probationer teachers (37, 2.0%), chartered teachers (34, 1.9%), deputy headteachers (35,1.9%), headteachers (10, 0.5%) and lead teachers (5, 0.3%) completed the time use diary and survey questions. Most respondents were employed in primary (971, 52.9%) or secondary schools (791, 43.1%), with smaller returns from teachers working in special schools (58, 3.2%) and early years settings (14, 0.8%). The distribution of primary teachers by year(s) (P1 - P7) and secondary teachers by subject area(s) can be found in Appendix 1. Participants had a mean of 14 years experience as a teacher, and most had taught in fewer than five schools. Most participants were employed on full-time contracts (1474, 80%) with fewer on part-time contracts (360, 20%), which is consistent with the general teaching population as indicated in Scottish School Census data (Scottish Government, 2023). Of those employed on fractional part-time contracts, most were either 0.6 FTE contracts (122) or 0.8 FTE contracts (112). Most respondents were employed in urban locations (815, 44%) or small towns (772, 42%), with fewer working in rural locations (202, 11%) or island communities (45, 2.5%).

### Follow-up interview

When the survey closed on 17 March 2024, 550 teachers had given permission for further contact (550 from 1834 respondents, 30%), 274 had provided details about their availability and a 10% sample, 55 were invited to take part in an interview. Criterion-based sampling was used for interviewee selection using teacher and school characteristics (Scottish Government, 2023). Each teacher who supplied details of availability was contacted twice to arrange an appointment at a convenient time. Flexibility was offered in terms of the mode of remote interview - telephone or online video call - to accommodate interviewee preference, availability

and location. Between 18<sup>th</sup> March and 29th April, 40 interviews were conducted. The interview sample comprised 28 female teachers (70%) and 12 males (30%) currently employed in schools in 26 local authorities in Scotland. Most interviewees were employed in primary schools (14, 35%) or secondary schools (20, 50%), with a much smaller number employed in Early Years settings (2, 5%), Early and primary (2, 5%), primary and secondary (1, 2.5%) and special education (1, 2.5%). The majority of interviewees were employed as main grade teachers (23, 57%).

### 4.3 Analysis

Quantitative analysis was carried out using the statistical analysis software, SPSS28. All data were checked to see if it met the assumptions for parametric testing and, where this was not the case, non-parametric tests were utilised instead to restrict the chance of type 1 error (false positive). Furthermore, multiple comparisons were corrected using Bonferroni correction to again limit the risk of any type 1 error. All inferential tests use an alpha value of .05 for significance. This means that if the value given for significance is .05 or less it can be assumed that there is a significant effect with either a generalisable difference between two conditions or with one factor able to predict another in the regression analysis. In simple terms, this identified associations between questions which were not random and/or showed strong relationship to each other.

Thematic analysis of full verbatim interview transcripts was supported by NVivo12 software. A small sample of transcripts was coded independently by two researchers, who then met to discuss appropriate codes and clarify inconsistencies. This process of cross-checking informed the coding of the remainder of the transcripts. Extracts from these interviews are used to supplement the survey results later in this report.

To reduce the risk of deductive disclosure (i.e., possible identification of interviewees), gender, local authority and school type (urban, small town, rural) are removed from direct quotations used in the report. Local authority has been replaced by the five geographical regions (i.e., International Territorial Levels) used by OECD member states for Scotland: Eastern Scotland, Highlands and Islands, North Eastern Scotland, South Western Scotland, and Southern Scotland.<sup>9</sup>

### 4.4 Limitations

There are a number of caveats that should be considered when interpreting the findings of this study. The working patterns presented are based on self-report. Moreover, establishing a typical week in teaching is not without challenge. Teachers' work per week can vary substantially over the academic year. Some activities are unevenly distributed over the school year, such as administrative work or professional development. Random repeated allocation of diary days to overcome the difficulty of identifying a 'typical' teaching week was not possible within the timeframe for this research. The response rate to the survey is high (and the participant profile is consistent with general teaching population in Scotland as recorded in the Summary statistics for schools in Scotland 2023), but some of the subgroups are small e.g. the proportion of returns from probationers, chartered teachers, and lead teachers (Appendix 1). The instrument was co-designed with a focus on class-committed teachers. School leaders working patterns are less well represented in the time use diary and survey questions. Teachers at different career stages may respond to workload stressors differently. Further research is needed to interrogate time use data by individual and school-level characteristics.

<sup>9</sup> https://www.ons.gov.uk/methodology/geography/ukgeographies/eurostat#scotland

# 5 Findings

### **Key summary points**

- Teachers who were primarily classroom-based reported spending around two-thirds (68%) of teaching time on learning interactions. Minor disruptions and significant behavioural interruptions occupied between 14.7% 28.60% of all face-to-face teaching time for all roles in schools.
- Interviewees consistently reported greater use of teaching time to address low level and serious disruptive behaviour, and administrative follow-up activities outside lessons to report incidents and communicate with parents/ carers/ colleagues/ external agencies.
- Planning and preparing lessons and marking and feedback were the core tasks that occupied most time for classroom-based teachers.
- Planning and preparation challenges were reported by interviewees teaching composite classes, cross-phase teachers, teachers of technical subjects, and subjects with just one teacher.
- Higher rates of pupil absence and intermittent attendance require additional preparation to maintain learning for pupils who are away from the classroom in other within-school provision, or at home.
- Teachers reported increased levels of additional support needs (ASN) from early years to senior classes in high school.
- Across sectors and regions, main grade interviewees commented on the challenges of completing data entry for tracking and monitoring and reporting requirements within their contracted hours.

### 5.1 Work within contracted hours

This section of the report presents findings reflecting the four categories of time use in the diary within contracted hours:

- Face-to-face teaching activities
- Preparation and admin tasks
- Student wellbeing responsibilities
- · Activities outside of lessons.

Each of these categories was exemplified in guidance preceding this question (see Table 1 Categories of Time Use in Appendix 1). In each category, respondents were first asked to provide the *number* of hours they spent on the category, and then to break these hours down as a *percentage* (to total 100%) against the provided exemplification. To ensure clarity and provide consistency of responses, teachers were reminded in the survey that:

Full-time contracted working hours are 35 hours a week; with 22.5 hours of teaching and additionally no less than a third of this figure allocated for preparation & correction. All tasks that do not require a teacher to be on the school premises can be undertaken at a time and place of the teacher's own choosing.

Respondents were reminded that this section of the survey addressed 'work done within your contractual 35 hours a week (or fraction thereof, if part-time)'.

# 5.1.1 Face-to-face teaching activities

A Kruskal-Wallis analyses confirmed significant differences between position in school and the amount of time, in hours, spent on the face-to-face teaching ( $\chi^2$  (6, N = 1834) = 164.48, p < .001). The mean number of hours for class-committed teachers ranged between 19-24 hours, with probationers reporting a mean of 20 hours (table 1).

Table 1: Number of hours spent on overall face-to-face teaching.

	Median (Mean)	SD
Head	3.50 (4.40)	4.01
Deputy head	6.50 (9.01)	7.04
<b>D</b> · · · ·	10.00 (10.50)	2.22
Principal	19.00 (18.59)	6.20
Lead	24.00 (22.64)	5.03
Chartered	22.50 (21.95)	5.34
Main grade	22.50 (21.32)	5.61
Probationer	20.00 (20.98)	6.14

Table 2: Pairwise comparison on overall face-to-face contact hours differences

	Head	Deputy	Principal	Lead	Chartered	Main	Probationer
	teacher	head				grade	
Headteacher		>.999	.002	.003	<.001	<.001	.001
Deputy Head			<.001	.003	<.001	<.001	<.001
Principal				>.999	.148	<.001	>.999
Lead					>.999	>.999	>.999
Chartered						>.999	>.999
Main grade							>.999
Probationer							

(significant findings in bold)

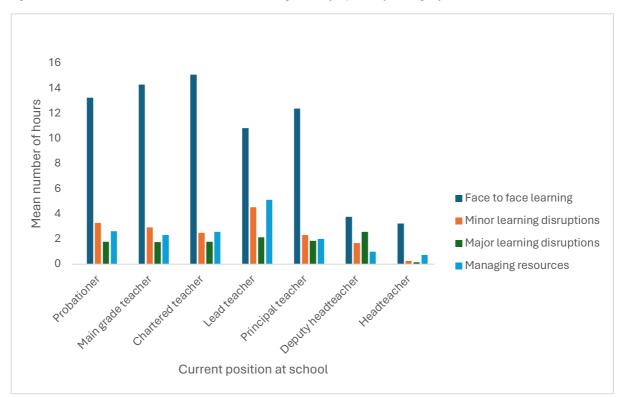


Figure 2: Number of hours face-to-face teaching activity spent by category and teacher role

Note: Excluding those who reported more than 22.5 hours for face-to-face contact time did not change the significance of the results ( $\chi^2$  (6, N = 1365) = 210.31, p < .001) (see technical annex for full analysis).

Figure 3 provides details of the percentage of the above face-to-face class contact time allocated to each category by position in school. In the target week, the highest mean percentage across all school roles were spent on learning interactions, with only lead teachers dropping below  $60\%^{10}$ .

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 $<sup>^{10}</sup>$  It should be noted that the high percentage of time for headteachers and deputies was a percentage of 3.5-6.5 hours, compared to a percentage of 19-24 hours for other roles.

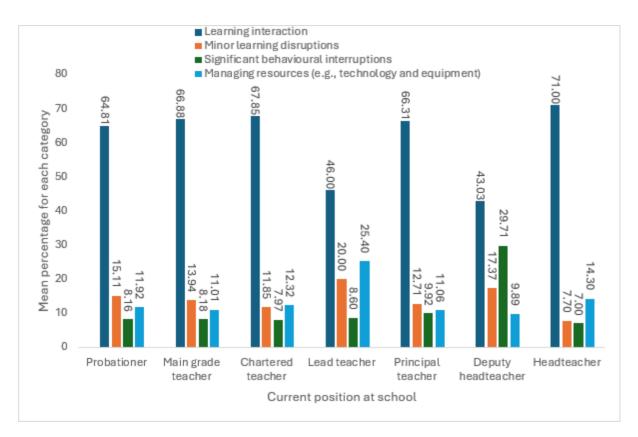


Figure 3: Percentage of time spent in face-to-face teaching by category and role

Teachers who were primarily classroom-based spent between 46 and 68% of teaching time on learning interactions, with the remainder of time spent on behavioural interruptions and managing resources. The second highest percentage of face-to-face teaching time for probationer, main grade and principal teacher was 'minor' learning disruptions.' Taken together, minor disruptions and significant behavioural interruptions represented between 14.7% - 28.6% of class contact time for all roles in schools, with an even greater percentage of time for deputy headteachers (47.08%).

Concern about disruptions and significant behavioural issues was echoed in interviewees across regions, settings (early years, primary and secondary) and roles (main grade, principal teachers). Interviewees reported an escalation in behaviour-related issues that contributed to their workload in a number of ways. This entailed greater use of class contact time to address low level and serious disruptive behaviour, time outside lessons to report incidents to appropriate colleagues, meeting with senior staff to discuss incidents and how to respond, contacting and meeting with parents and other professionals, including safeguarding. Additionally, some teachers reported inconsistent application of behaviour policies or lack of a whole school behaviour policy, which meant insufficient guidance on how to manage incidents.

A minority reported that senior management in school failed to take their concerns seriously (and viewed low level disruption as 'trivial'), failing to acknowledge the cumulative impact on staff of having to deal with a constant flow of disruption through each day over a period of weeks or months. For example,

I don't have any down time in my classes, because they're really large and there's a lot of different behaviours to deal with all the time. If something kicks off in one class, I might not get time to email or call about the situation until lunch or break because that's the first time

I've not had other things to deal with in the classroom. (Main grade secondary teacher, West Central Scotland)

You're doing referrals for behaviour in your free periods, which means there isn't enough time for marking, planning, and reporting. If restorative conversations are going to be valuable, it's not a two-minute chat. Those practices are good practices, but they're eating my time, adding to your working day and leaving less time and space for prep. (Main grade secondary teacher, Southern Scotland)

I spend the majority of my time dealing with either paperwork for referrals or having to deal with behaviour. One child will kick off and I'm having to deal with that with no support and keep the rest of the children safe and occupied. (Principal teacher, primary, Southern Scotland)

Staff absence as a result of challenging behaviour increases the workload of colleagues called upon to cover classes, often at short notice:

People have left the school building part-way through the day simply to de-stress. They were too upset and had to go home. I had a member of my department leave after a violent incident. They weren't injured but had to go home, which bounces workload onto other people because those classes need to be covered within a moment's notice. (Principal teacher, secondary, Highlands and Islands)

A reported marked increase in referrals for behaviour created additional time pressure. This was sometimes exacerbated by limited access to office phones during school hours. For example, up to eleven primary teachers queuing to make calls to parents from two office phones at the end of the school day, forcing staff to forgo lunch breaks to stay on top of reporting. Another example reported was,

If there is an incident, then you can put a referral into SEEMiS that all the relevant people higher up see and just sitting down and doing one of those takes between five and 10 minutes. And if you've got several of those a day to do it's amazing how quickly that adds up. Because behavioural incidents are going up, more and more children are then on behaviour target cards, which you need to complete, and you need to feedback to their guidance staff about that. All these things on their own seem very manageable but when you've got six or seven of those a day to deal with, it's another hour which needs to be taken from something else. (Main grade, secondary, Highlands and Islands)

There's certainly a culture of fear of not passing things on. There is an increased social pressure, as well as the professional pressure, to do it in a timely manner. So I will drop whatever I need to in order to feel that I've done that as soon as I possibly can. And I worry that the quality of my lessons isn't as immersive as it could be because these things do arise more often. You think it's only gonna be two minutes to send an email to a pastoral care teacher, but if you're having to think, right, who is that student's pastoral care teacher, who is their head of year, looking up details on the system, that is time you're taking time within the lesson, at break time or lunchtime. (Main grade, secondary, West Central)

### **5.1.2** Preparation and Administration

In considering the amount of time spent within contracted hours on preparation and administration, six categories were provided in the time use diary:

- Data recording, input and analysis
- Marking and feedback to pupils
- Writing reports
- Preparing Additional Support Plans
- Preparing for inspection
- Planning and preparing lessons

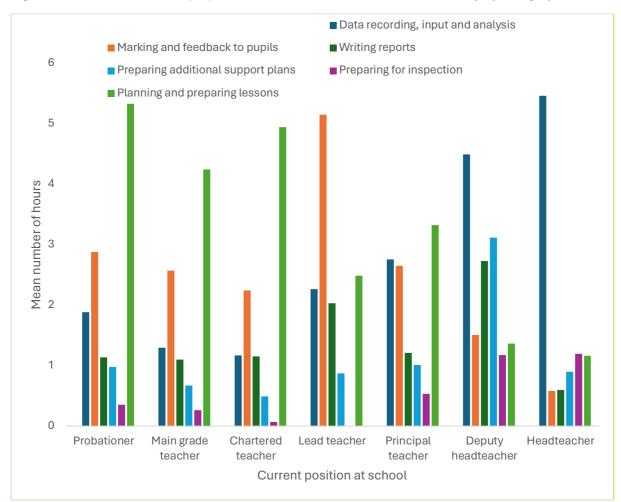


Figure 4: Number of hours on preparation & administration outside class activity by category & role

Figure 4 provides details of the percentage of time allocated to each category by position in school. This shows that 'planning and preparing lessons' occupied most time for probationer (the highest percentage of all roles), main grade, chartered and principal teachers, whereas 'marking and feedback to pupils' took most time for lead teachers and 'data recording, input and analysis' took most time for deputies and particularly headteachers. Marking and feedback was the second highest percentage of time for probationer, main grade and chartered teachers. Preparing for inspection was the lowest category for all users within contracted hours.

Table 3: Number of hours spent on overall preparation and admin tasks within contracted time

	Median (Mean)	SD
Head	6.00 (9.90)	9.89
Deputy head	10.00 (14.39)	12.40
Principal	10.00 (11.49)	6.81
Lead	14.00 (12.80)	3.70
Chartered	8.75 (10.06)	8.79
Main grade	10.00 (10.15)	5.95
Probationer	12.00 (12.55)	5.87

Kruskal-Wallis analyses were carried out to examine whether there were significant differences between those in different teacher positions and the amount of time, in hours, they spent on preparation and administration tasks ( $\chi^2$  (6, N = 1834) = 22.15, p = .001). Post-hoc tests with a Bonferroni correction showed that principal teachers spent more hours on this category than main grade teachers.

Table 4: Pairwise comparison on overall preparation contact hours differences

	Headteacher	Deputy head	Principal	Lead	Chartered	Main grade	Probationer
Headteacher		>.999	>.999	>.999	>.999	>.999	.839
Deputy			>.999	>.999	>.999	>.999	>.999
Head							
Principal				>.999	>.999	.061	>.999
Lead					>.999	>.999	>.999
Chartered						>.999	.261
Main grade							.105
Probationer							

(significant findings in bold)

Note: Limiting the number of hours spent on preparation to 35 hours did not change the significance or the pattern of results on this test ( $\chi^2$  (6, N = 1826) = 21.01, p = .002) (see technical annex for full results).

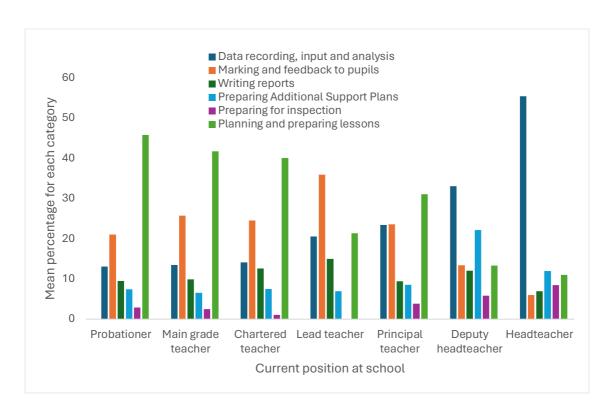


Figure 5: Percentage time on preparation & administration outside class by category & role

In interviews, Principal teachers (PTs) reported less ability to control time use, particularly in smaller schools where they are required to wear 'multiple hats' (for example PT Guidance and sole subject teacher) and may also deputise for the senior leadership team (SLT). At the same time, middle leaders and faculty heads sought to engage in processes of brokering teacher workload and buffering workload demands for teachers in their teams. PTs in schools facing recruitment challenges and insecure cover arrangements operated in constant responsive modes, such as

Because I am in a promoted post there is the admin. associated which is never defined, so can just expand. This means it's extremely hard to manage your time. The emergent things that come up daily you can't just push to the side. I spend a lot of time dealing with parents, recording incidents, trying to come up with strategies. That's time that's never factored into your working time agreement. Because behavioural issues have really ramped up, it's tricky to even focus on anything PT based, because you're so stretched. You're getting it from the top and from your colleagues because they both think you should do something about it. (Principal Teacher primary, Southern Scotland)

I work in quite a small school and often adopt a role above my role as principal teacher. That can contribute to my workload, because I'm having to do two jobs with one job's workload and timescale. (Principal Teacher, primary, Eastern Scotland)

Planning was a challenge for teachers teaching across levels, for example, secondary teachers teaching across six different year groups with five non-contact periods a week; teachers employed in all-through schools, and primary teachers working with multi-composite classes, sometimes at more than one school. Teachers reported difficulty in undertaking professional learning, keeping their subject knowledge up-to-date, refreshing their approaches to curriculum and assessment in line with national and regional policy guidance. Teachers of technical

subjects, and subjects with just one teacher, pointed to additional preparation time, often in the face of contracting or no technician support. Reduced auxiliary support resulted in increased workload for those teaching practical subjects.

A reported increase in diverse needs extended preparation time for all teachers, and particularly early career teachers with less experience and continuing development needs. Higher rates of pupil absence from school and intermittent attendance adds additional pressures to maintain learning for pupils returning to class who have not engaged in learning while absent from school, and preparing resources to maintain learning for pupils who are away from the classroom in other within-school provision, or at home.

Teachers reported an increased level of need from early years to senior classes in high school. Interviewees commented on the tensions between the work required to address increasing levels of need within their classrooms and the resources and time available. Strategies of teacher support through further training were interpreted by some as inconsistent with the removal of in-class support. Teachers reported a growing sense of exposure to increasing need with less time and material resources to meet such needs well. For example:

The raised level of need that the pupils are showing recently just overwhelms the time that's available. It's the interpersonal workload too, the mental workload. You are expected to deal with distressed young people who aren't prepared for learning, who aren't in a position to learn, and help them to a point where they might do some work. And you're doing that for most of your periods during the day. The mental intensity required has increased a lot. (Main grade, secondary, Highland and islands)

Children are coming in much more with delays or autistic type tendencies and a significant decline in speech and language skills. The support for learning teacher is often pulled from pillar to post and then that falls on me. The children you would normally focus on with speech and language are not receiving the support because you are more inclined to be supporting children with these other delays and a wider range of needs. It's really challenging. (Early Years Teacher, Eastern Scotland)

The authority is very good at giving us additional support needs training, but they're doing it because they're cutting teachers. It seems a cynical move to make us do all this extra training when they're pulling support left, right and center. (Main grade, secondary, Highlands and islands)

We don't have enough money for young people who need extra support and are in mainstream education just muddling along as best as they can. Without smaller class sizes, more teachers and more learning support, the government is just putting plasters over a gaping wound. (Main grade, secondary, West Central)

Across sectors and regions, main grade interviewees reported struggling to undertake reporting requirements within their working hours. Reporting systems were described as complex and multi-layered. Numerous teachers guestioned the value of data and how (or whether) it was subsequently used to support improvement action, in relation to the time required for teachers to complete the task. Some teachers felt data entry demands were excessive and indicated a lack of trust in teacher professionalism. While teachers acknowledged the importance of tracking and monitoring of pupil progress, many felt the systems to support this process were disjointed and not easy to navigate, adding to the time required to perform tasks. Where efforts have been made to reduce tasks to numerical data entry, teachers invested time in ensuring their choice of response for each young person was valid and reliable. Others noted a lack of shared understanding across professionals and parents on the meaning of data generated. The demands of reporting and the regularity with which these demands were made throughout the school year, reduced teacher time and space to catching up rather than forward planning and taking positive intervention action. For numerous interviewees monitoring activity had become an end in itself rather than purposeful activity undertaken to support an improvement strategy.

There's much higher scrutiny and that takes up time. You're filling out records for 25 children against each individual not just benchmark, but skill and underpinning knowledge, not just literacy and numeracy, but also for science, health and wellbeing, French, art and design. This is really micromanaging not just children, but myself, my own professional judgment. I would hope that I have very secure knowledge of the children in front of me, but I'm required to produce a paper trail, to evidence on a bit of paper that that's where they are. I'm having to duplicate workload by filling out paperwork, essentially bureaucracy'. (Main grade, primary, Eastern Scotland)

Tracking and monitoring for kids you don't see in your class and especially senior phase pupils, you have to contact guidance teachers and deputy heads. It's up to you to get on record who's off track including attendance or misbehaving in class. You do your tracking and monitoring at night at home, you cannot do that in class contact time. Your first, second and third year, we are also expected to record those who are beyond expectations, who are doing really well. And then especially those who are not on track, you enter in another place to say why they're not in track. You've two layers to the one system. (Main grade, secondary, Southern Scotland)

Tracking and monitoring has seemed to explode this year, in terms of the number of times we have to input into the systems, and the number of times we have to check them from a Principal Teacher perspective. This year, it has increased to four attainment reviews throughout the year, which requires a massive amount of processing of data. My frustration is that, at the end of it all, it doesn't tell us anything that we don't already know. We've written our development plan, but there's no time to do any of it before we're back to reviewing it again, and finding that we've done nothing (Principal Teacher, secondary, Highlands and Islands).

Opinion was divided on the needs to streamline report writing processes to help make them manageable for teachers while retaining a level of personalisation and accessibility that meant the process was meaningful for families. Primary teachers who participated in interviews reported spending five hours a week over five weeks on writing reports for parents. Secondary teachers commented on the increasing frequency and level of detail required for reports. For example, 'interim' reports that were indistinguishable from full reports in terms of the level of detail required with respect to progress data and comments. Cross-phase teachers (working with primary and secondary pupils) faced particular pressure, for example, one teacher reported completing 166 reports each year. While acknowledging the value of developing positive home school relationships, some teachers sought assurance of the effectiveness of activities given the considerable time investment.

Reporting to parents and relationships with families is incredibly important and adds to workload. We do parents' night, parents' meetings and then we write reports, we put things online. But what actually works in building relationships with families? It's probably different for every family and we need the time to do that well. (Probationer, primary, Southern Scotland)

Reporting is important. For each year group we have a short report, which is a target grade then numbers that reflect how we feel they're doing in terms of homework, behaviour and effort. Parents really struggle to get to grips with what it all means, which means we're doing something that isn't having an impact. I want to write reports that can help the child to really excel. A couple of weeks ago, I had to write 53 reports. That's a lot of time when you treat each one individually and make it really attuned to that individual. (Main grade, secondary, Highlands and Islands)

We cannot stick to the Working Time Agreement. Even with standardised, pre-prepared report comments, the reality of individualising these takes more than the given allocation which when broken down is usually around ten minutes (or less) per report. We cannot just stop writing reports halfway through a class set no matter how long they take. (Principal teacher, secondary, Highlands and islands)

# 5.1.3 Student wellbeing responsibilities

Four categories were offered in this section of the time use diary:

- Out of class learning conversations with pupils
- Communicating with parents / carers / colleagues / external agencies
- Pastoral care duties
- Behaviour incident follow-up

Table 5 shows the total number of hours spent on student wellbeing by role.

Table 5: Number of hours spent on wellbeing tasks overall within contract time.

	Median (Mean)	SD
Head	8.00 (11.30)	9.13
Deputy head	10.00 (14.91)	9.20
Principal	5.00 (6.78)	6.53
Lead	5.00 (6.40)	6.07
Chartered	2.50 (3.57)	3.52
Main grade	2.00 (2.78)	3.26
Probationer	3.00 (3.70)	3.46

Kruskal-Wallis analyses examined whether there were significant differences between those in different teacher positions and the amount of time, in hours, they spent on the tasks related to pupil wellbeing outside class contact time ( $\chi^2$  (6, N = 1834) = 265.71, p < .001). Post-hoc tests with a Bonferroni correction showed that main grade teacher, probationers and chartered teachers spent significantly less hours on this category than teachers in promoted posts.

Table 6: Pairwise comparison on overall wellbeing contact hours differences

	Headteacher	Deputy head	Principal	Lead	Chartered	Main grade	Probationer
Headteacher		>.999	.487	>.999	.004	<.001	.023
Deputy			<.001	.383	<.001	<.001	<.001
Head							
Principal				>.999	.014	<.001	.289
Lead					>.999	>.999	>.999
Chartered						>.999	>.999
Main grade							.336
Probationer							

(significant findings in bold)

Note: limiting the number of hours spent on wellbeing tasks to 35 hours did not change the pattern nor the significance of the results ( $\chi^2$  (6, N = 1831) = 264.91, p < .001) (see technical annex for full results).

Figures 6 and 7 (overleaf) show the number of hours and mean percentage of time committed to each category.

Figure 6: Number of hours spent on pupil wellbeing by category and role

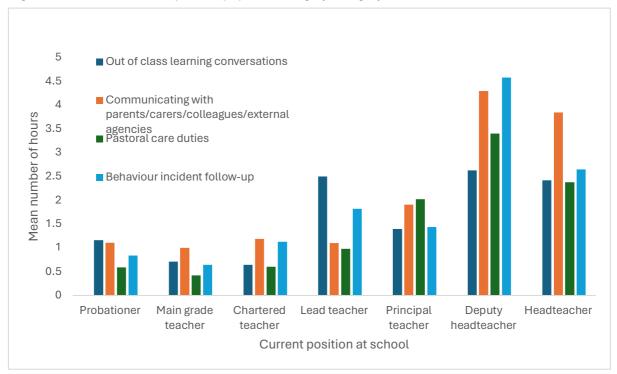
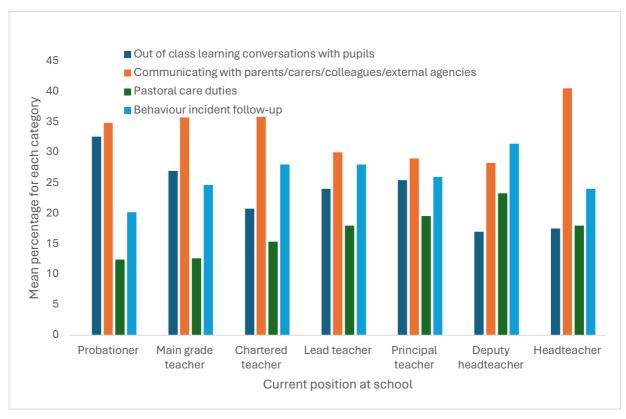


Figure 7: Percentage of hours spent on pupil wellbeing by category and role



For all roles except deputy headteacher (where it was second), 'Communicating with parents / carers / colleagues / external agencies' took the highest percentage of time. For probationers, this was very closely followed by 'Out of class learning conversations with pupils'. For deputy headteachers, 'Behaviour incident follow-up' took most time. The distribution of time spent on pupil wellbeing activities was broadly similar across roles in primary and secondary sectors.

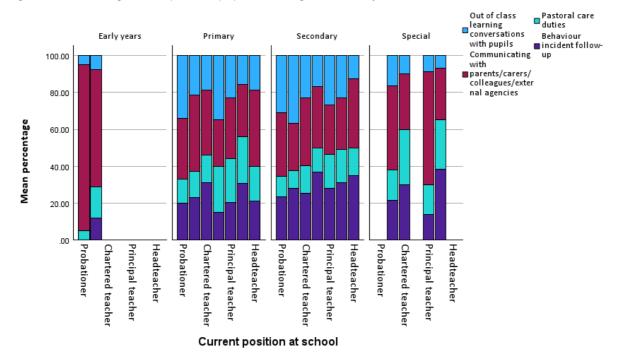


Figure 8: Percentage time spent on pupil wellbeing activities by sector

# 5.1.4 Other activities outside class contact

Table 7 shows the total number of hours spent on activities outside lessons by role. Kruskal-Wallis analyses were carried out examining whether there were significant differences between those in different teacher positions and the amount of time, in hours, they spent on tasks outside lessons ( $\chi^2$  (6, N = 1834) = 164.13, p < .001). Post-hoc tests with a Bonferroni correction showed that main grade teacher, probationers and chartered teachers spent significantly less hours on this category than deputy heads). Main grade teachers also spent significantly less time than headteachers and principal teachers on this category.

Teachers in promoted posts reported spending a lot of time reacting or 'fighting fires'. Staffing issues, absence management and class cover meant that senior leaders struggled to find time to be strategic. Interviewees reported a lack of clarity around responsibility for breaktime supervision resulting in some senior leaders taking on this role.

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	Median (Mean)	SD
Head	15.00 (18.00)	14.89
Deputy head	13.00 (15.81)	10.96
Principal	6.00 (7.99)	6.81
Lead	6.00 (6.20)	3.77
Chartered	4.00 (6.07)	9.06
Main grade	4.00 (4.63)	4.02
Probationer	5.00 (5.31)	3.31

Table 8: Pairwise comparison on overall activities outside school contact hours differences

	Headteacher	Deputy head	Principal	Lead	Chartered	Main grade	Probationer
Headteacher		>.999	>.999	>.999	.138	.009	.476
Deputy			.008	>.999	<.001	<.001	<.001
Head							
Principal				>.999	.076	<.001	.793
Lead					>.999	>.999	>.999
Chartered						>.999	>.999
Main grade							>.999
Probationer							

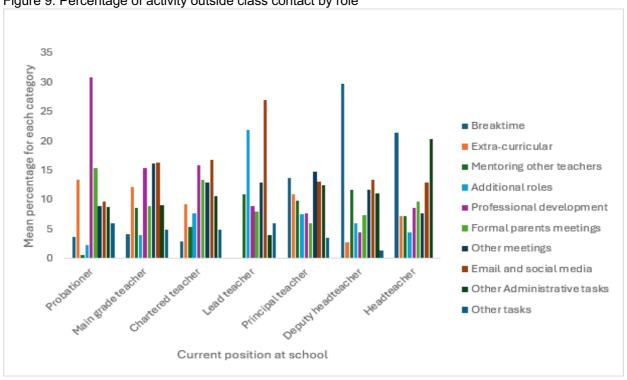
(significant findings in bold)

Note: limiting the number of hours spent on activities outside of school to 35 hours did not change the pattern nor significance of the results ( $\chi^2$  (6, N = 1827) = 155.07, p < .001) (see technical annex for full results).

The survey asked teachers to respond to how they used their time in relation to ten categories of time use outside lessons:

- Breaktime duties or supervisory roles
- Co/extracurricular activities
- Mentoring other teachers/supervising student teachers
- Additional/specialist roles
- Professional development
- Formal parents' meetings
- All other meetings
- Email /School-related social media / sharing work with parents / carers on VLE platforms
- Other administrative duties
- Other tasks

Figure 9: Percentage of activity outside class contact by role



### 5.2 Working time outside contracted hours

### **Key summary points**

- On average, teachers reported spending 11.39 hours in the week outside
  of contracted hours on work-related activity undertaken in the morning
  before work, into the evening and at home at the weekend.
- The three activities that consume by far the largest time commitment outside contracted hours (and totalling over five and a half hours) are planning and preparing lessons (2 hours and 15 minutes), preparing resources (1 hour and 50 minutes), and marking and feedback for pupils (one hour and 30 minutes).
- On average, teachers who completed the time use diary spent almost four hours on work-related activity at the weekend.
- Work beyond teachers contracted hours was the strongest predictor of perceived stress.
- Results from the perceived stress scale show that the teachers working in urban settings, early career teachers, and teachers who had more time with face-to-face commitments reported higher levels of stress.
- Interviewees accounts suggest school policies vary regarding expectations that teachers will access work-related emails in evenings and weekends.
- Many teachers reported extensive use of electronic platforms such as MS Teams, WhatsApp, and Google classroom could assist in managing workload remotely, but also increase working hours.
- Interviewees reported negative effects of extended working hours on family life, including reduced participation in social and leisure activities, less time spent with their own children, and increased reliance on partners to manage family responsibilities.
- The Teachers' Job Satisfaction scale shows a correlation between working time in the evening and weekends and a decline in job satisfaction.
- Workload was a contributing factor influencing teachers' career decisions i.e., whether to seek promotion, move schools, move into education-related work, or exit the profession.

This section reports those activities that respondents reported were 'done beyond your contractual 35 hours (or fraction thereof, if part-time) i.e., non-contractual hours', both within and outside of school, including separate questions relating to mornings, evenings and weekend.

On average, teachers reported spending **11.39 hours** in the week outside of contracted hours on work-related activity undertaken in the morning before work, into the evening and at home at the weekend.

The survey offered 17 time use options:

- Preparing resources
- Planning and preparing lessons
- Data recording, input and analysis
- Marking and feedback to pupils
- Writing reports
- Preparing Additional Support Plans
- Preparing for inspection

- Communicating with parents/carers/colleagues/external agencies
- Behaviour incident follow-up
- Mentoring other teachers/supervising student teachers
- Additional/specialist roles
- Professional development
- Formal/informal parents' meetings
- All other meetings
- Email/ School-related social media / sharing work with parents / carers on VLE platforms (or some similar wording)
- Other administrative duties
- Other tasks

# 5.2.1 Morning and evening

The time spent across a wide range of activities varied with more time spent on preparing resources, planning and marking than other categories. (Table 9).

Table 9: Percentage of total number of hours spent in the morning & evening outside contracted hours.

Tasks	Mean	Mean	SD
	Hours	Percentage	
Total evening hours	11.39		7.91
Preparing resources		17.65	15.34
Planning and preparing lessons		20.59	16.78
Data recording, input and analysis		5.46	8.44
Marking and feedback to pupils		13.71	17.08
Writing reports		5.53	12.57
Preparing additional support plans		2.26	5.88
Preparing for inspection		1.19	5.47
Communicating with parents/carers/colleagues/external		5.18	8.53
agencies			
Behaviour incidents follow up		3.18	6.40
Mentoring other teachers/supervising student teachers		2.18	6.16
Additional/specialist roles		1.89	6.16
Professional development		4.78	9.83
Formal/informal parents' meetings		2.34	7.28
All other meetings		2.83	6.33
Email/school-related social media/sharing work with		5.32	8.50
parents/carers on VLE platforms			
Other administrative duties		2.97	8.30
Other tasks		2.95	10.93

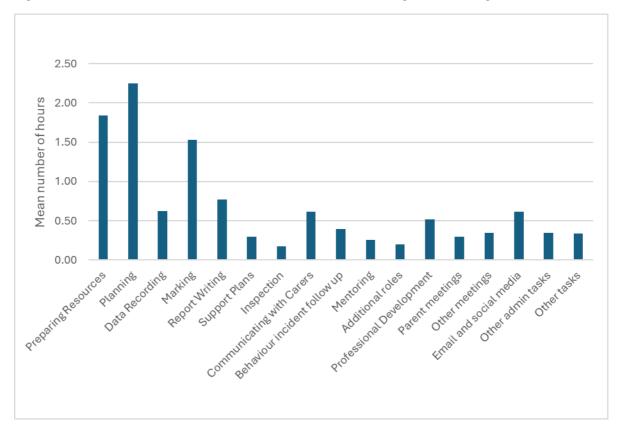
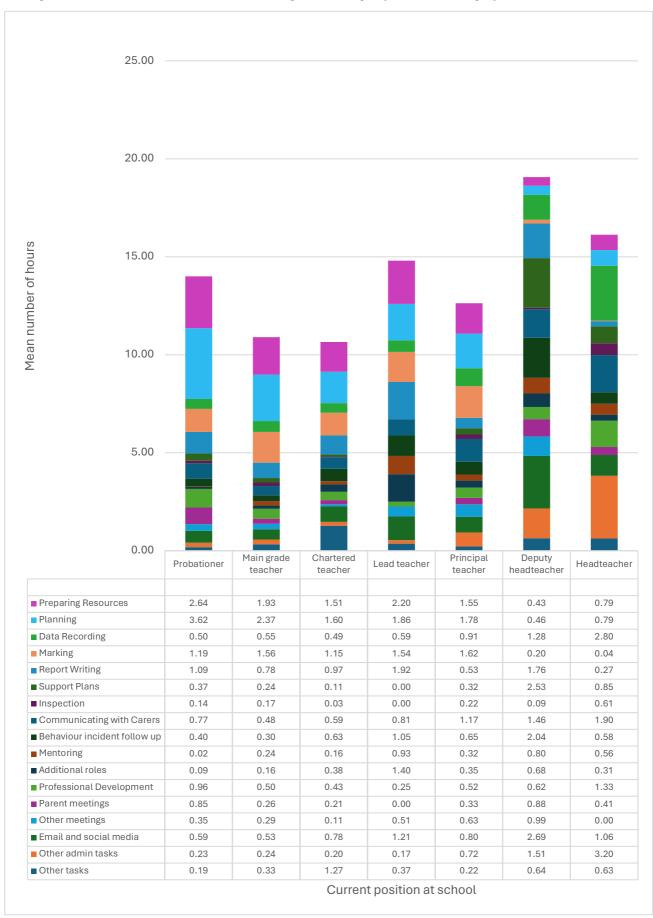


Figure 10: Mean values for the number of hours worked in mornings and evenings

After examining the mean number of hours spent on different categories across the cohort this was broken down further to look at the number of hours spent on different categories depending on participants' current position at school (Figure 11).

A Kruskal-Wallis test examined whether there were significant differences in the total amount of time spent working in the morning and evening outside contracted working hours based on role in school. This test showed that there was a significant difference ( $\chi^2$  (6, N = 1674) = 39.90, p < .001) with Bonferroni corrected pairwise comparisons showing that **deputy head** teachers did significantly more hours outside school contracted hours in the week than chartered teachers (p = .026) and main grade teachers (p = .002). Main grade teachers did significantly fewer extra hours in this period than principal teachers (p < .001). After correction for type one error no other comparisons reached significance (ps => .242).

Figure 11: Mean number of hours for mornings & evenings by time use category and role



## 5.2.2 Weekend

On average, teachers who completed the time use diary spent almost **four** hours on work-related activity **at the weekend**.

Table 10: Overall number of hours spent in the weekend outside contracted hours.

Tasks	Mean	Mean	SD
	Hours	Percentage	
Total Weekend hours	3.91		4.06
Preparing resources		19.37	25.38
Planning and preparing lessons		28.20	30.03
Data recording, input and analysis		3.22	10.78
Marking and feedback to pupils		16.25	29.27
Writing reports		8.56	22.85
Preparing additional support plans		1.35	7.38
Preparing for inspection		1.55	9.60
Communicating with parents/carers/colleagues/external		1.74	8.20
agencies			
Behaviour incidents follow up		0.48	3.54
Mentoring other teachers/supervising student teachers		1.07	6.66
Additional/specialist roles		1.45	9.32
Professional development		4.73	15.68
Formal/informal parents' meetings		0.40	4.59
All other meetings		0.12	1.30
Email/school-related social media/sharing work with		6.08	16.72
parents/carers on VLE platforms			
Other administrative duties		2.11	9.60
Other tasks		3.30	14.85

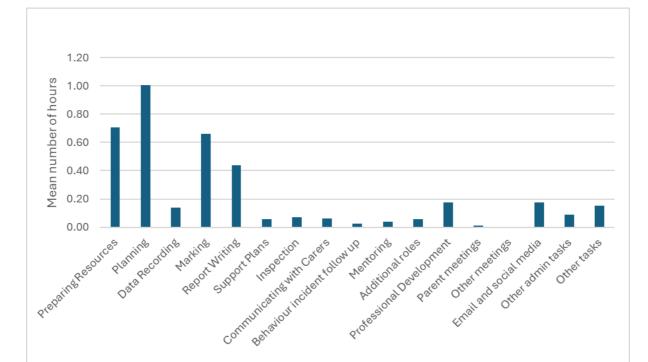
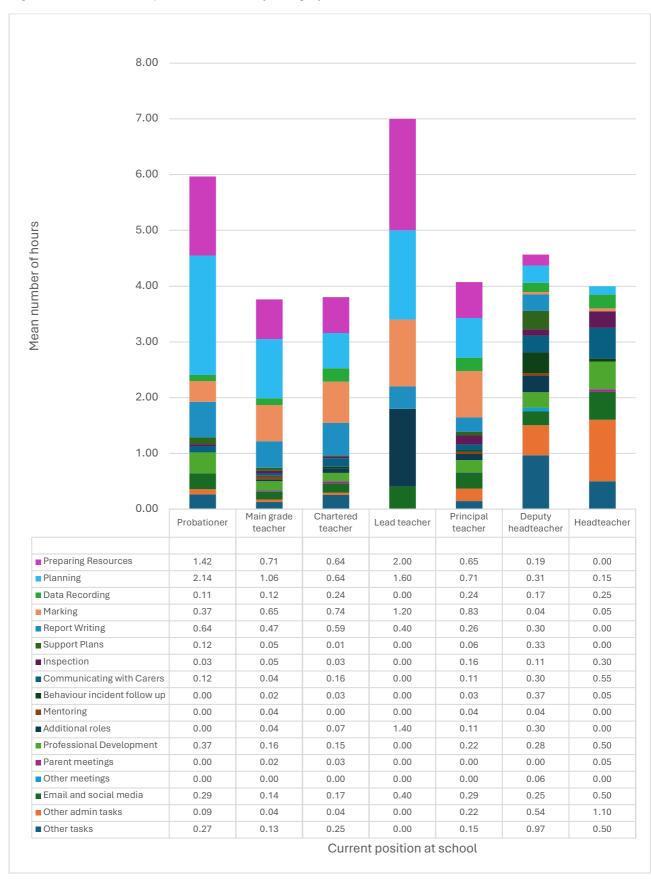


Figure 12: Mean number of hours worked beyond contracted hours at the weekend

There were significant differences in the number of extra hours worked beyond teachers' contracted hours at the weekend by position ( $\chi^2$  (6, N = 1667) = 16.26, p = .012). After correction for type one error using a Bonferroni correction the only significant result found that **main grade teachers spend fewer hours working on the weekend than probationary teachers** (p = .008). No other comparisons were significant (ps => .112). There were also significant differences in the number of extra hours worked beyond teachers' contracted hours at the weekend by sector ( $\chi^2$  (3, N = 1667) = 11.98, p = .007). Bonferroni corrected pairwise comparisons showed that primary teachers indicated that they worked longer hours than secondary teachers (p = .005).

Figure 13: Mean hours spent at weekend by category and teacher role.



Analysis of interview transcripts indicates that some schools set clear parameters about access to emails in evenings and weekends. Other schools were less successful in managing expectations. For example, a school leader advised teachers to 'switch off notifications in holiday periods, but to be aware that everybody's individual lifestyle means that they may be working at different times' (Principal Teacher, secondary, Highlands and islands). Pressure is experienced by receiving emails from colleagues that often have short deadlines/require urgent attention/are 'send to all'. There are clear areas of ambiguity with staff authoring emails at night or the weekends and scheduling emails to be sent the next weekday morning. Some teachers felt they needed to be available 24/7 to respond to communications from senior staff, parents or pupils. Interviewees reported that parental expectation around communication/ communicating with parents has increased their workload, and resulted in work that might have been done within contracted hours being moved to outwith contracted hours. Secondary main grade teachers were more likely to refer parent communications for the attention of principal teachers or guidance staff. Teachers experienced a heightened sense of personal responsibility to respond rapidly to areas of pupil concern. Furthermore, extensive routine use of electronic platforms such as MS Teams, WhatsApp and Google classroom increased access to teachers outside school. Interviewees commented that e-platforms both helped them to manage their workload from home in terms of ease of access, but also made them more susceptible to working longer outside school. Strategies to manage workload included the use of voice notes to provide verbal rather than written feedback to pupils at secondary school (main grade secondary, Eastern Scotland).

A couple of things have changed in the post-Covid period, it's certainly this idea that you're available all the time to your headteacher. In fact, it's become acceptable to just work over hours and to work at the weekend. It's just the new norm. (Principal teacher, primary, Southern Scotland)

We always receive an email on Sunday night to open on Monday on what's coming in the week ahead. It has eight or nine things that need to be done by Wednesday, but my non-contact time is Thursday morning. (Main grade, primary, Highlands and island)

I don't think our management lead by example. There's a WhatsApp group that buzzes all weekend, and emails are sent out on a Sunday that usually require some sort of response. (Main grade, secondary, Eastern Scotland)

Interviewees reported negative effects of extended working hours on family life, especially the contraction of quality time to spend with their own children and partners. One teacher commented on struggling to find time for conversations with her partner, 'I'm waiting for the weekend to almost breathe' (Principal teacher, Primary, Eastern Scotland, urban). Others commented on the stress of frequently delegating domestic duties (e.g. shopping, childcare, preparing meals) because they needed to work late or make time for schoolwork at weekends. Teachers referred to panic attacks, stress and anxiety arising from an inability to complete all that was required of them. Others noted going without food and drink at school because breaks and lunch periods were consumed with administrative duties and preparing convenience foods for their own families due to tiredness and/or to create more time in the evenings for schoolwork. The routine spillover into family time for female and male teachers meant reduced leisure time, and many duties were transferred to partners, which sometimes created tension at home.

It does have a negative impact on my own kids, the amount of time I've spent at weekends being in the same house but doing schoolwork. (Main grade, primary, North Eastern)

You lose a lot of family time. We talk a lot about the wellbeing of our children at school, but you work six days a week, you're physically exhausted, and you're not mentally working at your best. That is a massive impact on my wellbeing. I'm not getting to spend as much time with my family, and that has an impact on relationships. (Principal teacher, primary, Southern Scotland)

There are days where I will not have anything to eat, or very little time to drink anything, and come home completely exhausted. (Main grade, secondary, West Central)

One night I was sitting here at ten to nine on my laptop, getting organised for the next day. It's dark outside, it's miserable. I wasn't going to the gym. I wasn't doing anything for me. And I just thought I cannot do this anymore. At the Christmas holidays there was a couple of days I just didn't leave the house; I was so tired. I'm in my twenties. I love my job, but I cannot do this. I'm exhausted. (Main grade, secondary, Southern Scotland)

I think children of teachers don't get the best of them as parents - they definitely don't. Other folks' children get the best of me. (Secondary, main grade teacher, Southern Scotland)

I feel like a zombie to be honest when I get home at night. You always feel like you've got nothing left to give. (Secondary teacher, Principal teacher, Southern Scotland)

## 5.3 Teacher responses to perceived stress scale

The survey included a validated perceived stress scale. A regression analysis looked at what factors would predict scores on this scale. Initial investigations included position, years teaching experience, sector, type of contract (full/part times), contract status (permanent, temporary), number of schools taught at, location of current school, total number of hours worked in the working week before and after school but outside of contracted hours and total number of hours worked outside of contracted hours at the weekend. After dummy coding, the nominal variables; position (main grade as the reference), sector (Primary as the reference), contract (permanent as the reference) and location (urban as the reference) correlations were run to establish whether the predictors correlated with the outcome measure score on the perceived stress scale. The correlations established that position, number of schools and sector did not correlate with the outcome measure and so these variables were not included in the final regression model. The regression model was significant (F (12, 1577) = 14.48, p < .001) and explained 9% of the variance (adjusted R²). (See technical annex for a replication of these results when the number of hours was restricted to 22.5 for face-to-face contact and 35 hours for all other categories).

Examination of the coefficients showed that teachers in urban settings were more stressed than those in rural settings (p = .017). Those with fewer years' experience as a teacher were also more stressed than those with more (p < .001). Teachers who had more time with face-to-face commitments were more likely to be stressed than those with less (marginal, p = .079). Most importantly, stress levels were higher in those who spent more time working outside of their contracted hours in the working week (p <.001) and on the weekend (p < .001). The standardised coefficients shows that work beyond teachers contracted hours was the strongest predictor of perceived stress. These results indicate that the more burdened teachers are with needing to work beyond their contracted hours the more stressed they will be.

Table 11: Regression model Perceived Stress

#### Coefficients of the regression model predicting PSS<sup>a</sup>

	Unstandardized Coefficients	Standardized Coefficients		<u>.</u> .
	В	Beta	t	Sig.
(Constant)	24.928		36.072	<.001
Small town vs. Urban	115	009	364	.716
Rural vs. Urban	-1.175	061	-2.398	.017
Island Community vs. Urban	660	018	733	.464
Permanent vs. Temporary	514	021	858	.391
Permanent vs. Short term Supply contract	973	013	548	.584
How many years you have been a teacher	090	134	-5.204	<.001
Hours face to face (within contract)	.046	.045	1.758	.079
Hours prep (within contract)	.015	.016	.618	.537
Hours wellbeing (within contract)	.040	.031	1.140	.254
Hours outside school (within contract	001	001	040	.968
Hours outside contract - during the week	.128	.165	5.863	<.001
Hours outside contract- during the weekend	.214	.142	5.360	<.001

a. Dependent Variable: PSS

Prolonged working hours reduce the recuperation time that is available to teachers to help them to cope with work-related stress. Examples in the interviews included:

Workload is not always piles of marking or doing reports. A lot of the time it's the unseen work of managing your mental health, reflecting on a classroom experience, having downtime from a difficult interaction with a student. Letting those emotions sit with you and working through that. (Main grade, secondary, West Central)

In summary these results suggest that stress is increased by working longer hours. Importantly, it shows that there are no differences in stress between those in different sectors or the position that a teacher held. Instead, this is a universal finding that those who have to work more, especially beyond their contracted hours, will have a greater level of general stress in their lives. It is important to note that this is not just stress in relation to their job but that the workload burden leaves teachers feeling stressed within all aspects of their lives.

#### 5.4 Job satisfaction & career intentions

This section of the survey asked a series of questions (Table 12) using the TIMSS Teachers' Job Satisfaction scale (Mullis et al., 2020). Correlations were run to establish the relationship between working time and reported job satisfaction. These correlations showed that as working time in the evening and weekends increased, the less content and appreciated teachers felt within their profession.

Table 12: Correlations between the number of hours spent on different tasks and job satisfaction

	I am content with my profession	I find my work full of meaning and purpose	I am enthusiastic about my job	My work inspires me	I am proud of the work I do	I feel appreciated as a teacher	I value my time with the pupils
Hours face to face	.008	.012	016	017	016	075*	.009

Hours Prep	038	008	.002	.013	.013	028	.010
Hours Wellbeing	084**	068**	018	052*	010	100*	.027
Outside school	.008	005	.034	.008	.068*	018	.026
Evening hours	087**	020	.013	025	.015	112**	.092**
Weekend hours	069**	027	.010	.034	.022	066**	.067**
Year-long workload	139**	102**	083**	085**	026	141**	.062**

Negative values indicate a negative relationship (i.e., as one score goes up the other goes down).

The demands of excessive workload were a contributing factor influencing teachers' career moves. For some this was a decision to look for employment overseas, or UK education-related work in cognate areas such as re-training in educational psychology to support children with additional support needs, or employment with an educational charity. One probationer teacher would not be seeking employment in a mainstream school but had decided to move to working with small groups in alternative provision or special education due to the challenges of large class sizes with high needs.

For teachers with caring commitments, workload was cited as a factor in their decision to leave the profession earlier than planned. Others requested flexible working and sought to reduce their contract from full time to fractional e.g. 0.8 FTE to achieve a manageable worklife balance. Teachers entering teaching from other demanding careers were quick to point out that working lives do not have to be this challenging. Some experienced teachers elected to remain in teaching due to the lack of a viable alternative (with comparable salary) or were considering leaving for non-graduate occupations. The notion that teaching was a 'less attractive profession' due to issues of behaviour and workload was widely held, such as:

To be honest, I regularly think about leaving the profession. The expectations are just more and more unmanageable. Think of all the things we do to meet the needs of young people, which I completely support, but at what cost to teachers? If something happens, the culture is 'what did you do to cause that?' as if you're always the cause of a young person's stress or issues, when that is very rarely the case. That culture I find really difficult; the lack of insight into what teachers do and the toll that takes on you. (Main grade, secondary, West Central)

I had a meltdown with my PT at the beginning of the week. I just don't know if I want to do this job anymore. I'm a good teacher but I find myself asking, how many more years can I put myself through this? I hold it together, but I get to a point where I'm so exhausted and so stressed that I become physically ill. (Main grade, secondary, Highland and Islands)

It's got to a crazy level. You just feel that you're not able to give the children what they need. If you're not able to do yourself justice, you walk away thinking have I done a good job? And I don't think I've achieved that. So, unless something changes this might not be the promised career that it was supposed to be, a career for life. (Principal teacher, primary, Southern Scotland)

I see teachers leaving to become joiners, carpenters, and postal workers. People don't have the appetite anymore to stick with the overwork for an extended period of time if they have other options. There's also kind of a kind of gallows humour, trench culture, where people are punishing themselves for not being able to do it. (Main grade, secondary, Highland and Islands)

<sup>\*</sup> significant to .05

<sup>\*\*</sup> significant to .01

I've actively dissuaded friends' children and my own children from going anywhere near education as a career because it's brutal. It takes so much out of you and your family. (Main grade, Early years, North Eastern Scotland)

For some, moving schools was regarded as one strategy to alleviate workload pressures. An early career teacher in their second year of teaching reported high rates of teacher turnover, which they perceived to relate to excess workload (Main grade, primary, Highlands and Islands, rural).

Workload pressures on senior staff were cited by main grade teachers as a key reason not to pursue promotion pathways in teaching. Teachers observed a lack of support for new headteachers and the excessive workload of principal teachers and deputes. Several teachers acknowledged that principal teachers sought to act as a buffer for staff from increased workload by adopting an intermediary role to alleviate pressures from senior management. However, they suggested they felt 'lucky' rather than expected to have supportive professional relationships. Others anticipated a lack of practical assistance from senior staff should they raise concerns, and a lack of authenticity in espoused teacher wellbeing policies. For example, one teacher observed, 'I just know there wouldn't be direct support. It would just be we're all in this exhausted sinking ship together. And let's try and get through it' (Main grade, secondary, Southern Scotland). Three interviewees had relinquished promoted posts (Faculty roles and principal teacher positions) to return to the role of main grade teacher.

The principal teacher is being crushed. It all seems to come crashing into the middle. You do everything. That's not guidance's job, that's not careers job, that's your job. It's beyond breaking point, really. Messages go out. We don't know what everybody's going through, please be mindful of colleagues; but in the next communication, it's please do X, Y and Z. It's a mismatch between we're here to support, but things need to get done. (Principal Teacher, secondary, Highlands and islands)

I see what my deputy has to deal with on a day-to-day basis. She's dealing with social work concerns, major welfare concerns, an increased number of referrals to different services. At Depute level they're stuck in that midpoint, still managing the teachers they're responsible for, while the needs of the children have increased hugely. I have absolutely no aspiration anymore to go further. (Main grade, primary, Eastern Scotland)

I don't want to progress up. I've seen what it's doing to my current PT. He doesn't look happy. He just looks exhausted the entire time and I don't want that. He stays even later than I do. I know I can't do that. I can't make that sacrifice. (Main grade secondary, Highlands and island)

#### 6 Conclusion

This research was commissioned to examine the workload of teachers, the extra hours they work beyond their contractual 35-hours, and the drivers of teacher workload in Scotland.

The research was guided by the following research questions:

- What are the main activities that constitute teacher workload?
- What is the balance of this workload over the working week?
- What extra hours do teachers work beyond their contractual hours?
- Where do workload demands come from, out with class contact time?
- What are the main reasons for failure to achieve a 35-hour working week for teachers?

The research considered the policy background influencing teachers' workload in Scotland (Section 2) and reviewed the knowledge base on teacher workload from international research (Section 3). The evidence presented draws on an online time use diary completed by 1,834 teachers during the full calendar week beginning 4<sup>th</sup> March 2024, supplemented by 40 semi-structured interviews (Section 4). To explore the drivers of prolonged working hours the research first examined how teachers spend their time both within and beyond their class-contact time in a typical week, and then identified categories of work that spillover into evenings and the weekend. This final section draws together key insights in relation to the research questions.

Reported working hours in the target week indicate that teachers in Scotland are routinely working well beyond the 35-hour working week stipulated in the Teachers' Agreement, *A Teaching Profession for the 21st Century* (SEED, 2001). On average, the teachers who participated in the research reported working **46 hours** in the target week. Teachers spent **11 hours** 23 minutes, on average, outside their contracted hours on work-related activity that was undertaken in the morning before work, in the evening and at home at the weekend (Tables 9 and 10). This shows no improvement from the Teacher Working Time Research conducted by the University of Glasgow in 2005-06 that found teachers to be working 45 hours per week (Menter et al., 2006), and is an increase on the 8 additional hours reported in the 2022-23 EIS member survey (EIS, 2023b). Two decades after the Teachers' Agreement, teachers in Scotland continue to work well beyond their contracted hours and working hours are rising.

The deepening of pupil conduct and support issues is changing how teachers use their time. Within class-contact time, two thirds of teachers' time (all grades) in the target week was focused on learning interactions. The remaining third of main grade teachers' time in class was spent on behavioural interruptions (22%) and managing resources (11%) (Figure 3). During follow-up interviews, teachers reported a perceived increase in behavioural issues that interrupt learning. This is consistent with the findings of the Behaviour in Scottish Schools Research (BISSR) (Scottish Government, 2023). Moreover, teachers interviewed in the 2024 Teacher Workload Research reiterated the finding of the 2023 BISSR survey that more time is required to ensure that nurturing and restorative approaches to managing discipline can be deployed effectively. A perceived increase in behavioural issues creates additional administrative tasks in reporting incidents and pursuing appropriate follow-up action, including pastoral care and emotional support for pupils. Teaching is a relational activity, and persistent relational challenges intensify the emotional labour of teaching. In the post-pandemic period, teachers are increasingly placed in the front line of children's services. As their responsibilities expand, the emotional intensity of teachers' work increases (Education Support, 2023). This study contributes to an emerging body of research that connects pupil conduct issues with declining job satisfaction and emotional exhaustion (Aldrup et al., 2018; de Ruiter et et al., 2020).

The core activities *outside class-contact time but within contractual hours* that dominate teachers' time are planning and marking. These two activities accounted for 6 hours and 49 minutes, on average, in the teachers' time use diary. In the target week, the mean number of hours spent outside class (within contracted hours) by main grade teachers on planning and preparation was 4 hours 15 minutes (4.25 hours, 41.8%), plus a further 2 hours 34 minutes (2.57 hours, 25.7%) on marking and providing feedback to pupils (Figure 4). In addition, on average, main grade teachers spent one hour communicating with parents/ carers/colleagues/ external agencies, 39 minutes on behaviour referral, 25 minutes on pastoral work, and 42 minutes for out-of-class learning conversations (Figure 6). Interviewees confirm that time for administrative and student wellbeing processes was taken from time allocated to the core tasks of planning and preparation, creating time pressures for class committed teachers. Providing short notice cover for staff absence linked to behavioural incidents was a much less frequent but additional challenge for senior leaders.

While the job demands made of teachers are increasing, teachers often contend with escalating need without sufficient additional resource in terms of time or support. A reported increase in learner needs, a contraction of support for learning in many local authorities, a decline in pupil attendance and increase in emotionally based school non-attendance create additional time pressures for teachers who are committed to responsive personalised planning. The sharp increase in the number of children and young people with identified additional support needs (Pupil Census, 2023) was reflected in the experiences of teachers who took part in follow-up interviews. Teachers expressed concern about the capacity of schools to address escalating need in the context of a reduction in the number of ASN teachers and associated increase in the number of pupils that ASN teachers now support (Scottish Government, 2023, Scottish Children's Services Coalition, 2024). Some disquiet was expressed regarding the capacity of the education system to continue to fully support the presumption to mainstream. Taking a whole system approach, frontline teachers will experience a backwash from the financial pressure on local authority budgets at a time of increasing service demands (Audit Scotland, 2024).

Across roles, sectors and regions there was widespread support for effective use of data to improve teaching and learning, but insufficient time within contracted hours to navigate systems of data entry for recording and monitoring learner progress. Teachers commented on the frequency with which they were required to quantify and report on learner progress and expressed frustration at duplication of effort in disjointed systems and a perceived disconnect with reporting processes and day-to-day practices of teaching and learning. Directed activities were perceived to be burdensome if an explicit connection with the quality of teaching and learning was not firmly established. This confirms earlier research that identifies relevance, or the perceived educational benefit for learners, as a key factor influencing attitudes to workload (Lawrence at et al., 2019; Worth & Van den Brande, 2020). Several working groups over a decade have sustained a focus on reducing bureaucracy and unproductive workload (Scottish Government, 2013, 2015; Scottish Government, 2016). This research suggests that this remains an issue for many teachers in Scotland.

It is concerning that the work that teachers report cannot be accomplished within their contracted working hours are non-negotiables within their core role as educators. The three activities that consume by far the largest time commitment *outside contracted hours* (over 5 and half hours) are planning and preparing lessons (2 hours and 15 minutes), preparing resources (1 hour and 50 minutes), and marking and feedback for pupils (one hour and 30 minutes) (Figure 11). Participating teachers reported spending, on average, almost **four** hours (3 hours and 55 minutes) on work-related activity **at the weekend**. At the weekend the four most common activities are activities are planning (one hour), preparing resources (42 minutes), marking (39 minutes) and report writing (26 minutes) (Figure 13). This finding contributes to a growing body of work that demonstrates that teachers will

extend their working hours to complete valued tasks aligned with their sense of professionalism (Martin et at al., 2023). A culture of caring professionalism renders many teachers vulnerable to over work and consequently reduced recuperation time. This research provides further evidence of 'self-endangering' habits of over work that have a negative impact on teachers' health and wellbeing and family life (Beck, 2017; Hoppe et al., 2023).

Opportunities to engage in on-going professional development is a hallmark of a profession and many teachers make time for this beyond their contracted hours. Time for elective professional learning was reduced to just 35 minutes during the week, on average, for main grade teachers in this study. The contraction of elective self-directed professional learning was associated with competing demands and the immediate need to attend to multiple 'take home' tasks that spill over beyond contracted hours. Many teachers reported being caught in a continuous cycle of 'catching up' that constrained possibilities for deeper forms of reflection and strategic professional development. It is likely that the capacity of the teacher workforce in Scotland to meet changing learner needs will be affected, in some part, by reduced time and willingness to undertake unfunded self-directed professional learning. More time will be needed within contracted hours to meet the challenges of large-scale assessment reform and to adapt the curriculum to future needs.

While some tasks that cannot be completed during the working week and spillover beyond contracted hours are undertaken through a sense of professionalism, others are experienced as directed activity over which teachers have little control. There is some variability between schools in Scotland in how far teachers are supported to set limits around their work responsibilities and working hours away from school. While main grade teachers reported, on average, spending around ten minutes accessing work-related email at weekends (Figure 13), these communications entailed subsequent planning and reporting activity and a sense of always being available. This is consistent with international research that records the blurring of boundaries between teachers' work and home life because of increased access to information and communications technology and declining levels of task discretion (Reid and Creed, 2021; Selwyn, 2022).

Workload manageability – and the balance between elective and directed activity - is important because of its links with sustainability and ultimately turnover. In this study stress levels were higher among those who spent more time working beyond their contracted hours in the working week and at the weekend (Section 5.3). As working time in the evening and weekends increased, the less content and appreciated teachers felt within their profession (Section 5.4). Prolonged working hours and reduced discretion over tasks have implications for career choices and mobility (between schools and beyond education). Research elsewhere in the UK has established strong links between teacher working conditions, recruitment and quality retention (McLean et al., 2024).

The professional life of educators, as reported by the teachers who completed the time use diary and took part in interviews for this study, is clearly under strain. Teachers in Scotland, and comparable national/ regional education systems, are currently facing a perfect storm of increased job demands and declining organisational support.

The key drivers of teacher workload reported in this study are:

- Multiple competing pressures on non-teaching time that mean that core activities planning, preparation and marking - cannot be accomplished in contractual hours
- Increased pupil behaviour and attendance issues
- More diverse learner needs requiring personalised planning
- Increased and more complex Additional Support Needs
- Reduction in support for learning

Insufficient funding to support increased job demands

A policy focus on excessive working time and occupational wellbeing in teaching is timely. This study provides little support for the effectiveness of workload reduction strategies to date. Working hours are rising. Declining job quality and workload manageability have significant implications for the quality of education and career choices. Further investigation is needed to explore the possible relationship between prolonged working hours, increased job demands, falling recruitment patterns, teacher mobility/immobilities (between schools and regions) and attrition rates (i.e., push-pull factors). Teacher workload and wellbeing needs to be considered within whole system strategies to improve educational outcomes. Increased staffing numbers and increased support - in terms of non-contact time and access to specialist expertise and development opportunities - will help to protect the quality of education in Scotland's schools and promote positive perceptions of teaching as an attractive and sustainable career choice.

## **Appendix 1: Participant characteristics**

#### Gender

The time use diary and survey questions were completed by 1,834 teachers. Of these 1518 (82%) were female, 303 (16.5%) male, 5 non-binary and 8 preferred not to say. This is broadly in line with the general teaching population as set out by Scottish School Census (Scottish Government, 2023), which records the gender composition of the primary education workforce as 89% female and 11% male, and secondary education as 65% female and 35% male. The teacher workload sample is therefore gender representative of teachers across Scotland.

### **Ethnicity**

The self-identified ethnic breakdown of the participants was 11 Asian, 3 Black, 1794 White, 22 mixed or multiple ethnicities and 4 others. Grouping the minority ethnic groups together, 2% of participants in the sample are from a BAME background which is identical to the teacher census data. There were 97% of participants from a white background, which is slightly higher than the general teaching population as set out by Scottish School Census of 92%, but within reasonable limits for a representative sample given the proportion of those from minority groups is identical to the census data.

### Age

The mean age of the participants was 40.87 (SD = 10.16). Figure 1a and b gives the mean age of each gender and ethnicity respectively. This is in line with the general teaching population as set out by Scottish School Census where average age was 41.

Figure 14: Mean age of survey participants by gender.

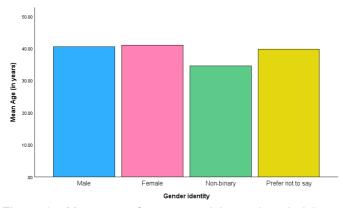
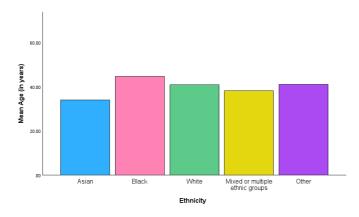


Figure 15: Mean age of survey participants by ethnicity.



#### **Teaching role**

The participants were employed across the full range of roles from probationer to headteacher (Table 13).

Table 13: Total number of survey respondents by school position.

	Number	Percentage	School census percentage
Probationer	37	2.0%	-
Main grade teacher	1440	78.5%	76%
Chartered teacher	34	1.9	-
Lead	5	0.3%	14%
Principal	273	14.9%	
Deputy head	35	1.9%	5%
Headteacher	10	0.5%	4%

Note: the census data does not have all the categories which were used in this survey and so values cannot be given for all comparisons. The census data also collapsed the lead and principal teacher role.

#### **Sector**

Details of the sector in which the sample teachers worked is shown in Table 14.

Table 14: Survey respondents by sector

	N	Percentage
Early years	14	0.8%
Primary	971	52.9%
Secondary	791	43.1%
Special	58	3.2%

### **Previous experience**

Participants had a mean of 14.11 (SD = 9.25) years of experience as a teacher and most had taught in fewer than five schools. A higher number of schools reflects those teachers who have worked as short-term supply teachers (Table 16).

Table 15: Previous experience: number of schools

	Ν	Percentage
1.00	320	17.4%
2.00	462	25.2%
3.00	347	18.9%
4.00	238	13.0%
5.00	157	8.6%
6.00	94	5.1%
7.00	52	2.8%
8.00	43	2.3%
9.00	23	1.3%
10.00	28	1.5%
11.00	8	0.4%
12.00	15	0.8%
13.00	7	0.4%
14.00	5	0.3%
15.00	6	0.3%
16.00	5	0.3%
17.00	1	0.1%
19.00	1	0.1%
20.00	22	1.2%

## Years taught by primary teachers in current role

Table 16 gives the number of primary teachers who teach in each year, with some participants teaching across multiple years.

Table 16: Primary teacher respondents by year group

Year	Number of teachers
P1	257
P2	288
P3	311
P4	336
P5	339
P6	336
P7	304

## Subjects taught by secondary teachers in current role

Secondary teachers were asked to provide information on which subject areas they primarily taught, with participants able to select multiple areas (Table 17).

Table 17: Secondary respondents by subject(s) taught

Subject taught	Number
Art and Design	40
Biology with science	52
Business education	37
Chemistry with science	47
Community languages	2
Computing science	19
Dance	3
Drama	20
English	146
Gaelic	6
Geography	28
History	45
Home economics	39
Mathematics	79
Modern foreign languages	42
Modern studies	46
Music	50
Physical education	40
Physics with science	34
Psychology	6
Religious education	24
Support for learning	31
Technological education	17
Learning support/guidance	41
Other	26

## **School setting**

The majority of participants worked in either urban (44%) or small town (42%) settings, with fewer working in rural (11%) or island communities (2.5%) (Table 18).

Table 18: Location of school settings of survey respondents

	N	Percentage
Urban	815	44.4%
Small town	772	42.1%
Rural	202	11.0%
Island Community	45	2.5%

## Local authorities

Teachers completing time use diaries were employed across the 32 local authorities in Scotland.

Table 19: Survey respondents by local authority

	N	Percentage
Aberdeen City Council	70	3.8%
Aberdeenshire Council	119	6.5%
Angus Council	37	2.0%
Argyll and Bute Council	36	2.0%
City of Edinburgh Council	141	7.7%
Clackmannanshire Council	19	1.0%
Comhairle nan Eilean Siar	17	0.9%
Dumfries and Galloway Council	56	3.1%
Dundee City Council	33	1.8%
East Ayrshire Council	38	2.1%
East Dunbartonshire Council	31	1.7%
East Lothian Council	55	3.0%
East Renfrewshire Council	46	2.5%
Falkirk Council	32	1.7%
Fife Council	110	6.0%
Glasgow City Council	127	6.9%
Inverciyde Council	22	1.2%
Midlothian Council	54	2.9%
North Ayrshire Council	48	2.6%
North Lanarkshire Council	110	6.0%
Orkney Islands Council	8	0.4%
Perth and Kinross Council	59	3.2%
Renfrewshire Council	55	3.0%
Scottish Borders Council	43	2.3%
Shetland Islands Council	13	0.7%
South Ayrshire Council	47	2.6%
South Lanarkshire Council	100	5.5%
Stirling Council	33	1.8%
The Highland Council	99	5.4%
The Moray Council	49	2.7%
West Dunbartonshire Council	48	2.6%
West Lothian Council	77	4.2%
Other setting or independent school	2	0.1%

#### Tenure by contract type

Most participants were on permanent contracts (1691, 92%) with fewer on temporary (131, 7%) and short-term supply contracts (12, 0.6%). This is broadly in line with the general teaching population as set out by Scottish School Census which showed that between 78-85% were in permanent positions and 11-16% were in temporary positions (Scottish Government, 2023).

The majority of participants were employed on full-time contracts (1474, 80%) with fewer on part-time (360, 20%) contracts. Both values are in line with the Scottish School Census data of 80% for full-time and 20% part-time. Of those on part -time contracts, most were on either 0.6 contracts (122) or 0.8 contracts (112).

### Interview sample by role and sector

Forty remote interviews were conducted with teachers who had completed the time use diary and survey questions (Table 21). The interview sample comprised 28 female teachers (70%) and 12 males (30%) currently employed in schools in 26 local authorities.

Table 20: Interview sample by role and sector.

Role	Sector	Count	
Chartered	Primary		1
	Secondary		1
Chartered Total			2
Deputy	Pri/Early Years		2
	Secondary		1
	Special		1
Deputy Total			4
Headteacher	Primary		1
	Secondary		1
Headteacher Total			2
Main grade	Early Years		2
	Primary		8
	Pri/Sec		1
	Secondary		12
Main grade Total			23
Principal	Secondary		4
Principal Total			4
Probationer	Primary		4
	Secondary		1
Probationer Total			5
Grand Total			40

## Appendix 2: Time use diary & survey

## Consent form

You will be asked about your time use (workload) in the week commencing 4 March 2024, including workdays, evenings and the weekend. You will be asked to identify the main activities that constitute your workload, the influences on your time use, and how your workload affects your wellbeing.

In order to participate in this study, we need to ensure that you understand the nature of the research, as outlined on the Participant Information page.

Please tick the boxes to indicate that you understand and agree to the following conditions.

*
I confirm that I have read the information sheet for this study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
I understand that in order to take part in this study, I should/ be at least 18 years old and have normal or corrected to normal vision.
I understand that personal data about me will be collected for the purposes of the research study including age and gender, and that these will be processed in accordance with the information sheet.
I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my legal rights being affected.
I understand that my data is anonymous and will be stored on secure university servers. I understand that it will be used by the investigators for research purposes and to provide an overview of the findings to the Educational Institute for Scotland
I understand that data will be anonymous once given and it will be impossible to withdraw at a later date. However, any data given will be completely anonymous and so it will not be possible to identify any individuals.
I agree to take part in this study

# About you

* Ple	ease move the slider to indicate your age in years
	n years)
* Ple	ease indicate your gender identity
	Male
$\bigcirc$	Female
	Non-binary
	Prefer not to say
* Ple	ase indicate your ethnicity
	Asian
$\supset$	Black
$\supset$	White
$\supset$	Mixed or multiple ethnic groups
$\bigcirc$	Other
* Ple	ase indicate your professional experience (how many years you have been a teacher)

* Pleas	se select your current position at school
$\bigcirc$	Probationer
$\bigcirc$	Main grade teacher
$\bigcirc$	Chartered teacher
$\bigcirc$	Lead teacher
$\bigcirc$	Principal teacher
$\bigcirc$	Deputy headteacher
$\bigcirc$	Headteacher
* Pleas	se select the sector you predominantly work at (select the one which applies most to you)  Early years
$\bigcirc$	Primary
	Secondary
$\bigcirc$	Special
Please	select the main years you teach in (select all that apply)
	P1
	P2
	P3
	P4
	P5
	P6
	P7

Please s	select your main curriculum area (secondary only): Tick all those that apply
	Art and Design
	Biology with Science
	Business Education
	Chemistry with Science
	Community Languages
	Computing Science
	Dance
	Drama
	English
	Gaelic
	Geography
	History
	Home Economics
	Mathematics
	Modern Foreign Languages
	Modern Studies
	Music
	Physical Education
	Physics with Science
	Psychology
	Religious Education

	Support for learning
	Technological Education
	Learning Support/Guidance
	Other
* Pleas	se indicate the location of your school
$\bigcirc$	Urban
	Small town
	Rural
$\bigcirc$	Island Community
* Pleas	se select which local authority you work within.
$\bigcirc$	Aberdeen City Council
$\bigcirc$	Aberdeenshire Council
$\bigcirc$	Angus Council
$\bigcirc$	Argyll and Bute Council
$\bigcirc$	City of Edinburgh Council
$\bigcirc$	Clackmannanshire Council
$\bigcirc$	Comhairle nan Eilean Siar
$\bigcirc$	Dumfries and Galloway Council
	Dundee City Council
$\bigcirc$	East Ayrshire Council
	East Dunbartonshire Council

	East Lothian Council
	East Renfrewshire Council
	Falkirk Council
$\bigcirc$	Fife Council
	Glasgow City Council
	Inverclyde Council
	Midlothian Council
$\bigcirc$	North Ayrshire Council
$\bigcirc$	North Lanarkshire Council
	Orkney Islands Council
	Perth and Kinross Council
	Renfrewshire Council
	Scottish Borders Council
	Shetland Islands Council
	South Ayrshire Council
	South Lanarkshire Council
	Stirling Council
	The Highland Council
	The Moray Council
	West Dunbartonshire Council
	West Lothian Council
$\bigcirc$	Other setting or independent school

Please indicate the number of schools you have taught in since qualification			
Number of Schools			
* Please indicate the type of contract you have			
Permanent			
Temporary			
Short term Supply contract			
Full-time contracted working hours are 35 hours a week; with 22.5 hours of teaching and additionally no less than a third of this figure allocated for preparation & correction. All tasks that do not require a teacher to be on the school premises can be undertaken at a time and place of the teacher's own choosing  The following questions will ask you about your work done within your contractual 35 hours a week (or fraction thereof part-time) and, then further questions will ask you about your work done beyond your contractual 35 hours (or fraction thereof, if part-time) i.e. non-contractual hours  Please answer the following questions within the time usage diary with these hours in mind.			
* Please select your contract type			
Full time			
Part time			

If your contract is part-time please indicate what FTE you are contracted to work per term-time week (1 = full time)

FTE contract hours



## Time usage diary

The following questions ask you to reflect on your time usage in the following categories

Please note you may need to scroll up to return to look at these categories again during the following questions Table 1 Categories of time use

Face-to-face teaching activities

- Learning interactions
- Minor learning disruptions
- Significant behavioural interruptions
- Managing resources

Preparation and admin tasks

- · Planning and preparing lessons
- Data recording, input and analysis
- Marking and feedback to pupils
- Writing reports
- Preparing Additional Support Plans
- Preparing for inspection

Student wellbeing responsibilities

- Out of class learning conversations with pupils
- Communicating with parents/carers about student learning/colleagues/external agencies
- Pastoral care duties
- Behaviour incident follow-up

Activities outside lessons

- Breaktime duties or supervisory role
- Co/extracurricular activities
- Mentoring other teachers/supervising student teachers Additional/specialist roles
- Professional development
- Formal/informal parents' meetings
- All other meetings
- Email
- Other administrative duties
- Phone calls to parents/carers

Full-time contracted working hours are 35 hours a week; with 22.5 hours of teaching and additionally no less than a third of this figure allocated for preparation & correction. All tasks that do not require a teacher to be on the school premises can be undertaken at a time and place of the teacher's own choosing
The following questions will ask you about your work done within your contractual 35 hours a week (or fraction thereof, if part-time) and, then further questions will ask you about your work done beyond your contractual 35 hours (or fraction thereof, if part-time) i.e. non-contractual hours
* Reflecting on the week beginning 4th March, within your contracted hours approximately how many hours did you spend on <a href="#Face-to-face teaching activities">Face-to-face teaching activities</a> (total number of hours)
* Thinking of the hours spent on Face-to-face teaching please input the percentage of time you spent on each of these categories (it should total to 100%)

Learning interactions

Minor learning disruptions	
%	
Significant behavioural interruptions %	
Managing resources (e.g., technology and equipment)	
Total Percentage	0
* Reflecting on the week beginning 4th on Preparation and admin tasks (number)	March, within your contracted hours approximately how many hours did you spend ber of hours)
* Thinking of the hours spent on prepare	aration and admin tasks please input the percentage of time you spent on each of
these categories (it should total to 100%)	
Data recording, input and analysis %	
Marking and feedback to pupils	
%	
Writing reports	
%	
Preparing Additional Support Plans %	
Preparing for inspection	
%	

Planning and preparing lessons		
%		
Total Percentage %	0	
* Reflecting on the week beginning	1th March, within you	r contracted hours approximately how many hours in school did you
spend on Student wellbeing respons	sibilities (number of	hours)
* Thinking of the hours spent on we	Ilbeing responsibilitie	s input the percentage of time you spent on each of these
categories (it should total to 100%)		
Out of class learning conversations with pupils %		_
Communicating with parents/carers/dagencies	colleagues/externa <u>l</u> %	
Pastoral care duties		
%		
Behaviour incident follow-up		
%		
Total Percentage %	0	
* Reflecting on the week beginning	1th March, within you	r contracted hours approximately how many hours did you spend
on <u>Activities outside lessons at sch</u>	ool (number of hour	5)

Thinking of the hours spent on activities	outside lessons i	nput the percentage of time you spent on each of these
categories (it should total to 100%)		
Breaktime duties or supervisory roles %		
Co/extracurricular activities		
%		•
Mentoring other teachers/supervising student teachers		
Additional/specialist roles		
%		
Professional development		
%		•
Formal parents' meetings		
%		•
All other meetings		
%		•
Email /School-related social media / sharing work with		
parents / carers on VLE platforms %		
Other administrative duties		
%		
Other tasks (please specify below) %		

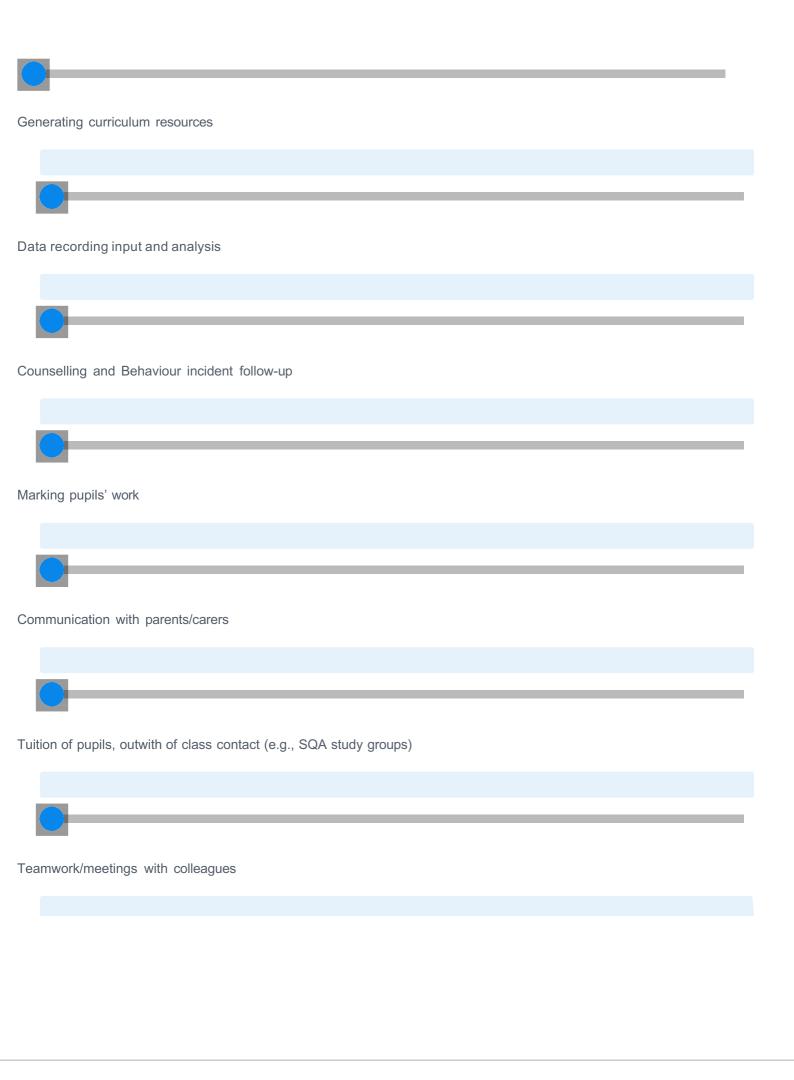
Total Percentage %	0	
If you have selected 'other tasks' above p	please state what these are here.	
The following questions relate to anythin hours per week).	g you did <u>outside</u> your contracted hours (which if you are full-time	equate to 35
	arch, outside your contracted hours approximately how many hours ng week (such as before and after school hours)	did you spend
	xtra work <u>outside</u> your contracted hours within the working week l	
	egories (please write the number in the box). Please exclude weeken	d hours as
these will be covered in the next quest	ion.	
Preparing resources		
Planning and preparing lessons		
Data recording, input and analysis		
Marking and feedback to pupils		
Writing reports		

Preparing Additional Support Plans	
Preparing for inspection	
Communicating with parents/carers/colleagues/external agencies	
Behaviour incident follow-up	
Mentoring other teachers/supervising student teachers	
Additional/specialist roles	
Professional development	
Formal/informal parents' meetings	
All other meetings	
Email/ School-related social media / sharing work with parents / carers on VLE platforms (or some similar wording)	
Other administrative duties	
Other tasks (please specify below)	

If you have selected 'other tasks' above please state what these are here.						
Reflecting on the week beginning 4th March, on work-related activity: - at the weekend	outside your contra	acted hours approx	imately how ma	any hours did yo	u spend	
If you have indicated that you are doing extra indicate approximately how many hours you lhours in the box)						
Preparing resources						
Planning and preparing lessons						
Data recording, input and analysis						
Marking and feedback to pupils						
Writing reports						
Preparing Additional Support Plans						
Preparing for inspection						
Communicating with parents/carers/colleagues/external agencies						
Behaviour incident follow-up						

teachers/supervising student teachers		
Additional/specialist roles		
Professional development		
Formal/informal parents' meetings		
All other meetings		
Email/ School-related social media / sharing work with parents / carers on VLE platforms (or some similar wording)		
Other administrative duties		
Other tasks (please specify below)		
If you have selected 'other tasks' above pleas	e state what these are here.	
right/ too much/ far too much?	ou spend outside lessons on the following far to bout right, and 100 = far too much. 0 = this st	

Individual lesson planning



Delivering uncontracted extracurricular activities
Contact with people outside of school other than parents
General administration
Professional development
reachers' workload varies across the school year. Please indicate the calendar months(s) where your workload is highest
peaks).
January
February
March
April
April May

	June	
	July	
	August	
	September	
	October	
	November	
	December	
Plea	se briefly say why this is your busiest month/s	
		<u>/ı</u>
	Factors affecting your workload	
Wha	at are the most significant factors outside your control that influence how you spend your time in school? and why?	
		/
		<u>/ı</u>
_ Wha	It are the most significant factors within your control that influence how you spend your time in school? and why?	<u>/ı</u>
Wha	at are the most significant factors within your control that influence how you spend your time in school? and why?	
Wha	at are the most significant factors within your control that influence how you spend your time in school? and why?	<u>//</u>

ngements and working time agr ased workload) Has this strate			(e.g. reducing wo	rkload, no diffe	erence,
se just put the appropriate lette	er for columns 2 an	d 3			
	School stra	Reduced (R)	) / No difference ed workload (I)	Su	stained? Y/N
1					
2					
3					
4					
5					
	How you fee	el about your			
	strongly disagree,	2 = disagree, 3 = (	generally, 4 = agre	ee, and 5 = str	
		2 = disagree, 3 = (	generally, 4 = agro	ee, and 5 = stro 4 = agree	
he seven items below measure 5-point Likert scale in which 1 =  1. I feel that my time is very ragmented.	strongly disagree,	2 = disagree, 3 = (	generally, 4 = agro		5 = strongly

What are your main take-home tasks? and why?

3. I often feel that I do not have enough time at work.			$\bigcirc$	$\bigcirc$	$\bigcirc$			
4. I feel that I do not have enough time to improve my professional skills.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\circ$	$\circ$			
5. I feel that my teaching hours are often taken up by transactional (i.e., routine administrative) work.								
6. I feel that I do not have enough time to share family responsibilities.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$			
7. I feel that I do not have enough time with my friends.		$\bigcirc$			$\bigcirc$			
Your thoughts and feelings during the last month								

\* The questions in this scale ask about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don't try to count up the number of times you felt a particular way; rather indicate the alternative that seems like a reasonable estimate

	0 – never	1 – almost never	2 – sometimes	3 - fairly often	4 - very often
I. In the last month, how often have you been upset because of something that happened unexpectedly?			$\bigcirc$	$\bigcirc$	$\bigcirc$
2. In the last month, how often have you felt that you were unable to control the important things in your life?			$\bigcirc$		$\bigcirc$
3. In the last month, how often have you felt nervous and stressed?			$\bigcirc$	$\bigcirc$	
4. In the last month, how often have you felt confident about your ability to handle your personal problems?	$\bigcirc$		$\bigcirc$	$\bigcirc$	$\bigcirc$

have you felt that things were going your way?								
6. In the last month, how often have you found that you could not cope with all the things that you had to do?	$\bigcirc$							
7. In the last month, how often have you been able to control irritations in your life?	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$			
8. In the last month, how often have you felt that you were on top of things?	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$				
9. In the last month, how often have you been angered because of things that happened that were outside of your control?								
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?								
	Feelings a	bout being a	a teacher					
*								
Have you considered leaving the profess	ion in the last t	wo years?						
Yes								
No	○ No							
Why you have considered leaving the pro	ofession in the I	ast two years?						
					,			

What holds you in the profession and why?
How do you feel about being a teacher?
I am content with my profession as a teacher
I find my work full of meaning and purpose
I am enthusiastic about my job
My work inspires me
I am proud of the work I do
I feel appreciated as a teacher

I value my time with the pupils
Are there any other areas of your work which you would like to give feedback on which has not been covered elsewhere?
Future contact
We are keen to understand as fully as possible Scottish teachers' experiences of workload. As
such, we would like to invite you to participate in follow-up interview (conducted online or by telephone) as part of this research. We expect interviews to take no more than 45 minutes. If
you are happy for us to retain your contact details and contact you for this purpose, please
ENTER a contact email address below.
This information will be kept separate to your survey responses and so will not compromise your anonymity on the survey as this is kept in a separate location to your survey responses

# **Appendix 3: Interview topic guide**

### TEACHER WORKLOAD RESEARCH

Date:	Mode:	Duration:
Interviewee ID code:		Interviewer:

#### **Interview Guide**

[Revisit Participant Information Sheet, consent procedure and allow time for questions] We would like to give you an opportunity to say a little more about your responses to the Workload Diary. Before we start, can we check some demographic details with you? Is there any other <a href="contextual">contextual</a> information that you would like to share that you feel is relevant to our conversation about workload?

- 1. We asked, what are the most significant factors <u>outside your control</u> that influence how you spend your time in school? Can you say a little more about the influences on how you spend your time in school? Who or what focuses your attention in this way?
  - a. How do feel about the level of directed activity in your role?
  - b. How do feel about the level of discretionary activity in your role?
  - c. In your opinion, how does how you spend your time influence the guality of provision?
- 2. We asked, what are the most significant factors <u>within your control</u> that influence how you spend your time in school? Why do you choose to spend your time on certain activities rather than others? Which are the most important activities in your opinion and why?
  - a. Is there alignment between how you *must* spend your time and how you would *choose* to spend your time in school?
  - b. As an experienced teacher [if relevant], has your workload changed across your career? If so, in what ways? What is the impact of this on you?
- 3. We asked, what are your main <u>take-home tasks</u>? Can you say a little more about why these tasks are taken home to complete?
  - a. How often do you need to take school work home? Why?
  - b. How much time do you give to school-related work at home each week?
  - c. How manageable do you find making time for school work outside working hours? What is the impact of this on your life outside school?
- 4. We asked about the strategies/policies that are in place to help teachers manage workload at your school. Can you tell me about these and whether you feel they are helpful?
  - a. Have you sought support in relation to your workload in school? What was the response?
  - b. Have you ever taken time off work due to the impact of workload?
- 5. We asked if you had considered leaving the profession in the last two years. Can you say a little more about your career intentions?
  - a. What keeps you in teaching?
  - b. Why have you considered leaving?
- 6. If you could <u>change one thing</u> that would have a significant impact on your workload, what would that be?
- 7. Is there anything further that you want to say about teacher workload that you have not yet had the opportunity to say?

Thank you for participating in this research.

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## **Technical Annex**

### Face-to-face teaching activities by role

Table 21: Number of hours spent on overall face-to-face teaching for collapsed positions.

	Median (Mean)	SD
Head/Deputy	6.00 (7.99)	6.74
Principal/Lead	19.00 (18.66)	6.20
Chartered/main	22.50 (21.34)	5.60
Probationer	20.00 (20.98)	6.14

A Kruskal-Wallis analyses were carried out examining whether there were significant differences between those in different teacher positions (using the larger collapsed categories) and the amount of time, in hours, they spent on the face-to-face tasks ( $\chi^2$  (3, N = 1834) = 160.06, p < .001). Post-hoc tests with a Bonferroni correction showed that Headteachers and Deputies spent significantly less time on face-to-face contact hours than those in other teacher positions.

Table 22: Pairwise comparison on overall face-to-face contact hours differences collapsed categories

	Headteacher/	Principal/Lead	Chartered/Main	Probationer
	deputy		grade	
Headteacher/deputy		<.001	<.001	<.001
Principal/Lead			<.001	>.999
Chartered/Main grade				.326
Probationer				

(significant findings in bold)

## Preparation and administration time within contracted hours by role

Table 23: Number of hours spent on overall preparation and admin tasks within contracted hours by collapsed position

conapoca pocinion		
	Median (Mean)	SD
Head/Deputy	10.00 (13.39)	11.93
Principal/Lead	10.00 (10.71)	6.76
Chartered/Main grade	10.00 (10.14)	6.02
Probationer	12.00 (12.55)	29.00 (5.87)

A Kruskal-Wallis analyses were carried out examining whether there were significant differences between those in different teacher positions (collapsed categories) and the amount of time, in hours, they spent on the preparation tasks ( $\chi^2(3, N = 1834) = 17.94$ , p < .001). Posthoc tests with a Bonferroni correction showed that principal and lead teachers spent more hours on this category than main grade teachers but with probationers spending the longest time.

Table 24: Pairwise comparison on overall preparation contact hours differences by collapsed position

position				
	Headteacher/Dep uty	Principal/Lead	Chartered/Main grade	Probationer
Headteacher/Deputy		>.999	>.999	>.999
Principal/Lead			.009	.807
Chartered/Main grade				.028
Probationer				

(significant findings in bold)

### Student wellbeing responsibilities

Table 25: Number of hours spent on overall wellbeing contract hours by collapsed position

	Median (Mean)	SD
Head/Deputy	10.00 (14.11)	9.21
Principal/Lead	5.00 (6.77)	6.51
Chartered/Main grade	2.00 (2.80)	3.27
Probationer	3.00 (3.70)	3.47

A Kruskal-Wallis analyses were carried out examining whether there were significant differences between those in different teacher positions (collapsed categories) and the amount of time, in hours, they spent on the **wellbeing tasks** ( $\chi^2$  (3, N = 1834) = 263.70, p < .001). Post-hoc tests with a Bonferroni correction showed that main grade teacher, probationers and chartered teachers spent significantly less hours on this category than teachers in promoted posts.

Table 26: Pairwise comparison on overall wellbeing contract hours by collapsed position

	Headteacher/Deputy	Principal/Lead	Chartered/Main grade	Probationer
Headteacher/Deputy		<.001	<.001	<.001
Principal/Lead			<.001	.088
Chartered/Main grade				.104
Probationer				

(significant findings in bold)

#### Other activities outside class contact

Table 27: Number of hours spent on other activities outside class contact by collapsed position.

	Median (Mean)	SD
Head/Deputy	15.00 (16.30)	11.79
Principal/Lead	6.00 (7.95)	6.77
Chartered/Main grade	4.00 (4.66)	4.21
Probationer	5.00 (5.31)	3.31

A Kruskal-Wallis analyses were carried out examining whether there were significant differences between those in different teacher positions (collapsed categories) and the amount of time, in hours, they spent on other activities outside class contact ( $\chi^2$  (3, N = 1834) = 163.04, p < .001). Post-hoc tests with a Bonferroni correction showed that main grade teacher and probationers spent significantly less hours on this category than heads. Main grade teachers also spent significantly less time than principal teachers on this category as well.

Table 28: Pairwise comparison on overall other activities contact hours differences

	Headteacher/Deputy	Principal/Lead	Chartered/Main grade	Probationer
Headteacher/Deputy Principal/Lead		.001	<.001 <.001	<.001 .235
Chartered/Main grade				.414
Probationer			( ) ( )	at Caralinana in Ira

(significant findings in bold)

### Working time outside contracted hours: mornings and evenings

A Kruskal-Wallis test examined whether there was a significant difference in the total amount of time spent working in the morning and evening outside contracted working hours based on role in school (collapsed categories). This test showed that there was a significant difference ( $\chi^2$  (3, N = 1674) = 38.87, p < .001) with Bonferroni corrected pairwise comparisons showing that head teachers and principal teachers did significantly more hours outside school contracted hours in the week than main grade teachers (ps < .001) After correction for type one error no other comparisons reached significance (ps => .066).

A repeated measures Friedman's ANOVA showed that there are significant differences in the amount of time teachers spent on the **different tasks outside contracted hours** during the working week ( $\chi^2(16, N = 1662) = 7771.76, p < .001$ ). Pairwise comparisons with a Bonferroni correction showed that these differences were largely driven by more time spent on preparing resources, planning and marking than the other categories (see figure 16 and figure 17 for medians and mean values for hours worked).

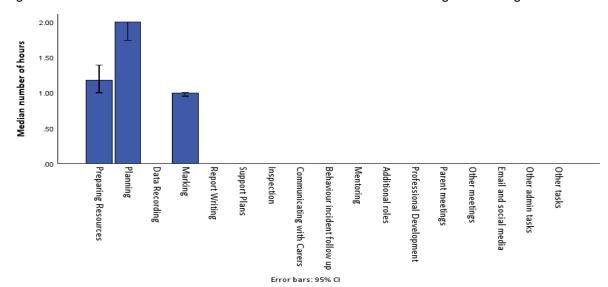
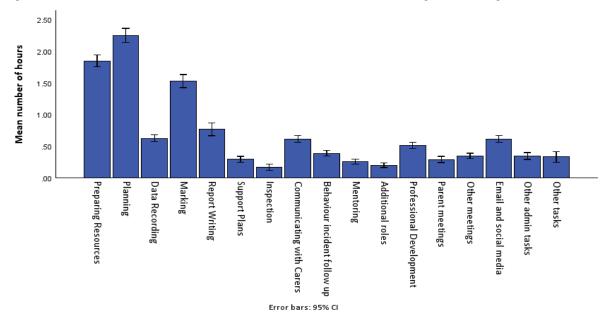


Figure 16: Median values for hours worked outside contracted hours during the working week





### Working time outside contracted hours: weekend

There were significant differences in the number of extra hours worked beyond teachers' contracted hours at the weekend by position (collapsed categories) ( $\chi^2$  (3, N = 1667) = 15.02, p = .002). After correction for type one error using a Bonferroni correction the only significant result found that main grade and principal teachers spend fewer hours working on the weekend than probationary teachers (ps =< .036). No other comparisons were significant (ps => .144).

A repeated measures Friedman's ANOVA showed that there are significant differences in the amount of time teachers spent on the **different tasks outside contracted hours during the weekend** ( $\chi^2(16, N = 1661) = 5639.80, p < .001)$ . Pairwise comparisons with a Bonferroni correction showed that these differences were largely driven by more time spent on preparing resources, planning, marking and report writing than the other categories (see figure 18 and figure 19 for medians and mean values for hours worked).

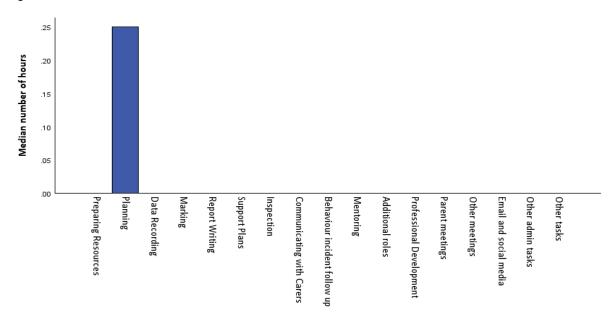


Figure 18: Median number of hours worked at the weekend



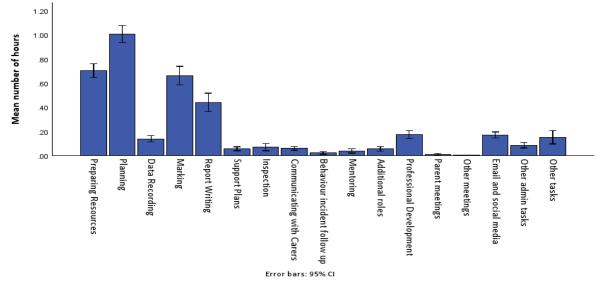


Figure 20: Percentage hours spent on tasks in the morning and evening outside contracted hours by category and sector.

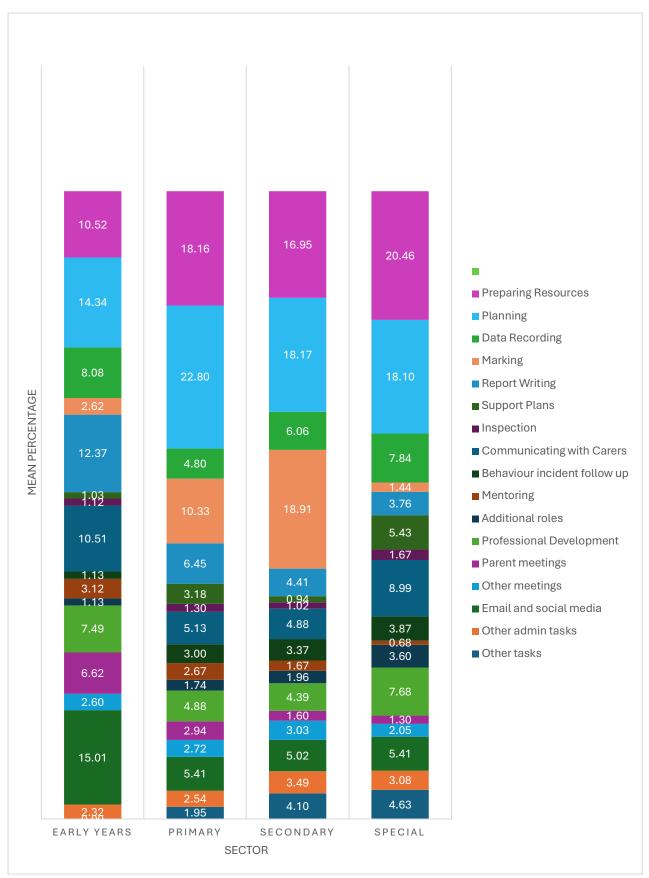
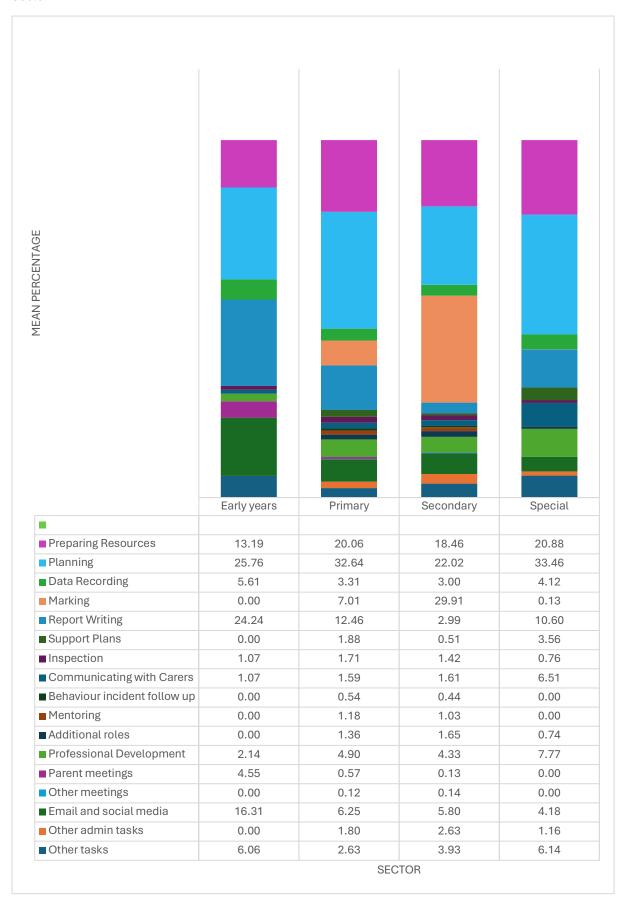


Figure 21: Percentage hours spent on tasks at weekend outside contracted hours by category and sector



A Kruskal-Wallis test showed that there was a significant difference ( $\chi^2$  (3, N = 1674) = 25.91, p < .001) in the total amount of hours worked between teachers in the **working week** (out with contracted hours) by **sector**. Bonferroni corrected pairwise comparisons showed that this was principally driven by primary teachers indicating they worked longer hours than secondary school teachers (p < .001). After correction for type one error no other comparisons reached significance (ps => .438).

Similarly, there were also significant differences in the number of extra hours carried out beyond teachers contracted hours at the **weekend** by sector as well ( $\chi^2$  (3, N = 1667) = 11.98, p = .007). Bonferroni corrected pairwise comparisons showed that this was also driven by primary teachers indicating they worked longer hours than secondary school teachers (p = .005). After correction for type one error no other comparisons reached significance (ps > .999).

# Contract type: full-time and part-time

Further analysis was performed to investigate whether there was a significant difference in the number of hours spent working outside of contracted hours in the working week and at the weekend by **contract type**.

Figure 22: Percentage hours spent on tasks in the morning and evening outside contracted hours by category and contract type

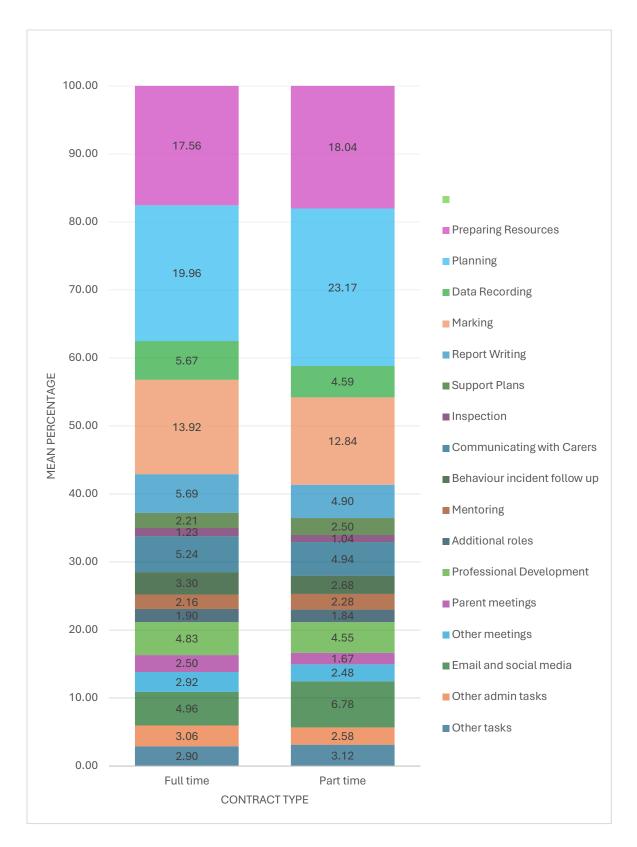
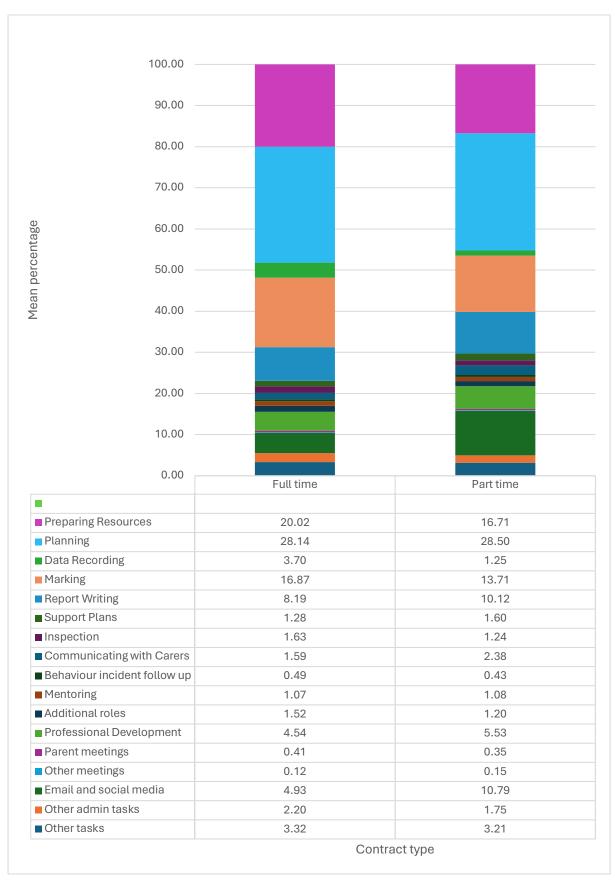


Figure 23: Percentage hours spent on tasks in the weekend outside contracted hours by category and contract type.



A Mann-Whitney U test showed that there was a significant difference (U (N = 1667) = 3.14, p = .002) in the total amount of hours worked between teachers in the working week (out with contract) based upon contract type with full-time staff working more time outside their contract within the week than part-time. A second Mann-Whitney U test showed that full-time staff also spend more time working overtime at the weekend (U (N = 1674) = 7.97, p < .001).

Table 29: Mean, median and standard deviation values for overtime working by contract

		Median (Mean)	SD
In the working week	Full-time	10.00 (12.10)	8.23
	Part-time	7.00 (8.54)	5.65
Weekend	Full-time	3.00 (4.08)	4.21
	Part-time	2.00 (3.23)	3.27

### Regression for year-long workload

A regression analysis was carried out on the Mean amount that teachers felt they did across the year (1 = far too little, 100 = far too much), using the average across all the year-long workload questions, utilising the same predictors as the PSS scale. Location, years of experience and contract type (permanent, temporary) did not correlate with the outcome measure and so were dropped from the final regression model (presented in table X). The regression model was significant in predicting year-long workload (F (16, 1573) = 6.96, p < .001) and explained 5.7% of the variance (adjusted  $R^2$ ). Examination of the coefficients showed that primary sector teachers felt a higher workload than secondary sector teachers (p < .001) and special schools (p = .003). Main grade teachers also felt a greater workload than deputy heads (p < .001) and headteachers (p = .054). Importantly, though number of hours spent working outside school (within contracted hours) (p = .044), in the morning and evening outside contracted hours (p < .001) and in the weekend (p = .022) all predicted the perception of workload levels.

Table 30: Predictors of year long workload.

## Coefficients for predictors of year long working commitments<sup>a</sup>

	Unstandardize d Coefficients B	Standardized Coefficients Beta	t	Sig.
(Constant)	54.999		43.891	<.001
Hours face to face	009	005	178	.858
Hours prep	.033	.018	.672	.502
Hours wellbeing	.069	.028	.947	.344
Outside school - within contract	.124	.057	2.016	.044
Within the week - outside contract	.176	.120	4.144	<.001
Weekend hours - outside contract	.178	.062	2.297	.022
Early years vs. primary	-4.449	033	-1.351	.177
Secondary vs. primary	-3.049	130	-4.930	<.001
Special vs. primary	-5.134	073	-2.944	.003
Probationer vs. main-grade	-2.525	030	-1.213	.225
Chartered vs. main-grade	-2.382	027	-1.115	.265
Lead teacher vs. main-grade	-4.242	020	836	.403
Principal teacher vs. main-grade	-1.437	044	-1.596	.111
Deputy headteacher vs. main-grade	-8.012	092	-3.300	<.001
Headteacher vs. main-grade	-7.641	049	-1.929	.054
Number of Schools taught at	.121	.032	1.269	.205

a. Dependent Variable: Mean Year long workload

Re-analysis of the findings of the main report when face-to-face is restricted to 22.5 hours and all other contracted activities are restricted to 35 hours.

# Kruskal-Wallis when number of hours face-to-face is restricted to 22.5 hours.

A Kruskal-Wallis analyses confirmed significant differences between position in school and the amount of time, in hours, spent on the face-to-face teaching ( $\chi^2$  (6, N = 1365) = 210.31, p < .001).

Table 31: Pairwise comparison on overall face-to-face contact hours differences, restricted

	Headteacher	Deputy head	Principal	Lead	Chartered	Main grade	Probationer
Headteacher		>.999	.025	>.999	<.001	<.001	.004
Deputy			.001	>.999	<.001	<.001	<.001
Head							
Principal				>.999	.001	<.001	>.999
Lead					>.999	>.999	>.999
Chartered						>.999	>.999
Main grade							.277
Probationer							

(significant findings in bold)

### Kruskal-Wallis for hours when number of hours is restricted to 35 hours

A Kruskal-Wallis analyses were carried out examining whether there were significant differences between those in different teacher positions and the amount of time, in hours, they spent on the preparation tasks when restricted to 35 hours ( $\chi^2$  (6, N = 1826) = 22.01, p = .002).

Post-hoc tests with a Bonferroni correction showed that principal teachers spent more hours on this category than main grade teachers.

Table 32: Pairwise comparison on overall preparation contact hours differences, restricted.

	Headteacher	Deputy	Principal	Lead	Chartered	Main	Probationer
		head				grade	
Headteacher		>.999	>.999	>.999	>.999	>.999	.821
Deputy			>.999	>.999	>.999	>.999	>.999
Head							
Principal				>.999	.928	.088	>.999
Lead					>.999	>.999	>.999
Chartered						>.999	.132
Main grade							.094
Probationer							

(significant findings in bold)

A Kruskal-Wallis analyses examined whether there were significant differences between those in different teacher positions and the amount of time, in hours, they spent on the tasks related to pupil wellbeing outside class contact time when number of hours was restricted to 35 hours ( $\chi^2$  (6, N = 1831) = 264.91, p < .001). Post-hoc tests with a Bonferroni correction showed that main grade teacher, probationers and chartered teachers spent significantly less hours on this category than teachers in promoted posts.

Table 33: Pairwise comparison on overall wellbeing contact hours differences, restricted

	Headteacher	Deputy	Principal	Lead		Main	Probationer
		head			0.10.10.00	grade	
Headteacher		>.999	.483	>.999	.004	<.001	.023
Deputy			<.001	.387	<.001	<.001	<.001
Head							
Principal				>.999	.014	<.001	.286
Lead					>.999	>.999	>.999
Chartered						>.999	>.999
Main grade							.318
Probationer							

(significant findings in bold)

A Kruskal-Wallis analyses were carried out examining whether there were significant differences between those in different teacher positions and the amount of time, in hours, they spent on tasks outside lessons when number of hours was restricted to 35 hours ( $\chi^2$  (6, N = 1827) = 155.07, p < .001). Post-hoc tests with a Bonferroni correction showed that main grade teacher, probationers and chartered teachers spent significantly less hours on this category than deputy heads). Main grade teachers also spent significantly less time than headteachers and principal teachers on this category as well.

Table 34: Pairwise comparison on overall activities outside class-contact hours differences, restricted

	Headteacher	Deputy head	Principal	Lead	Chartered	Main grade	Probationer
-		Heau				grade	
Headteacher		>.999	>.999	>.999	.242	.039	>.999
Deputy			.017	>.999	<.001	<.001	.001
Head							
Principal				>.999	.038	<.001	.881
Lead					>.999	>.999	>.999
Chartered						>.999	>.999
Main grade							>.999
Probationer							
			-		/ . · · c·		

(significant findings in bold)

### Perceived stress scale follow up and replication.

A regression was also run on the perceived stress scale to repeat the analysis given in the main report when those who indicated they worked over 22.5 hours face-to-face or more than 35 hours on other contracted categories (wellbeing etc...) were excluded.

The regression model was significant (F (12, 1179) = 10.31, p < .001) and explained 9% of the variance (adjusted  $R^2$ ).

Examination of the coefficients showed that teachers in urban settings were more stressed than those in rural settings (p = .046). Those with fewer years' experience as a teacher were also more stressed than those with more (p < .001). Teachers who had more time with face-to-face commitments were no longer more likely to be stressed than those with less (p = .343). Most importantly, stress levels were higher in those who spent more time working outside of their contracted hours in the working week (p < .001) and on the weekend (p < .001). The standardised coefficients shows that work outside of teachers contracted hours was the strongest predictor of perceived stress. These results indicate that the more burdened teachers are with needing to work beyond their contracted hours the more stressed they will be.

In summary these results suggest that stress is increased by working longer hours outside contracted hours. Importantly, it shows that there are no differences in stress between those in different sectors or the position that a teacher held. Instead, this is a universal finding that those who have to work more, especially outside of their contracted hours, will have a greater level of general stress in their lives. It is important to note that this is not just stress in relation to their job but that the workload burden leaves teachers feeling stressed within all aspects of their lives.

Table 35: Regression model Perceived Stress

#### Coefficients of the regression model predicting PSSa

	Unstandardized Coefficients B	Standardized Coefficients Beta	t	Sig
(Constant)	24.720		27.461	<001
Small town vs. Urban	.133	.011	.355	.723
Rural vs. Urban	-1.121	059	-1.994	.046
Island Community vs. Urban	849	023	798	.425
Permanant vs. Temporary	-1.000	041	-1.422	.155
Permanant vs. Short term Supply contract	.181	.002	.086	.931
How many years you have been a teacher	097	147	-4.871	<.001
Hours face to face (within contract)	.036	.030	.949	.343
Hours prep (within contract)	.058	.055	1.849	.065
Hours wellbeing (within contract)	.104	.074	2.258	.024
Hours outside school (within contract)	044	035	-1.091	.276
Hours outside contract - during the week	.114	.134	4.234	<.001
Hours outside contract - during the weekend	.242	.154	5.132	<.001

a. Dependent Variable: PSS





