Time Use, Time Poverty and Teachers' Work:

Preliminary Report on Phase 3

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Professor Greg Thompson,
Queensland University of Technology

Associate Professor Anna Hogan,
Queensland University of Technology

Professor Nicole Mockler,
University of Sydney

Dr Meghan Stacey,
University of New South Wales

Dr Sue Creagh,
Queensland University of Technology

Contents

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The authors of this report acknowledge that we stand on the lands of First Nations Peoples, and thank their Elders for continued custodianship of the land and their culture, for they hold the memories, the traditions, the culture and hopes of First Nations Australia. We must always remember that under the concrete and asphalt, the land, sea, and waterways were, and always will be, First Nations lands.

Executive Summary

This Executive Summary is a companion piece to the Phase 3 Preliminary Report of the Australian Research Council funded Linkage Project *Time Use, Time Poverty and Teachers' Work* (LP190101301). In partnership with the Queensland Teachers' Union (QTU), researchers from Queensland University of Technology, the University of Sydney and the University of NSW have been investigating workload and work intensification in Queensland public schools. This has become a pressing concern for education systems and teacher unions as workload and work intensification are commonly linked to stress, burnout and teacher and school leader attrition. Challenges with retaining early career teachers and recruiting new teachers are often blamed on increasing teacher workload and associated burnout. Further, there is concern that teaching is perceived to be an unattractive career for young people because of the impost of workload and work intensity.

The relationship between workload and the intensity of that work is what we call 'time poverty'. Time poverty captures the feeling of tasks which seem to pile up, where people report there never being enough time to complete them all, and not feeling able to 'catch up' (Wajcaman, 2008). Time poverty can be caused by excessive workload or increased intensity of periods of time during the working day; when both workload and work intensity increase, feeling time poor seems inevitable. With the concept of time poverty at the forefront of our thinking, we designed a 'Timetracker App' to allow teachers to record their time use across randomly sampled 30-minute segments. Our aim was to explore the complexity of teachers' work, not just as a list of activities or the number of hours worked in a week, but to uncover how activities are layered on top of each other requiring teachers to manage, or triage, time use. This report delivers findings from Phase 3 of the project, where the app was rolled out to QTU members in Term 3, 2023. The app asked teachers and school leaders to report on their time use and their feelings of preparedness, rushedness, accomplishment and pressure across three working days, completing Before School, 30-minute Time Use, and After School Surveys on each day. 1,780 respondents (1,623 teachers and 157 school leaders) used the app to record their time use on up to three days over a two-week period. The main findings are summarised below.

Key Findings

The time poverty of teachers and school leaders

The data collected showed that teachers' and school leaders' experiences of the working day reflected the more "complex temporal patterning of experience" that Wajcman (2014, p. 15) characterised as time poverty. The Before School Survey responses, each reported on a 7-point scale ranging from 'not at all' (1) to 'to a great extent' (7), showed that teachers on average slept reasonably well (M = 4.10, SD = 1.51); felt adequately prepared for the day (M =4.55 , SD = 1.47); and were generally positive about the day ahead (M = 4.41, SD = 1.40). School leaders' responses support a similar view, although they were slightly more positive in their outlook across sleep (M = 4.17 , SD = 1.58); preparation (M = 4.84 , SD = 1.39); and positiveness about the day ahead (M = 4.91 , SD = 1.36).

During each selected day, teachers and school leaders recorded 30 minutes of time use in a randomly allocated time slot that occurred between 8am and 4pm. On average, when teachers and school leaders tallied the tasks they had to do and domains they needed to switch between in their 30 minutes of time use, they reported, on average, 71 minutes of work in 30 minutes for teachers and 82 minutes for school leaders. As a measure of intensity, this reflects the feeling of there being more tasks requiring their attention than time there is to complete them. This sense of 'multitasking' could make the day feel rushed and 'heavy' (Beck, 2017), as in a respondent's example where they were "using lunch times to communicate with families around duty, whilst organising lesson resourcing around eating and using amenities". While teachers and school leaders began the day feeling relatively well prepared, by the end of the day they reported feeling that they did not have enough time to achieve all that they wanted to, that they felt rushed across the day and that their workload did not feel manageable. When asked how typical this day was of their work, teachers (M = 5.17, SD = 1.56) and school leaders (M = 5.37, SD = 1.53) answered that this was very typical of their role. In other words, it appears that teachers and school leaders, on average, start each day more positively than they end it, and despite their best efforts to prepare, experience their workload as unmanageable. The intensity of the demands made of them negatively impacts their sense of accomplishment and satisfaction.

> *I don't know why I never feel like I'm just "doing" my day. I am always RUSHING, myself AND the kids, rushing to NCT, rushing back, rushing to playground duty, rushing back, rushing to finish activities and rushing them out the door for lunch. It's ridiculous, I never feel like I have enough time, headaches every day. I'm exhausted.*

Layering of tasks

A key characteristic of the expert teacher or school leader is their ability to multi-task or layer tasks in order of importance as they manage complex classroom and schoolyard environments. One respondent, for example, described how they had been "managing multiple tasks all at the same time whilst being interrupted repeatedly by questions from other staff and admin". The ability to manage this 'juggle', however, is not infinite, and there appears to come a point where the degree and complexity of layering, the multiple domains and processes that need to be cognitively engaged with and the effects of momentary 'blockages' to that flow can become overwhelming. Tasks accumulate over the day and teachers and school leaders start to feel constantly under pressure to make time up in order to achieve what they wanted to (Thompson et al., 2023). This is exacerbated by the effect of multiple disruptions that accumulate across a day. Timetable disruptions, the unexpected loss of non-contact time or additional duties due to, for example, the inability to secure relief teachers in the face of teacher absence, create a stressful and compressed need to layer tasks. The frequency of tasks that seemed constant, including the need to communicate with parents, enter data on student behaviour incidents, respond to administrative compliance demands, be continually available and responsive to emails and meet seemingly unrealistic marking timeframes also demonstrate that teachers and school leaders feel the stress of managing these tasks within the time they have available.

> *Very difficult to manage workload when doing not only my own job but that of teachers who have left. So organising lessons, marking out of my subject area, reporting and dealing with parents in addition to further admin work which is new today but needs to be done ASAP*

Interruptions compress the time available to respond to tasks that are accumulating, a significant reason why teachers leave work feeling frustrated that they did not achieve what they wanted to. Teachers are forced to manage their primary teaching responsibilities alongside a growing list of secondary - but nevertheless seemingly important - tasks. This continual juggling act (see also, Heffernan et al., 2022) appears to wear teachers and school leaders down over time, impacting their job satisfaction and belief in the sustainability of teaching as a career.

Triaging of tasks

The intensity of teachers' and school leaders' work is most evident in their need to continually triage their tasks (Stacey et al., 2022). To cope with the layering of tasks and the resultant accumulating workload, teachers often find themselves prioritising immediate and urgent duties over those that require thoughtful preparation or follow-up. This means focusing on the most pressing tasks, even as another pressing task requires immediate attention.

> *The amount of work simply cannot be done in one day, so certain tasks or school community concerns are left unaddressed. This is without the associated paperwork, which mostly needs to be completed outside of 'work hours'.*

For example, the teacher forced to address a significant student behaviour incident and the subsequent stages of follow up remains under pressure to complete other critical tasks such as the need to tailor teaching and learning to prepare students for upcoming assessments. As one respondent commented, "added workload at last minute multiple times during the day meant no time to do any personal prep". Triaging over extended periods depletes the resources an individual has and adds to feelings of stress, frustration and the feeling that the demands of the job are unsustainable. Teachers did not discuss their curriculum work such as lesson planning as a problem causing their time poverty. Rather, they were

concerned that this core professional duty that requires uninterrupted time and focus (and importantly, contributes to teacher job satisfaction), was often pushed aside because of the need to respond to more pressing, urgent concerns. In a day filled with unpredictable interruptions - many that take up a teacher's scheduled non-contact time - curriculum work is often left for after-hours. This contributes to a vicious cycle where urgent matters consistently take precedence over the critical, yet less time sensitive, tasks that many teachers understand as their main purpose and that they find rewarding and sustaining.

Cascading effects

This structuring and triaging of time is consequential and can have cascading effects. These cascading effects mean that the school system has become a place where it is increasingly difficult to make up for time that is lost, and this invariably impacts both individual teachers and the broader school community. For example, a teacher who has to meet with leadership to brief them on a student behaviour incident misses their playground duty, meaning that their colleague is unable to have their lunch, take a toilet break, or use the break time that they thought they had to communicate with parents. Tasks continue to accumulate, as does the amount of work that needs to be taken home. This is why seemingly minor events, such as a behaviour incident that requires follow up and recording, the need to give up NCT to cover an ill colleague as no relief teachers where available, an impromptu staff meeting or the need for a school wise response to the latest policy or compliance requirement become so problematic. One example from our research concerns a teacher who experienced a number of cascading effects because a colleague was taken ill and no relief teacher could be found to cover for them.

> *I spent an additional 60 minutes of a spare [lesson] following up on complex student behaviours - making phone calls, emails and entering the data to OneSchool. I did not have my line meeting with my deputy principal because she had to manage a HR disaster and therefore the items I needed to discuss with her have not been actioned. This has a flow on effect for my team in preparing curriculum and timetabling, and arts events. I have not yet prepared my lessons for tomorrow due to these interruptions.*

Work-life balance

The cascading effects of teacher's and school leader's work are most obviously visible in the amount of work needed to be completed 'out of hours'. Teachers and school leaders reported an average of 3 hours for leaders and 2.7 hours for teachers of work still to do at home because of various disruptions and the pace of their working day. This had a flow on effect as they felt more pressure to manage that work alongside their home responsibilities. This exacerbated their lack of time for self-care and/or recovery. Marking assessments with tight deadlines appeared to be a particularly problematic expectation in this regard, as increased pressure is placed by education systems on the collection and use of 'data' (Clutterbuck et al., 2023). This is problematic first because of respondents' self-reported frustrations with these pressures. Qualitative responses indicated that time poverty was understood to be related to a range of health problems; indeed research suggests that teachers with poor leisure and recovery time are at risk for work-related illnesses (Peixoto da Silva & FIscher, 2020). The second reason it is problematic is because research also suggests that a positive work life balance supports 'job performance' (Cho et al., 2023; Johari et al., 2018), suggesting systems are not doing themselves a long-term favour when teachers' work-life balance is not effectively supported.

> *The work I have to complete tonight is marking. If I don't set up a marking schedule and stick to it rigidly, it gets on top of me. I schedule weekdays after school plus also weekends and allocate myself so many per day. These survey questions ask about multi-tasking (which is an issue) but my problem is also the number of hours worked and the reality that it's impossible to do the job without working on weekends.*

Time pressure, professional satisfaction and consequences

These cascading effects have medium and long term impacts on teachers' and school leaders' professional satisfaction and beliefs about the sustainability of their roles. The negative impact of both the volume of work and the layering of tasks left teachers and school leaders feeling that their workload was unmanageable. In particular, the work that teachers found sustaining, such as planning innovative learning experiences and delivering engaging lessons was being 'timed out' of their experience because of the number and relentlessness of tasks, pressure, managing student behaviour, disruptions and paperwork that were now the hallmark of their roles. This accords with other research (Demerouti et al., 2001) that found a significant relationship between job satisfaction and burnout for teachers. Time pressure is a significant factor as it increases emotional exhaustion, decreases job satisfaction and increases the motivation to quit (e.g. Skaalvik & Skaalvik, 2020).

> *I feel disheartened. The demands from the department are too much, with very little support. It is not possible to do everything to a high standard. The amount of time spent with parents is excessive. Yesterday I worked from am until pm and today looks like it will be the same. I have not spent any time with my family or friends this week.*

Implications

This research project gets inside the 'heavy hours' of the work that teachers and school leaders do. It suggests new ways of understanding why teaching has become so demanding for experienced teachers and so unattractive for many young people considering their career options. The problems that we identify for teachers and school leaders goes beyond the amount of work that they are doing. The complexity, demands, layering and relentless nature of their work forces them into strategies such as triaging to survive their working day. Triage is a short term solution that does not resolve the issues that cause it, and over time this high-pressure juggling act is exhausting physically, emotionally and psychologically. Systems battling teacher burnout and attrition need to better understand the problem of time poverty, and think carefully about how to manage what is expected of teachers and/or school leaders.

This requires a key shift in thinking. While we commonly understand schools as ordered and orderly places, based on routines and timetables, our research suggests that this is rarely the reality. Today's schools are complex and dynamic settings that are constantly responding to the unexpected and unplanned changes that arise from the navigation of large numbers of staff, student and institutional demands. As a result, it is a norm rather than an exception for teachers and school leaders to experience daily disruption and disorder, associated for example with student and parent behaviour, timetable disruptions, and changes mandated by systems that necessitate schools changing their practices (such as to curriculum, assessment or teaching/learning). Such changes have important, but often unacknowledged, ripple effects on life in today's schools.

It also shows that the model of calculating the amount of work done in a working day is too blunt to be useful. As schools increasingly function as hubs for social services and welfare, as they manage increasingly complex student needs and behaviour and deal with a variety of disruptions, more thought needs to be given to how opportunities can be created to pause and reset and to refocus on those core aspects of their work that provide job satisfaction. In other words, the school day has to have opportunities for teachers to make up for time that is lost due to unexpected events and disruptions. How this should happen is not obvious, but the current system of Non Contact Time (NCT) is not working.

In Queensland Non Contact Time (NCT) is an industrially protected part of the negotiated award for public school teachers. NCT is meant to create periods of time where the teacher does not engage in face-to-face teaching, but provides opportunities where teachers can catch up on tasks, respond to issues, collaborate with colleagues, plan lessons and so on. For too many teachers, NCT is either taken from them in order to replace sick colleagues because schools cannot find relieving teachers or becomes wholly consumed by unexpected disruptions such as behaviour incidents and the subsequent rounds of meetings, emails, paperwork and data entry required for each student. The knock on effects, either of

serious incidents such as this or of a multitude of smaller, seemingly benign tasks, contribute to work appearing unmanageable and always feeling rushed and harried.

This shows the ecology of work within an institution. For example, where work comes to affect one member of a community, causing stress, burnout and health issues resulting in time off work, this creates ripples throughout a school community, adding to the burden of others. It is the ecosystem that is failing, not an individual.

It is obvious to us that the system is at a tipping point. Time poverty has been an issue for many years, but now the twin pincers of attrition and lack of available relief teachers are causing critical problems. The teacher who could not attend a funeral as there was no capacity for relief, either in the school or outside the school, speaks to this critical issue.

Introduction

The enduring workload pressures faced by teachers and principals remains a policy problem not adequately addressed. The 2022 Department of Education *Issues Paper: Teacher Workforce Shortages* surmised that "[t]eacher workloads and their complexity have increased over time", contributing to both workforce attrition and a decline in people choosing teaching as a career. The paper underlines that the challenges surrounding teachers' work remain a political problem. However, what appears to have shifted in recent decades is the nature of political intervention. Previously reforms were focused on curriculum, assessment, and teacher standards driven by accountability measures, but recent attention has turned to the adverse effects these policies have on the teaching profession. Issues such as recruitment difficulties, high attrition rates, work-life balance struggles, workplace stress, and the overall wellbeing of the workforce have become central concerns for education systems. This has been associated with many schools struggling to find staff, less teachers applying to be school leaders and the numbers of students pursuing qualifications in teaching being in decline (Productivity Commission, 2022, p.208). In short, there is an ongoing concern about the work that teachers do and how it relates to emerging crises of teacher stress, burnout and attrition.

To date, much of the discussion and the proposed solutions to the challenges surrounding teachers' work have centred on the issue of workload. The prevailing view is that teachers' working week is too long, leading to calls for a reduction in the number of hours they are required to work. This perspective frames the problem as one of excessive time demands, suggesting that reducing the amount of time teachers spend in the classroom, or at school, will ensure their overall workload is more manageable. However, this approach overlooks the complexity of teachers' work. This report argues that the oversimplification of teachers' and school leaders' work needs to be urgently addressed to understand two crucial factors that shape teachers' experience of work, namely: the expanding scope of their work (workload) and the intensity of that work (intensification) (Creagh et al., 2023).

These twin factors have created a workforce that is facing both a growing number of responsibilities and the expectation to complete them with heightened efficiency and effectiveness, leading to burnout, stress, and diminished capacity to maintain the quality of their work. This combination of an overwhelming workload and an accelerated pace of work creates an environment where teachers and school leaders constantly feel rushed, as though there is never enough time to accomplish essential tasks. We refer to this perpetual sense of time pressure as the time poverty of the contemporary school teacher, and it represents a significant shift in how work is being experienced in schools.

Explaining time poverty

Insisting on a distinction between workload and work intensification serves as a reminder to education systems that they need to intervene in both the number of tasks teachers are required to complete and the increasingly demanding nature of those tasks. To meaningfully combat teacher attrition and improve job satisfaction, systems must focus not only on reducing the overall number of responsibilities but also on alleviating the 'heavy hours' (Beck, 2017) teachers experience. Put simply, it is not just how many hours teachers are working, it is the subjective experience of that work which feeds into job dissatisfaction and attrition. Too often, proposed recommendations to 'solve' the problems of teachers' work focus solely on workload (such as saving teacher's time through automating or outsourcing some tasks) rather than addressing what it is that teachers find stressful both within and beyond their classrooms. Both dimensions must be tackled simultaneously to create a sustainable teaching environment that retains educators and enhances their professional satisfaction.

Workload

Workload is usually defined as the amount of work done over a given period. This is commonly elicited through self-report surveys. For example, the OECD's *Teaching and Learning International Survey* (TALIS), last conducted in 2018, asked teachers and school leaders; "During your most recent complete calendar week, approximately how many 60-minute hours did you spend in total on tasks related to your job at this school?". This question generates a number of hours worked each week which is averaged out across respondents. These surveys usually find that Australian teachers are working significantly more hours than is reasonable (Thomson & Hillman, 2019, p.23). A survey of AEU South Australian members on

workload published in 2022, specifically found that "South Australian teachers work on average over 50 hours per week, including 30 hours of tasks beyond face-to-face teaching" (Windle et al., 2022).

Work intensification

We understand work intensification, on the other hand, to refer to the experience of heightened difficulty or stress in a job, stemming from the complexity and cognitive or psychological demands of a specific task or set of tasks (Creagh et al., 2023). Beck (2017) has referred to these moments as 'heavy hours' and explains that an individual might feel like they are being pulled in multiple directions at once due to competing and contradictory demands at any given point in time. Heavy hours, however, are difficult to measure. While survey approaches have yielded much valuable information regarding workload, there are concerns that they are not as useful for understanding work intensification, or the subjective experience of teachers' work. Partly this is a problem of recall; in more complex or 'high-paced' moments it can be difficult to remember exactly what was occurring and how time was spent or allocated. Methods for collecting this real-time data have improved through wearable technology or easily carried devices such as smartphones (van Berkel et al., 2017). In addition, recent methods tend to promote the collection of random samples of shorter periods of time, known as 'random time sampling' or 'experience sampling' (e.g. Larson & Csikszentmihalyi, 2014). These techniques increase reliability as participants only have to recall shorter periods of time, and in addition, they reduce the burden of collecting data on participants; which is important in a study of time poverty.

Time poverty

In this report we provide empirical evidence showing the relationship between workload and work intensity. This relationship, we argue, explains a common feeling of always being time poor. Time poverty is 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. The fact that an increase in one (load or intensity) can lead to an increase in feeling 'out of time' suggests that they are independent concerns. Time poverty is becoming a common experience in teaching and this has to be a focus for systems and political leaders trying to make teaching a more attractive and sustainable career.

With the concept of time poverty at the forefront of our thinking, we designed a 'Timetracker App' to allow teachers to record their time use across randomly sampled 30-minute segments. Our aim was to explore the complexity of teachers' work, not just as a list of activities or quantum of work, but to uncover how activities are layered on top of each other requiring teachers to manage, or triage, time use. This report delivers findings from Phase 3 of the project where the app was rolled out to a sample of QTU members in Term 3, 2023. The app asked teachers and school leaders to report on their time use and their feelings of preparedness, rushedness, accomplishment and pressure across three working days.

Understanding the 'workload' crisis

Education systems have been concerned about stress, burnout and attrition among teachers and school leaders for some time. There is a particular concern about attrition, as more and more teachers leave the profession or express a desire to do so. In response, many systems have either resorted to inducements (like sign on bonuses, or subsidies) or to outsource an aspect of teachers' work such as lesson planning. Increasingly, this time dividend approach (identifying a task or activity that can be taken away from teachers, resulting in a time dividend for them) has become the common policy solution to the crisis of the teaching profession. One example is the 'Quality Time Action Plan' in NSW, which aimed to "[free] up time by reducing low-value administrative tasks" (NSW Department of Education, 2021, p. 2), including lesson planning. Meanwhile in WA, a recent trial of AI "to reduce lesson planning time" has been announced (Ministers' Media Centre, 2024). The problem with such approaches is that they fail to adequately address the problem of time use within the teaching profession (Stacey et al., 2024). As a result, resources are not being used effectively and opportunities to address the crisis are being overlooked. Concurrently, the situation confronting teachers and school leaders appears to be worsening.

The question of why policy has been unable to address the teaching crisis is complex and multifaceted. One key factor is the persistence of a negative public stereotype that suggests teachers have an abundance of leisure time, working only from 9am to 3pm with 10 to 12 weeks holiday each year. This oversimplified and inaccurate portrayal has been deeply demoralising for the profession, as it

undermines the reality of teachers' work. Yet, the persistence of this stereotype makes it politically challenging to justify interventions, as the public may perceive teachers as already enjoying generous work conditions. As long as this misconception continues to be propagated, there is limited political incentive for policymakers to tackle the deeper issues of workload and work intensification that are driving the crisis. This disconnect between public perception and the actual demands of teaching has contributed to the lack of urgency in addressing the systemic issues that have led to high attrition rates, reduced job satisfaction, and a growing teacher shortage. However, more recently, there has been a notable shift in this narrative, as schools have increasingly been forced to close or operate at reduced capacity due to severe staffing shortages. In NSW, for example, minimal supervision has been an ongoing concern in the media (e.g. Anonymous, 2023; O'Doherty & Pike, 2023; Sato, 2023). In many cases, schools have struggled to maintain basic operations because they simply do not have enough teachers to adequately supervise and instruct students. These disruptions have drawn public and political attention to the gravity of the teacher shortage crisis.

The second problem concerns the research that has informed current policy solutions. Commonly, systems and policies have emphasised the workload problem because it has proved to be easier to measure. Predominantly, this has meant that surveys that ask teachers to recall how many hours of work they did in a given week have been central to the ways that policymakers frame, and respond to, the problem. As already highlighted, the most obvious example is the OECD's TALIS survey that reports on and ranks systems on the hours teachers work. While this approach may be useful in providing the 'gist' of teachers' experience (see Brainerd & Reyna, 1990), concerns have been expressed about the accuracy of this measure. For instance, te Braak et al. (2022) have argued that these retrospective self-reports tend to overestimate 'core' activities, such as teaching, and underestimate 'peripheral' tasks, such as administrative duties and extracurricular commitments. This can skew the perception of what the workload issue is, leading policymakers to focus primarily on reducing core activities (e.g., lesson planning), while neglecting the wider array of responsibilities that contribute to work intensification.

Additionally, there exists an intensity paradox: when attempting to understand the cognitive demands or stress levels associated with teachers' work, simply averaging the number of hours worked in a week provides little meaningful insight. As Brante (2009) points out, the experience of multi-tasking and synchronous work - where teachers are required to juggle multiple tasks simultaneously - has a profound impact on their stress levels and overall wellbeing. Teachers are often expected to layer various activities, such as lesson planning, student assessments, administrative responsibilities, and extracurricular obligations, all within the same time frame. This constant layering intensifies their work and contributes to the escalating crisis of burnout and attrition. The complexity and cognitive load involved in managing these tasks cannot be captured by a simple measure of 'workload'. It is the intensity and psychological strain of these overlapping responsibilities that compounds the problem, making it clear that policy solutions focused solely on reducing hours will fail to address the root causes of teacher dissatisfaction and burnout. To respond effectively, policymakers need to move beyond simplistic metrics and develop a more nuanced understanding of the qualitative aspects of teachers' work that contribute to stress and exhaustion.

Project design

The time poverty project is funded by the Australian Research Council as part of the Linkage project scheme (LP190101301). The project team is led by researchers from Queensland University of Technology and includes researchers from the University of Sydney and the University of New South Wales. Our project partner is the Queensland Teachers' Union.

The project consists of four phases that have been deployed since 2021:

- **Phase 1 - Systematic Analysis of Research on Workload and Work Intensification*:***

  The preliminary phase of the project was conducted across 2021 in which a systematic review of the published research on teachers' work was undertaken. Findings were published open-access in 2023 in *Educational Review* and can be accessed here.

- **Phase 2a - Designing and Piloting the TimeTracker App**

  Using insights gathered from Phase 1, the project team developed an iOS/Android app that acts as a digital diary of time-use. The app collected data on how teachers use their time and how that time is experienced. The pilot version of the app was trialled in a school in 2021 and adjustments were made to launch a beta version of the app for Phase 2b.

- **Phase 2b - Statistical Pilot of TimeTracker App Codes**

  Using a convenience sample of participants across different types of schools in different locations across Queensland, 138 teachers/principals downloaded the app to record time use in 2022. This pilot generated 140 hours of evidence regarding teachers' time use and the various pressures that they feel. This 'proof of concept' phase showed that the app was able to get inside the 'heavy hours' of teaching and school leadership in robust ways. Analysis of this pilot data was published open-access in 2023 in the Australian Educational Researcher and can be accessed here.

- **Phase 3 - Roll Out of the TimeTracker App**

  In Phase 3 the app was provided to QTU members across Queensland in late 2023. This report deals with the data generated in Phase 3.

- **Phase 4 - Case Studies (to be completed in 2024)**

Project methods

The Teacher Time Use App was developed and enhanced across two pilot phases, the first in March 2022, and the second in October-November 2022. In August 2023, in the culminating phase of the Teacher Time Use App study, the Qld Teachers' Union invited members across the state to participate by downloading the digital app onto their mobile devices and completing the surveys on up to three working days. Each phase received approval from the QUT Human Research Ethics Committee, as well as permission from the Qld Department of Education.

Our aim, across all phases, was to minimise the time required of teachers for participation and to do this we utilised contemporary technology (teachers used their own smart devices) enabling access to a digital app, with embedded surveys designed to capture broad demographic characteristics of each respondent and their school, as well as information about their experience of work intensification. The app, described in more detail below, enabled a seamless process for capturing detail about time use, however, with minimal time demands on the teacher. Coverage was confined to school days between the hours of 8am and 4pm, deliberately not encroaching on non-work time. The app typifies the development of processes for measuring time use, distinct from preceding labour-intensive methods requiring completion of handwritten time diaries.

Qualtrics was used as the vehicle for the technical (second) pilot of the app and for the state-wide rollout of the app, and initial descriptive analyses of all data was done using Stata, Version 15.1. The analyses used data directly entered by participants into the app and embedded data fields generated by the

survey software (Qualtrics) including times and dates for each survey, duration for completion of each survey, and identification codes for responses and participants.

Designing and Piloting the TimeTracker App

The Teacher Time Use app was designed with a commercial app developer through an iterative development process. First, the research team consulted the literature on how teacher work has been categorised. This resulted in a systematic review (see Creagh et al., 2023), and the creation of a list of categories to record teacher time-use. This list informed the development of four meta categories of time use and nested sub-categories (see Table 1) that teachers could select from when using the app[1]. Also embedded within the app were demographic questions about the participant and their school, a Before School Survey to characterise stress at the beginning of the day, and an After School Survey to understand time pressures across the day.

Table 1: Categories and subcategories of time use

Category	Sub-categories
Face-to-Face Teaching	• Learning interactions between teacher and students (instruction, facilitating groupwork, asking and responding to questions) • In-class feedback on student work • Minor learning disruptions • Significant behavioural interruptions • Managing resources (lesson materials, conversations with teachers' aide/ed support personnel, managing ICT)
Preparation and Teaching Admin	• Data entry related to teaching • Planning and preparing lessons • Marking, feedback and other tasks related to assessment and reporting
Student Wellbeing Responsibilities	• Out of class learning conversations with students • Communicating with parents/guardians about their children's learning • Homeroom/pastoral care roles
Activities outside the classroom	• Playground duty and supervisory roles • Co/extra-curricular activities • Mentoring of other teachers, supervision of student teachers • Work related to any specific additional duties • Union official duties such as holding meetings • Participating in PD • All other meetings • Emails • Other administrative duties • Data entry not related to teaching
School Leadership Responsibilities	• Instructional leadership (including mentoring staff, leading instructional programs, facilitating professional learning) • Administrative responsibilities (including budgets, managing compliance, organising teaching relief) • Managing staff health and wellbeing (including HR matters, supporting staff wellbeing, organising auxiliary staff support) • Managing student health and wellbeing (including student behaviour, supporting student wellbeing, extended support to families) • Communication (including emails, meetings and phone calls with staff, parents and line managers) • Attending school events

Note. The final category of leadership activities was included for Phase 3 of the App rollout, following feedback during Phase 2b pilot.

The cognitive pilot was conducted in March 2022 in a single school, with a small sample of teachers working across a range of teaching areas and year levels (N=8). The purpose of this was to ensure the app's appropriateness and ease of use for recording time use activities. After the teachers provided

1 The list was expanded following the Phase 2b pilot to include leadership activities.

informed consent, they downloaded the app, and utilised it to record 30 minutes of time-use during a period of face-to-face teaching. Members of the research team observed the teacher during this 30-minute period and made their own notes about the teacher's time use for comparison and discussion in a follow-up interview with each teacher. The early feedback on the app was positive, with participants commenting that the app was easy to use even when they were busy; it did not significantly add to their workload; and the questions made sense and were easy to answer. Technical issues identified were addressed prior to the second pilot study. This small pilot was crucial in revising the app to ensure that it was efficient and effective.

Statistical Pilot of TimeTracker App Codes

The second pilot of the app aimed to review all technical aspects of the time-use app and address any issues which may have arisen. In addition, there was a larger sample of participants, enabling preliminary analysis and fine-tuning of the five surveys built into the app, resulting in some minor modifications to survey questions. Participants for the second pilot were recruited from the Queensland Teachers' Union, specifically from Local Area Council (LAC) meetings. In total, 138 participants were recruited between 14th October and 19th November in Townsville, Mackay, Brisbane, Toowoomba, Sunshine Coast and the Gold Coast. This convenience sampling meant that a) there was a higher number of participants working in regional schools and b) the commitment of these participants to represent the QTU may be evidence of particular views regarding work. Given the pilot nature of the study, it was felt that the location and commitments of these participants were appropriate.

The revised app consisted of two stages: 'set up' and 'data collection'. Participants first downloaded the app, using their work email address to authenticate their participation. This email address was not recorded, instead a unique participant identifier was generated to enable linking of all responses for each participant. In the set-up stage participants answered demographic questions about themselves and the school in which they worked, and nominated three days over a two-week period where they would be willing to record 30 minutes of their time use. The app then randomly allocated each participant a specific 30-minute time slot for each of their three nominated days from 8am through to 4pm, Monday to Friday. From here, the app moved to the second stage 'data collection'.

During data collection, the app sent notifications and reminders to participants to improve data collection. Participants received notifications on their mobile devices for each nominated data collection day. Notifications were sent every 30 minutes until completion. On each nominated day, the surveys had to be completed in order of: 'Before School', '30min Time Use', then 'After School'. Notifications stopped at 7.30pm each night when participants were given the option to 'opt-out' of that day to allow for unexpected events. If a participant was unable to complete one of their nominated days and decided to opt out, they could continue with their next designated day.

Participants came from a range of ages and levels of experience, and mostly included teachers and some school leaders. Participants' schools were mostly regional and of average or lower than average ICSEA[2]. Primary schools and secondary schools were most commonly and evenly represented. App data were retained and analysed for all teachers who completed the demographic surveys as well as at least one before-school and 30 minute time-use survey for at least one of the three nominated days (n=109, 79%). Of these 109, three timeslots were completed by 82 (75% of 109) teachers, 7 (6%) completed two days, and 20 (18%) completed one timeslot. In total, 815 surveys related to time use were generated: 280 before-school surveys, 280 30-minute time use surveys, and 255 after-school surveys.

As noted above, 30-minute time slots were randomly allocated to teachers, with the intention of building a dataset which covered the working week, blending the combined experiences of multiple respondents without overly burdening individual teachers. Further, the random allocation of time slots improved reliability of the data as teachers were not able to choose to report on their most challenging class or period. For this pilot, even with the small number of respondents, surveys were submitted for all 30 minute time slots between 8am and 4 pm Monday to Friday, with the exception of one time slot on Thursday and three on Friday (see Table 2). As stated previously, a primary aim in the design of the app was to reduce the burden on those teachers who participated in the study and to this end, the average

2 ICSEA stands for the Index of Community Socio-Educational Advantage. It is the common measure used in Australia to compare the educational advantage of a given school's student population.

time taken to complete each of the surveys was under five minutes with median times even less than this: 19.5 seconds for the Before School Survey, 95 seconds for the 30 minute time use survey and 61 seconds for the After School Survey. Teachers received reminders from the app to complete the time use surveys, and we requested that the 30 minute time-use survey be done only when the teacher had capacity, following the timeslot. We were interested to see the time difference between the allocated timeslot and survey submission and were able to use embedded data fields in Qualtrics to generate a measure of this gap. 25% of respondents submitted their time-use survey within 30 minutes of the end of the timeslot. Whilst there were outliers, the median response of just over 2 hours for submission suggests an improvement in timeliness and corresponding accuracy and detail, compared to more traditional methods which require teachers to record activity in the preceding week, month or year retrospectively.

Table 2: Time slot coverage - pilot study

	Mon.	Tues.	Wed..	Thurs.	Fri.	Total
8:00	5	7	10	6	2	30
8:30	5	4	3	4	3	19
9:00	7	6	9	1	3	26
9:30	1	3	3	2	6	15
10:00	4	5	3	0	0	12
10:30	5	2	3	1	4	15
11:00	2	4	4	1	1	12
11:30	4	4	3	4	0	15
12:00	4	8	5	2	4	23
12:30	9	1	4	3	2	19
1:00	5	2	4	4	3	18
1:30	9	1	3	3	2	18
2:00	6	5	1	2	2	16
2:30	6	1	2	2	0	11
3:00	4	3	3	2	4	16
3:30	4	2	4	2	3	15
Total (per day)	80	58	64	39	39	280

The pilot we conducted with 138 QTU members in 2022 confirmed new ways to understand teachers' work intensification. In particular, the results suggested that understanding teachers' work requires grappling with the effects of multitasking in which more than one activity is performed at a time. We asked teachers to record 30 minutes of time use across three random time slots. On average, across the 280 timeslots recorded, teachers accounted for 63.28 minutes of time use within a 30-minute time period. Moreover, their time use was typically spread across multiple broad categories of face-to-face teaching, administrative tasks, student wellbeing issues and other activities outside the classroom. This suggests that on average, a 30-minute period of work is intense for many teachers requiring decision making across multiple domains; layering activities upon other activities. While it is widely recognised that multitasking is a facet of teaching, the scale and scope of that multitasking, the cognitive load associated with switching domains, and the problem solving and decision making required across these multiple domains is not well understood.

This intensity of teachers' work was further made complex by the amount of work that teachers felt they needed to complete after hours. On average, teachers reported that they still had three hours of work left to do that night or over the weekend. Thus, teachers using the app were reporting both the heavy hours of their work (intensity) and the amount of work they have to do (workload). This is shedding light on time poverty, understood as the relationship between the amount of work to be done and the intensity of that work (Creagh et al., 2023).

In general, it seemed that the participants had a relatively positive attitude when starting the school day. Questions asking about how positive participants felt about the upcoming day and how prepared they felt for the school day were skewed towards the more optimistic end of the scale. However, at the end of the day the questions about how manageable their workload was that day and how rushed they felt during the day were skewed towards a more negative overview of the day. Those who recorded 'higher' levels of dissatisfaction with their workload and who felt rushed were asked to qualify factors that impacted this experience. Participants identified three common factors in response. These were managing student needs/behaviour, communicating with parents/carers and the amount of work to be covered in lessons. It is easy to see how these factors add layers of complexity to teaching. Managing student needs/behaviour can take time away from teaching and learning activities, at a premium where the teacher feels pressure to keep up with syllabus and curricular content. Communication with parents, whether via email or through a student management system, similarly becomes an administrative task that must be done on top of an already intense schedule (Heffernan et al., 2022).

This pilot did identify the need to add a specific time use category for school leaders and following consultation with an advisory panel of school principals, a list of leadership activities was compiled (see Table 1 above) and built into the 30 minute time use survey, for the full rollout of the app. Through a thorough review of the literature and work with the QTU Principal's Advisory Group, a separate section for leadership activities was added.

Given the positive participant experiences in using the app, and the usefulness of the data in targeting - and measuring - the intensity of teachers' work, the pilot was considered to be a successful 'proof of concept', and therefore, ready to be applied to a larger scale.

Full rollout of the Time Tracker App

In preparation for the full rollout of the App, and following feedback from respondents, a few minor changes were made to the surveys in the app such as the inclusion of a demographic question regarding status as Aboriginal and/or Torres Strait Islander, as well as the addition of a selection of leadership-specific activities for the 30 minute time use survey (see Table 1 above).

Throughout June and July of 2023, the research team worked with the app builders to resolve any final technical issues relating to:

- downloading the app, particularly onto Android phones;
- receiving reminders to complete surveys; and
- checking the logic of the surveys was working properly.

In addition, a user manual was finalised, Frequently Asked Questions (FAQs) with answers were generated, and video instructions for downloading and using the app were created and installed on the QTU website for the project and/or the QUT website for the project.

Using QTU membership information, a stratified sample of potential respondents was generated, organised into geographic strata based on QTU Local Area Councils, and excluding teachers on leave or not currently working in schools. Participants were invited in two waves on 14th and 28th August 2023; the first invitation was sent to 10,000 teachers and leaders and the second to 5,000. Due to a poor response rate, the invitation was finally sent to all QTU members (with the same exclusions) on 31st August, with an SMS reminder to members on 1st September 2023. Submission of survey data remained possible until the end of term 3 (15th September).

Data collected from respondents was counted in two ways: first, in relation to the number of respondents, and secondly, in relation to observations corresponding to a timeslot. For the former, teacher demographic data with school demographic data were submitted by 2,336 teachers and school leaders. These data were retained and analysed with the time use survey data for those respondents who completed at least one Before School Survey with one 30 minute time-use survey, for the same day. In other words, a set of surveys for analysis, at a minimum, consisted of teacher demographics + school demographics + one Before School Survey + one 30 minute time-use survey (for the same day). Submissions which satisfied this minimum requirement were submitted by 1,780 respondents (1,623 teachers and 157 school leaders). Data which included both demographic surveys as well as Before School Survey, 30 minute survey, and After School Survey were submitted by 1,651 teachers and school leaders. In relation to timeslots, these survey submissions generated 4,386 observations of 30 minute

time use, with combined demographic and time-use surveys (before school and 30 minutes). Of these 4,386 observations, 3,639 included After School Survey responses. All timeslots between 8am and 4pm from Monday to Friday were described in multiple numbers of surveys, displayed in Table 3.

Table 3: Time slot coverage

	Mon.	Tues.	Wed..	Thurs.	Fri.	Total
8:00	65	61	51	40	31	248
8:30	65	51	68	62	39	285
9:00	65	52	63	45	44	269
9:30	70	46	50	52	33	251
10:00	51	50	56	52	44	253
10:30	84	45	67	43	46	285
11:00	60	62	64	62	41	289
11:30	67	71	59	52	32	281
12:00	71	69	66	62	39	307
12:30	76	52	68	46	40	282
1:00	73	54	63	54	45	289
1:30	79	53	60	52	40	284
2:00	83	56	60	47	32	278
2:30	52	56	54	51	30	243
3:00	76	41	65	53	36	271
3:30	66	55	53	58	39	271
Total (per day)	1,103	874	967	831	611	4,386

Time taken to complete each of the surveys was calculated using Qualtrics generated variables. The demographic teacher and school surveys each took less than one minute on average (59 and 55 seconds respectively). The Before School Survey took 106 seconds on average (median was 20 seconds), the 30 minute time use survey took four minutes on average (median was 1.45 minutes), and the After School Survey was completed in 141 seconds (average, 67 seconds median).

Table 4 provides an overview of the demographics of those who completed demographic (teacher and school) and time use surveys. Because a number of the survey questions are reported showing teacher and leader responses separately, demographic information has been disaggregated on the basis of those who identified as teachers and those who identified that they held some kind of leadership role. The 'school leaders' group consists of respondents who reported the following work positions in the school: deputy principal, principal, head of school, executive principal. The 'teachers' group consists of those who indicated they were: teachers, senior teachers, experienced senior teachers, highly accomplished teachers, HODs, HOCs, HOSES, guidance officers, senior guidance officers, advisory visiting teachers, local relieving teachers, district relieving teachers and specialist teachers.

For both groups, the majority of respondents were female, working in major city or regional schools. Teachers and leaders working in remote and very remote schools were less represented in the dataset. There was a high level of work experience represented in the group: 31% of teachers and 62% of leaders had more than 20 years' experience, 17% of leaders had 16-20 years of experience, while amongst the teachers there was a more even distribution from those who had 0-5 years of experience (17%), 6-10 years (21%), 11 to 15 years (17%) and 14% with 16 to 20 years.

No identifying detail was collected about schools, and so it is not possible to provide a count of schools represented in the data as we are unable to determine how many respondents may have worked at the same school. A greater proportion of teachers and leaders work in primary schools, though there is reasonable representation of secondary schools for teachers (38%) and leaders (24%). Regardless of type of school, the majority of teachers (80%) and leaders (82%) reported that their schools were characterised

by average to well below average socio-economic status (SES). The data also highlighted the movement of teachers with over half of the group (52%) having worked at their current school for five or less years, and another 25% having been at their schools for six to ten years. Likewise, 64% of leaders had spent 0-5 years at their current school, and 20% had been at their school for six to ten years.

Table 4: Demographic information of teachers and leaders and the schools they represented

Demographic characteristics of participants	Number (rounded % of group)	Demographic characteristics of their schools	Number (rounded % of group)
i) **Teachers (n = 1,623)**			
Age groups		**Type of school**	
25 or less	50 (3)	Primary (P-6)	765 (47)
26 – 35	374 (23)	Secondary (7-12)	617 (38)
36 – 45	495 (31)	Prim & Sec (P-10/12)	154 (9)
46 – 55	494 (30)	Special school/SEP (Prim & Sec)	68 (4)
More than 55	210 (13)	Other	19 (1)
Gender		**Location of school**	
Female	1,361 (84)	Major city	709 (44)
Male	251 (15)	Regional	804 (50)
Other	11 (1)	Remote	95 (6)
		Very remote	15 (1)
Years of experience		**Socio-economic status**	
0-5	279 (17)	Well above average	52 (3)
6-10	338 (21)	Above average	273 (17)
11-15	269 (17)	Average	516 (32)
16-20	234 (14)	Below average	572 (35)
More than 20	503 (31)	Well below average	210 (13)
Current position		**Years at current school**	
Teacher	579 (36)	0-5	843 (52)
Senior teacher	167 (10)	6-10	411 (25)
Experienced senior teacher	569 (35)	11-15	184 (11)
HOD	144 (9)	16-20	89 (5)
HOC	28 (2)	More than 20	96 (6)
HOSES	31 (2)		
Guidance officer	26 (2)		
Senior guidance officer	2 (0.1)		
Advisory visiting t.	1 (0.1)		
Local relieving t.	2 (0.1)		
District relieving t.	4 (0.3)		
Specialist t.	62 (4)		

Demographic characteristics of participants	Number (rounded % of group)	Demographic characteristics of their schools	Number (rounded % of group)
ii) **School leaders (n = 157)**			
Age groups		**Type of school**	
26 – 35	14 (9)	Primary (P-6)	83 (53)
36 – 45	44 (28)	Secondary (7-12)	38 (24)
46 – 55	69 (44)	Prim & Sec (P-10/12)	19 (12)
More than 55	30 (19)	Special school/SEP (Prim & Sec)	13 (8)
		Other	4 (3)
Gender		**Location of school**	
Female	111 (71)	Major city	59 (38)
Male	46 (29)	Regional	80 (51)
		Remote	12 (8)
		Very remote	6 (4)
Years of experience		**Socio-economic status**	
0-5	7 (4)	Well above average	5 (3)
6-10	11 (7)	Above average	22 (14)
11-15	14 (9)	Average	43 (27)
16-20	27 (17)	Below average	57 (36)
More than 20	98 (62)	Well below average	30 (19)
Current position		**Years at current school**	
Deputy principal	75 (48)	0-5	101 (64)
Principal	77 (49)	6-10	31 (20)
Head of school	2 (1)	11-15	15 (10)
Executive principal	3 (2)	16-20	6 (4)
		More than 20	4 (3)

Findings

Before School Survey

The Before School Survey consisted of four questions each using a 7-point Likert scale. Questions asked about how well participants slept, how much they were looking forward to the school day, how prepared they felt and their overall sense of positiveness for the upcoming school day. These questions aimed to understand respondents' outlook for the day ahead.

Descriptive results and histograms for teachers and for school leaders are presented separately below for each of these questions. For each of the questions there were 4030 responses completed by 1,640 teachers, and 356 responses completed by 159 school leaders. As respondents submitted between one and three surveys, each question was checked for level of variability between teachers and within teachers' individual responses. For all questions reported below, there was greater variation in responses between respondents than there was within their individual responses. Means and standard deviations (S.D.) are reported, as well as median and interquartile range (IQR), reporting the range of scores between the 25th and 75th percentile, or the middle spread of scores. Histograms are presented to show distribution of responses, first for leaders and then teachers.

Q.1 I slept well last night.

Leaders had a mean of 4.17 (S.D. 1.58) with a median of 4 (IQR 3,5). Teachers had a mean of 4.10 (S.D. 1.51), and median of 4 (IQR of 3,5).

Figure 1: Distribution of responses for 'I slept well last night' (leaders, n=356)

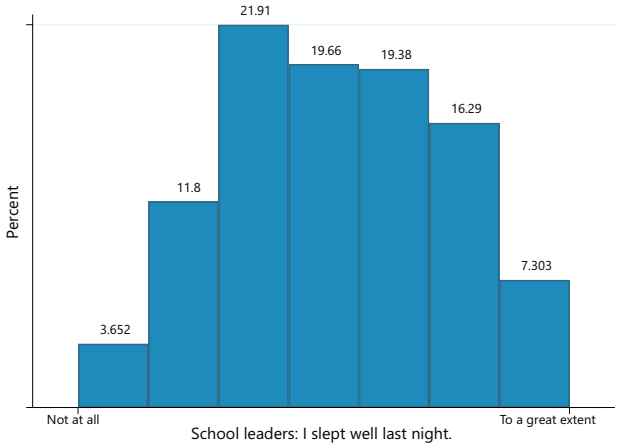
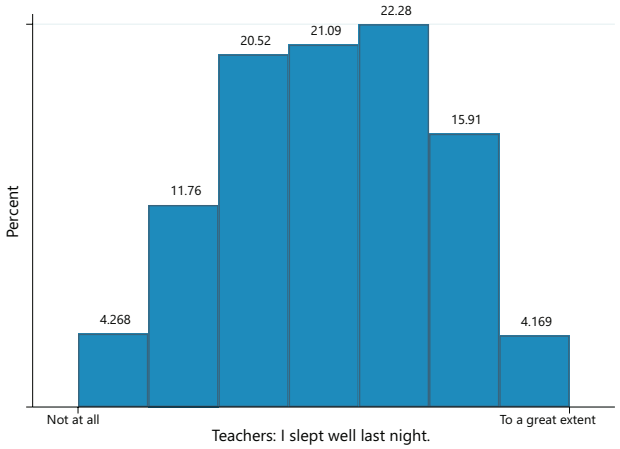


Figure 2: Distribution of responses for 'I slept well last night' (teachers, n=4,030)



Q.2 I am looking forward to the school day.

Leaders had a mean of 4.56 (S.D. 1.41) with a median of 5 (IQR 4,6). Teachers had a mean of 4.04 (S.D. 1.46), and median of 4 (IQR 3,5).

Figure 3: Distribution of responses for 'I am looking forward to the school day'. (leaders, n=356)

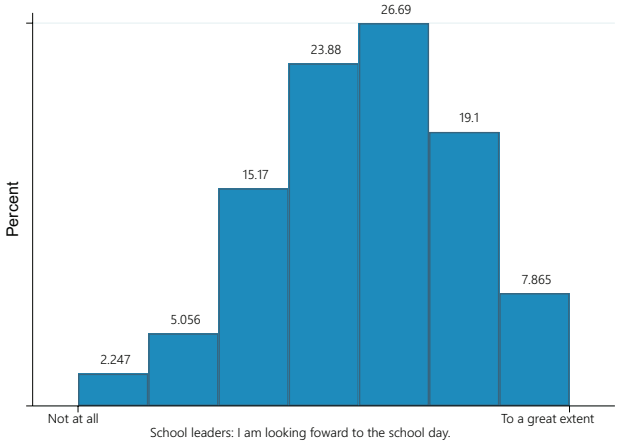
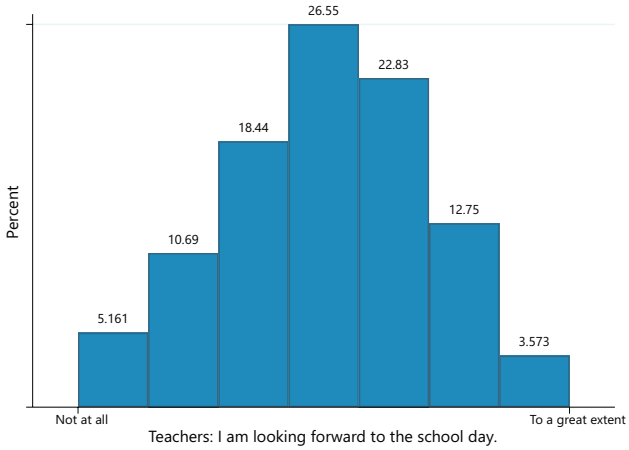


Figure 4: Distribution of responses for 'I am looking forward to the school day'. (teachers, n=4,030)



Q.3 I feel prepared for the school day.

Leaders had a mean of 4.84 (S.D. 1.4) with a median of 5 (IQR 4,6). Teachers had a mean of 4.55 (S.D. 1.47), and median of 5 (IQR of 4,6).

Figure 5: Distribution of responses for 'I feel prepared for the school day'. (leaders, n=356)

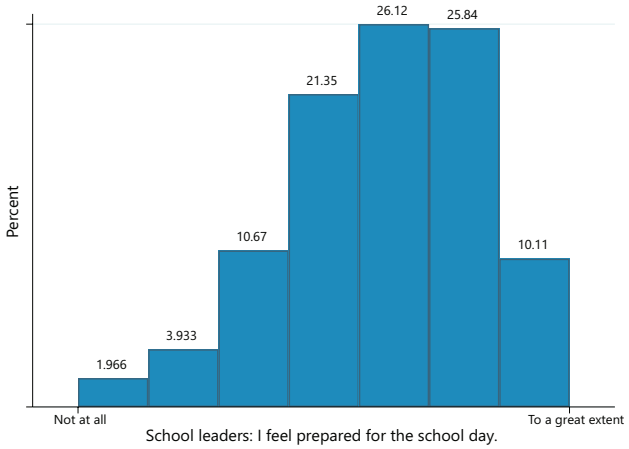
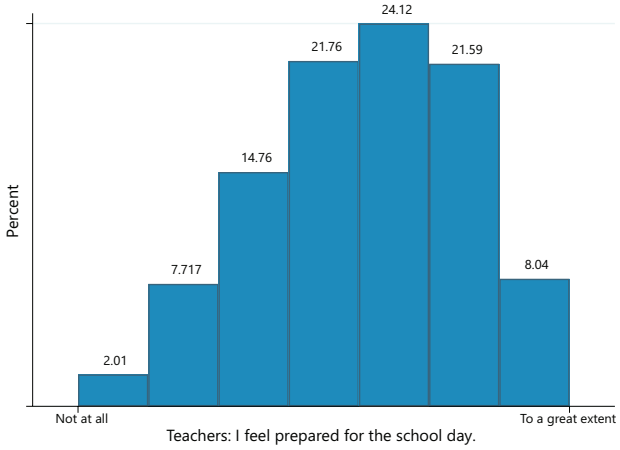


Figure 6: Distribution of responses for 'I feel prepared for the school day'. (teachers, n=4,030)



Q.4 Overall, I feel positive about today.

Leaders had a mean of 4.91 (S.D. 1.36) with a median of 5 (IQR 4,6). Teachers had a mean of 4.41 (S.D. 1.4), and median of 4 (IQR of 4,5).

Figure 7: Distribution of responses for 'Overall, I feel positive about today'. (leaders, n=356)

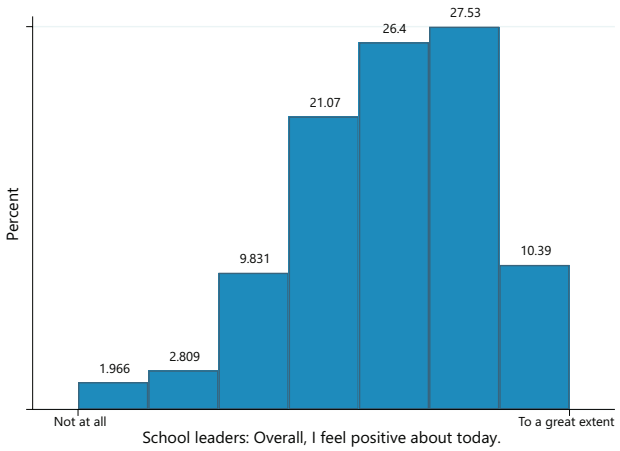
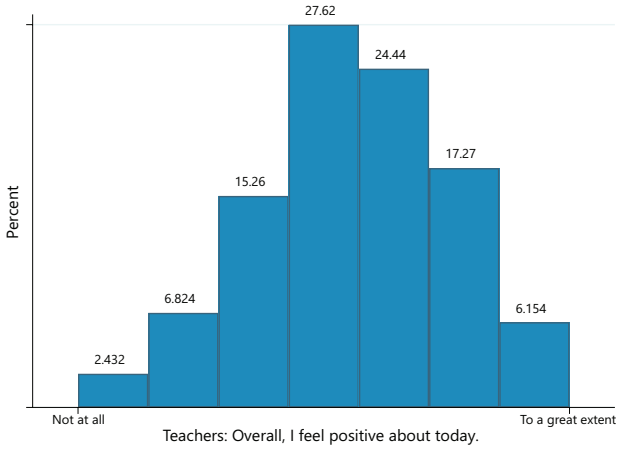


Figure 8: Distribution of responses for 'Overall, I feel positive about today'. (teachers, n=4,030)



Overall, these reports indicate an average sense of rest, optimism, preparation and positivity for the day ahead. Leaders appear, on average, to feel more positive than teachers. As will be highlighted below, these results contrast with respondents' reports at the end of the school day. Additional analysis is

currently being undertaken to see how the preceding day may impact the morning survey responses, where there is continuity of days across surveys for individual respondents.

30 minute time use survey

In this survey, respondents were asked to select activities they had been doing in the allocated 30 minute time slot from the range of possible activities presented in Table 1 (above). Using a sliding scale of minutes, teachers and leaders were asked to indicate the amount of time spent on each activity. We did not provide a running total of minutes, nor limit the number of minutes able to be recorded; without this constraint on time use recording, it became possible for the app to potentially capture a subjective experience of time use and layering of tasks. Table 5 presents the reported average time in minutes teachers and leaders indicated they spent on activities across the 30 minute time slot. There are a couple of patterns in these data to draw out: first, the average time significantly exceeds a total of 30 minutes, for both groups and across all three time slots. Secondly, even with increasing familiarity with the app's design, reported time still exceeded thirty minutes, though there is a decrease in average time across the three time slots. On the third occasion of using the app, the average time reported by teachers, across 1,041 time slots, was 62 minutes of activities. For leaders, the reported average time was 69 minutes, across 83 time slots.

Table 5: Subjective experience of time use: average time recorded for 30 minutes of activities.

	Average time (minutes) and number of timeslots	
	Teachers	Leaders
Time Use 1	77 (1,623 timeslots)	91 (157 timeslots)
Time Use 2	69 (1,366)	79 (116)
Time Use 3	62 (1,041)	69 (83)

The discrepancy between reported measures of time across activities, and an actual 30 minute time slot may in part be explained by the range of activities both teachers and leaders reported they undertook during the 30 minutes. For 25% of time slots, teachers reported they were engaged in face-to-face teaching. The remainder of the time slots were occupied mostly by combinations of the five categories of activities (see Table 6). Note that leadership activities were only available to those respondents who reported a leadership role in a school.

Table 6: Activity categories selected by respondents for timeslots (n=4,386)

Leadership activities	Face-to-face teaching	Preparation and teaching admin	Student wellbeing responsibilities outside lesson time	Other activities outside the classroom	n (%)
	✓				1,113 (25)
		✓			358 (8)
	✓		✓		285 (6)
		✓		✓	261(6)
	✓	✓			249 (6)
		✓	✓	✓	232 (5)
		✓	✓		198 (5)
✓					158 (4)
	✓	✓	✓		155 (4)
	✓			✓	134 (3)
	✓	✓	✓	✓	119 (3)
					110 (3)
			✓	✓	108 (2)
✓			✓	✓	98 (2)

Leadership activities	Face-to-face teaching	Preparation and teaching admin	Student wellbeing responsibilities outside lesson time	Other activities outside the classroom	n (%)
✓				✓	85 (2)
✓			✓		80 (2)
	✓	✓		✓	74 (2)
✓		✓			63 (1)
✓		✓		✓	53 (1)
✓		✓	✓	✓	48 (1)
			✓		35 (1)
✓	✓				34 (1)
✓		✓	✓		27 (1)
✓	✓	✓	✓	✓	12 (<1)
✓	✓	✓			11 (<1)
✓	✓		✓		10 (<1)
✓	✓		✓	✓	8 (<1)
✓	✓			✓	7 (<1)
✓	✓	✓		✓	7 (<1)
✓	✓	✓	✓		5 (<1)
					4,386 (100)

(* 110 time slots where respondents said no to all possible categories, however completed remaining survey questions, suggests they had undertaken activities which were not listed, for example, attended excursion.)

Of the 1,113 time slots that were recorded as teaching only activities, the majority of these had multiple sub-categories selected to describe the 30 minutes of activities (see Table 7). More precisely, for 26% of these timeslots (n=289), teachers selected all five possible subcategories of activities. For 434 of the timeslots (39%), teachers selected four of the five possible subcategories and for 287 (26%) of timeslots, three activities were selected. Teachers selected only one or two subcategories for the remaining 103 (9%) time slots.

Table 7: Subcategories selected for teachers reporting face-to-face teaching activities only.

Learning interactions	Giving feedback	Minor disruptions	Significant behaviour	Managing resources	Frequency (timeslots)	Percent
			✓		1	0.09
		✓			1	0.09
		✓		✓	1	0.09
	✓			✓	1	0.09
✓					13	1.17
✓				✓	4	0.36
✓		✓			27	2.43
✓		✓		✓	41	3.68
✓		✓	✓		17	1.53
✓		✓	✓	✓	16	1.44
✓	✓				55	4.94
✓	✓			✓	53	4.76
✓	✓		✓		2	0.18
✓	✓		✓	✓	1	0.09

Learning interactions	Giving feedback	Minor disruptions	Significant behaviour	Managing resources	Frequency (timeslots)	Percent
✓	✓	✓			174	15.63
✓	✓	✓		✓	345	31.00
✓	✓	✓	✓		72	6.47
✓	✓	✓	✓	✓	289	25.97
					1,113	100

Following the recording of activities and associated time, respondents were asked four further questions which were designed to investigate experiences of pressure and time poverty during the 30 minute time slot. For all four questions 4030 responses were provided by 1,640 teachers, for either one, two or three time slots each. Total responses provided by 159 leaders were 356. Again, there was greater variation in responses between respondents than there was within their individual responses. Means, standard deviations, medians and interquartile range are reported for each question, with histograms showing distributions for leaders, then teachers. First, respondents were asked to report their experiences of pressure during the 30 minute time slot, specifically in relation to decision making.

Q.11: I felt pressure to make decisions quickly.

The Likert scale ran from one (not at all) to seven (to a great extent). Leaders had a mean of 4.81 (S.D. 1.80) with a median of 5 (IQR 4,6). Teachers had a mean of 4.48 (S.D. 1.70), and median of 5 (IQR of 3,6).

Figure 9: Distribution of responses for 'I felt pressure to make decisions quickly'. (leaders, n=356)

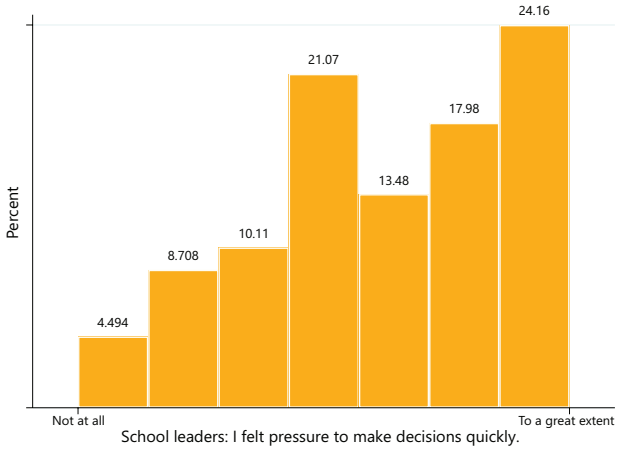
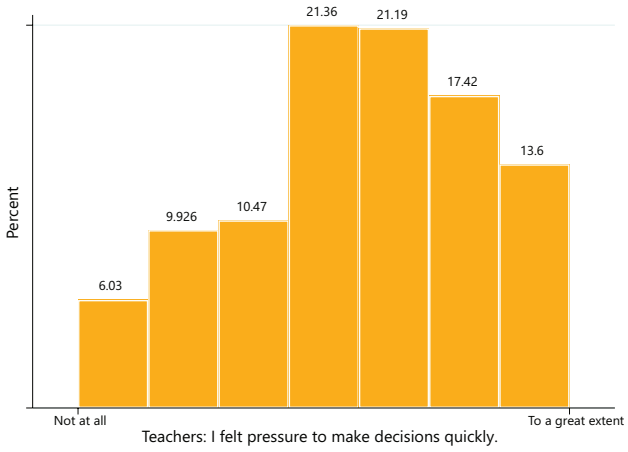


Figure 10: Distribution of responses for 'I felt pressure to make decisions quickly'. (teachers, n=4,030)



Q.12: I felt pressure because I had to make high-stakes decisions (for example, managing complex student behaviours).

Again, for this question the Likert scale ran from one (not at all) to seven (to a great extent). Leaders had a mean of 4.24 (S.D. 1.99) with a median of 4 (IQR 3,6). Teachers had a mean of 3.45 (S.D. 1.92), and median of 3 (IQR of 2, 5).

Figure 11: Distribution of responses for 'I felt pressure because I had to make high-stakes decisions'. (leaders, n=356)

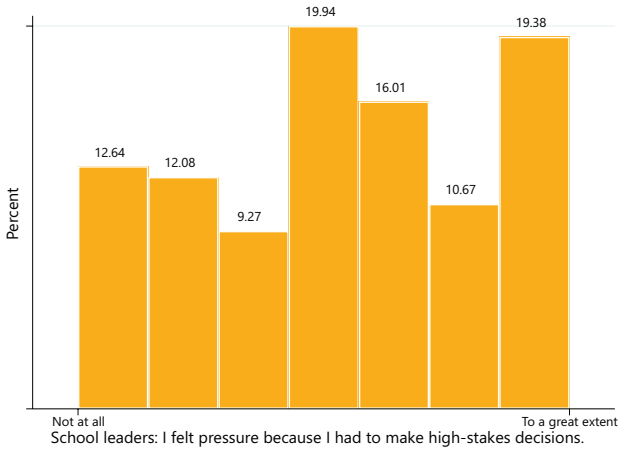
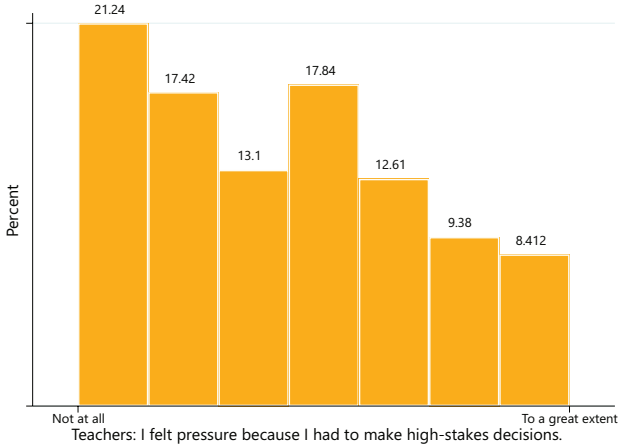


Figure 12: Distribution of responses for 'I felt pressure because I had to make high-stakes decisions'. (teachers, n=4,030)



Q.13: How many decisions do you estimate you made in 30 minutes?

For this question, teachers could select an approximation on a scale from one equal to 1-10 decisions, two, 11-20 decisions, three, 21-30 decisions, four, 31-40 decisions, five 41-50 decisions and six, more than 50 decisions. Leaders had a mean of 2.33 (S.D. 1.33) with a median of 2 (IQR 1,3). Teachers had a mean of 2.57 (S.D. 1.49), and median of 2 (IQR of 1, 3).

Figure 13: Distribution of responses for 'How many decisions do you estimate you made in 30 minutes'. (leaders, n=356)

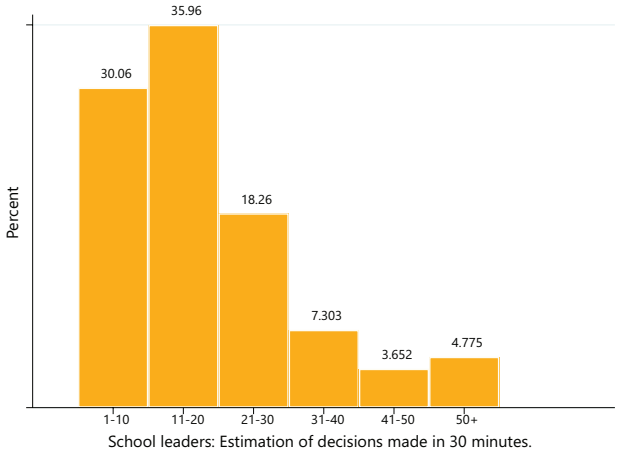
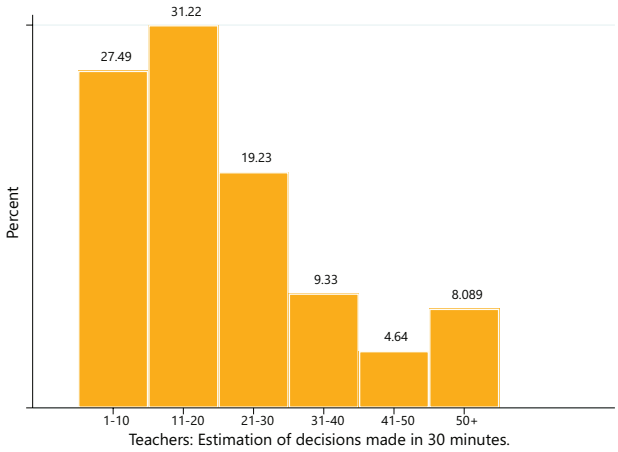


Figure 14: Distribution of responses for 'How many decisions do you estimate you made in 30 minutes'. (teachers, n=4,030)



Q.14: Overall, I feel I had enough time to complete all I wanted to.

For this question, responses which indicated lack of time, would be positioned closer to the lower end of the scale from one to seven, with one indicating 'not at all'. Leaders had a mean of 2.96 (S.D. 1.62) with a median of 3 (IQR 2, 4). Teachers had a mean of 3.12 (S.D. 1.62), and median of 3 (IQR of 2, 4).

Figure 15: Distribution of responses for 'Overall, I feel I had enough time to complete all I wanted to'. (leaders, n=356)

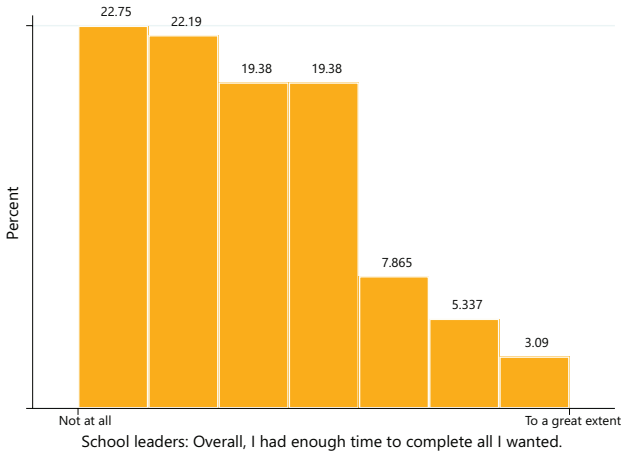
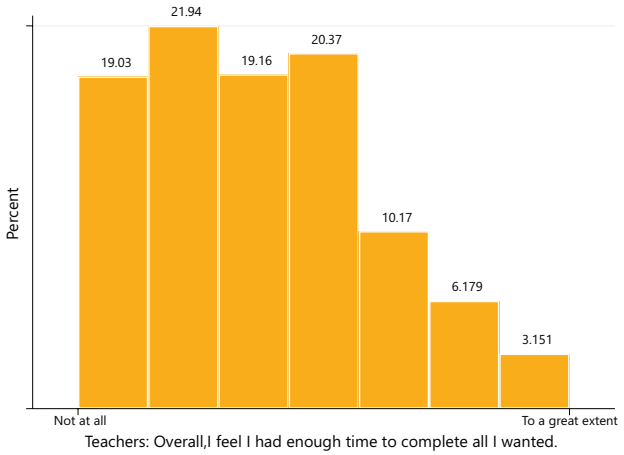


Figure 16: Distribution of responses for 'Overall, I feel I had enough time to complete all I wanted to'. (teachers, n=4,030)



After School Survey

The After School Survey was designed to measure the impact of the day on teachers: the manageability of the work, the extent to which they had felt rushed, and the amount of work that remained to be done that evening or weekend. Finally, we asked teachers to indicate the extent to which the day had been typical for them. For each of the main quantitative survey questions presented in this section 3,379 observations were provided by 1,512 teachers and 260 observations were provided by 138 leaders. At two points in the survey (Q1 and Q3), the logic of the survey offered respondents an additional question, depending on how they responded in Q1/Q3. To illustrate, for Q1, concerned with the manageability of work, if respondents selected either one, two or three on the Likert scale,(indicating that their work was less manageable) they were then asked to select activities from a list, to indicate those factors which impacted the manageability of the day. For questions guided by logic, numbers of respondents are reported where relevant below. For all quantitative questions, for both groups there was greater variation in responses between respondents than there was within their individual responses. Finally, teachers were also able to offer qualitative comments at three points in this survey, reported in detail below.

Q.1 My workload today felt manageable.

Possible responses for this Likert question ranged from one (not at all) to seven (to a great extent). The experience of a less manageable day is reflected in responses closer to the one end of the scale. For leaders the average response was 3.25 (S.D. 1.47) and the median response was 3 (IQR 2,4). For teachers, the mean was 3.54 (s.d. 1.44) and median was 4 (IQR 3,4). The first histogram shows distribution of leader responses and the second, teacher responses.

Figure 17: Distribution of responses for 'My workload felt manageable'. (leaders, n=260)

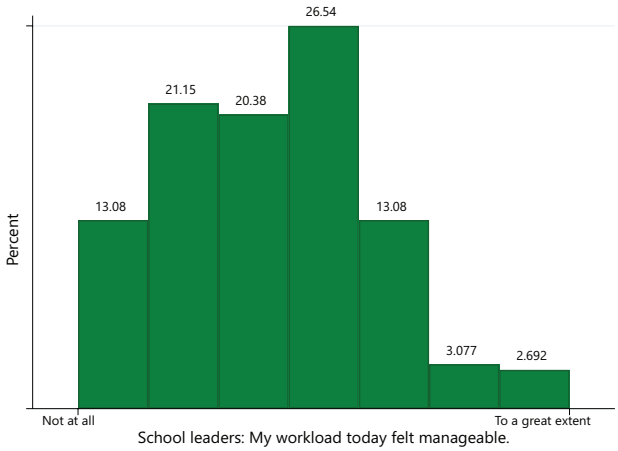
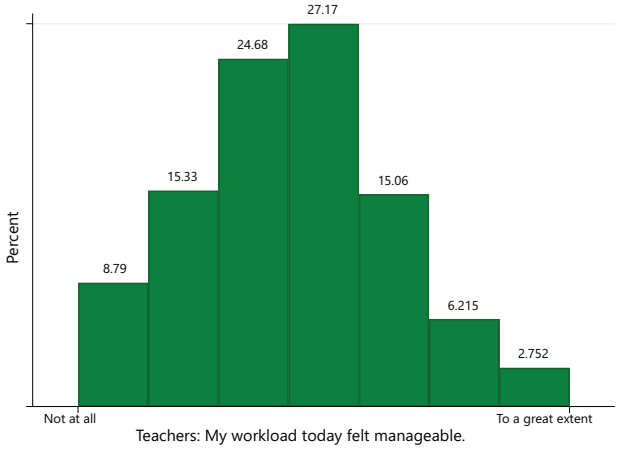


Figure 18: Distribution of responses for 'My workload felt manageable'. (teachers, n=3,379)



If respondents selected between 1-3 ('Not at all' end of the scale), the survey logic then asked those respondents to select all those that applied, from a range of options, as the reasons why their day had not been manageable. Within the leader group, for 142 surveys, (55% of a possible 260 surveys) responses ranged between one and three. These responses were provided by 93 school leaders, 59% of the total group of leaders who participated in the project. Table 8 shows how many times each option was selected (noting that respondents could select more than one option), across the sub group of 142 After School Surveys and options are ranked according to frequency of selection. The second column shows the proportion that each response contributed to the total responses selected. To illustrate, the most frequently selected option for those leaders who were asked to explain why their work was not manageable was 'managing the welfare of students and/or staff'. This option was selected 110 times across 142 surveys and constitutes 21% of the total options selected for this question. Each of the After School Surveys is reporting the leaders' experiences of the working day and in this sense, each of the 142 surveys represents a working day. The final column of Table 8 reports the proportion of 142 days for which each of the reasons was presented: for example, across 142 days represented in the data provided by school leaders, the issue of 'managing the welfare of students and/or staff' was an issue that impacted the manageability of the day on 110 days or 77% of total days.

Table 8: Selection of options giving reasons why work was not manageable (Leaders, n=142 surveys)

Leaders' reasons why work was not manageable	Frequency	% of total responses	% of 142 days (rounded)
Managing the welfare of students and/or staff	110	21.11	77
Managing and responding to student needs/behaviour	108	20.73	76
Communicating with parents/carers	96	18.43	68
Organising teacher relief	47	9.02	33
Other (open responses)	46	8.83	32
Timetable disruptions	41	7.87	29
Managing student teacher/s	26	4.99	18
Lesson preparation	17	3.26	12
Marking and data entry	16	3.07	11
Amount of work to be covered in lessons	14	2.69	9
TOTAL	521	100	

Of the 3,379 After School Surveys completed by teachers, for Q1 'My workload felt manageable', for 1,649 responses (49% of total After School Surveys), teachers selected within the range of one to three, triggering the option of Q2 where teachers could select reasons why their work was not manageable. These responses were provided by 1,006 teachers, 62% of the total group of 1,623 teachers. Table 9 shows the reasons teachers selected to explain why their work was not manageable on the day of the survey, ordered from most frequent reason through to least frequent. Across the 1,649 surveys given the option to answer this question, 'managing and responding to student needs/behaviour' was selected as an explanatory option 1,281 times, or 18.45% of all options selected by teachers. Again, the count of surveys equates to the number of working days being described by teachers. The final column reports proportion of the days in which each option was reported by teachers to impact the manageability of their day. For teachers, 'managing and responding to student needs/behaviour' was an issue for 1,281 of the 1,649 days of data, or for 78% of total days.

Table 9: Selection of options giving reasons why work was not manageable (Teachers, n=1,649 surveys)

Teachers' reasons why work was not manageable	Frequency	% of total responses	% of 142 days (rounded)
Managing and responding to student needs/behaviour	1,281	18.45	78
Managing the welfare of students and/or staff	929	13.38	56
Marking and data entry	907	13.07	55
Amount of work to be covered in lessons	897	12.92	54
Communicating with parents/carers	841	12.11	51
Lesson preparation	794	11.44	48
Timetable disruptions	539	7.76	33
Other (open responses)	383	5.52	23
Organising teacher relief	213	3.07	13
Managing student teacher/s	158	2.28	10
TOTAL	6,942	100	

Across the combined leaders and teachers group, for 429 surveys, participants responded 'other' to the question "select activities (all that apply) which made your workload feel less manageable" and were invited to elaborate on what constituted the 'other' activities. Respondents' elaborations of the 'other' activities which made their workload feel less manageable are discussed below.

A significant number of participants chose 'other' in order to reiterate the ways in which dealing with student behaviour issues, communicating with or otherwise dealing with parents and carers, or attending to student welfare, health and wellbeing had caused their workload to be unmanageable on the day of reporting. Similarly, participants reiterated that assessment and preparation activities had contributed to their workload feeling unmanageable. Importantly, the 'preparation' activities most commonly noted here related to preparation for excursions, classroom preparation for students on alternative learning plans or other special arrangements; and planning for faculty meetings, student-free days, or professional development. These activities should be considered distinct from general lesson planning. Finally, a smaller cohort of participants emphasised that their 'other' included data management activities, often including uploading data, sometimes related to student behaviour management, to OneSchool.

Table 10 – Themes for Q2: responses to 'other' factors that had made workload less manageable today

Reiteration of other options available	Assessment activities
	Preparation activities
	Managing student behaviour
	Managing student welfare, health and wellbeing
	Interacting with parents
	Data management
'Admin'	Email
	HR/complaints management
	Meetings
	Generic 'admin' duties
Staff interactions	Mentoring and supporting other teachers
	Facilitating professional development
	Line management responsibilities
	Managing/dealing with relationships between staff

Co- or extra-curricular activities	Both preparation for and supervising/attending to these, including performing arts, sport and other activities
'Covering' for colleagues	Supervision of classes/extras Extra playground duties/other supervision Other tasks as a consequence of staff absence
'Volume' of work	Range and/or intensity of activities named as 'other'

A range of further categories of responses reflected areas that were not available options and thus genuinely represented 'other' activities. Most notable among these were activities constituted by teachers as 'admin'. While many participants elaborated only with 'admin' or 'administration tasks', others provided more of a window onto these, such as "administrative tasks like reporting, planning ICPs, making alignment documents, creating a learning wall, formative task feedback, writing assessment tasks, converting a unit plan from an old template to a new template". "Checking and responding to emails", or dealing with "new tasks arriving as email" frequently appeared in these responses, along with QCAA-related work. Other 'admin tasks' were clearly specifically role-related, such as: "completing ordering $ worth of materials for faculty"; "general HOD [Head of Department] duties"; and "administration – finance, HR, IT, facilities, complaints management". Generally, common to these responses is a separation of 'admin tasks' from the core business of teaching and learning. While teaching, assessment and reporting 'admin', often linked to data entry, was sometimes noted by participants, absent was the discussion of lesson planning and/or curriculum planning more broadly from the qualitative responses about tasks that made teachers' work feel unmanageable.

Closely related to 'admin', 'meetings' were also nominated by a number of participants as contributing to their feeling that their workload had not felt manageable that day. The vast majority of these responses named generic 'meetings' rather than providing specifics, although specific contexts named for meetings included references to the timing of meetings (most usually before or after school), the purpose of the meeting (for example, "meeting regarding camp supervision", "meetings about incidents with students"), or the other attendees at the meeting (for example, "meeting staff and external agencies", "meeting with P and C executive").

Other activities noted by participants that had made their day feel less manageable included mentoring, supporting and managing other staff members. These activities included both formal professional development activities, for example "facilitating staff professional development at [the] last minute", and less formal professional support for colleagues, such as "supporting early career teacher" and "supporting staff after soft lockdown". Also included in this category were line management responsibilities, often referred to in general terms such as "management and leadership jobs", but sometimes expressed more specifically, for example "managing a teacher aide and guiding what they had to do" and "organisation of team due to class cover responsibilities, redistributing priority work due to class cover, responding to the teachers needing support in acting within the code of conduct". On occasion, participants noted that their day had been made less manageable as a consequence of the actions or behaviours of others within the school, sometimes school leadership such as "dealing with deputy principals and their decision making"; "dealing with issues that shouldn't have been issues due to poor communication of administrator"; and sometimes colleagues: "finding and cleaning art equipment for another art teacher. Having discussions with colleagues about this gear, was confrontational".

A significant number of participants noted that their 'other' comprised attending to extra-curricular or co-curricular activities, including camps, lunch club, eisteddfods, sports competitions, fundraisers, choir rehearsals, art club, bookweek activities, sports coaching, concerts, science week activities and the school formal. Importantly, for many of these teachers, the extra- or co-curricular activity named was one of a number of 'other' factors that had made their day feel less manageable.

Supervision and 'covering' for colleagues who were absent was the final substantive category of 'other'. This category includes playground duty during breaks (sometimes with little notice due to absence), supervision of classes and covering of administration duties, for example "covering multiple leadership roles due to staff absence" and "extra duties due staff absences. Manning the office due to staff absences". A strong sense of the impact of teacher shortages can be seen in these responses, with

participants noting the negative effects of schools suffering staffing shortages on both teachers and students, with, as an example, a "lack of staffing leading to unmanageable tasking choice" and instances where their work was intensified as a consequence of absence: "teacher aide unable to be replaced so support lacking for students with disabilities". For other teachers, the need to provide compassionate cover for colleagues was noted to have significance consequences for the manageability of their day: "I had to abandon my duties for the day to ulfil another person's duties as they had a family emergency. While I fully support my colleague's need to be with her family, I will need to fit four days work into two work days to catch up. Safe to say my stress levels are exploding right now".

Finally, a significant number of participants' responses gave a strong sense of the very large volume of work that constituted the 'other' for them. Many of these responses reflected the intensity of teachers' work and the way in which that intensity interacts in the moment with the amount of often time-sensitive or urgent work to be done, and a selection are reported in full here to provide a sense of the scale of these activities and demands:

> After work I had to mark assessment for moderation tomorrow afternoon, I had a PD to attend, submit a leave form, during school hours I worked through both lunches, had a duty, had to manage student emotions to a thunderstorm while conducting an assessment, and I still have more assessment marking to do tonight.
>
> Additional time needed to complete behaviour incident paperwork, call two families and document both calls along with associated paperwork needed to show behaviour level movement. Going through year level media permissions to ensure photos and info being uploaded to school Facebook is covered. Marking and giving one on one feedback to each child on their writing progression (have also brought home to continue) to ensure smooth lesson for tomorrow.
>
> Organising TA to assist assessment catch up for students away when assessment was done; assessing students in advance who are going on holidays early and will miss assessments next week; DP discussion for escalated behaviour situation during NCT; entering behaviour incident in OneSchool for behaviour incident which meant I missed getting work marked for feedback to students today; preparing for interviews before and after school; checking medications are assessable and in date for excursion tomorrow and checking location and procedures for ADHD medication as it wasn't in the same location as EpiPen and asthma medication I'll need to take; packing up resources for a student who has his last day at school tomorrow.

These responses reflecting the volume of work cut across categories such as admin, behaviour management, data entry and so on, and reflect the ways in which for many teachers, the varied urgent and important activities that need to be completed in a school day can, at times, contribute to the feeling that their day has been unmanageable.

Q.3 I felt rushed today

The next question again explored the concept of time poverty through the notion of rushedness, with seven (on the scale of one to seven) representing feeling rushed 'to a great extent'. For leaders the average response was 4.96 (S.D. 1.51) and the median response was 5 (IQR 4,6). For teachers, the mean was 4.92 (S.D. 1.47) and median was 5 (IQR 4,6). The first histogram shows distribution of leader responses and the second, teacher responses.

Figure 19: Distribution of responses for 'I felt rushed today'. (leaders, n=260)

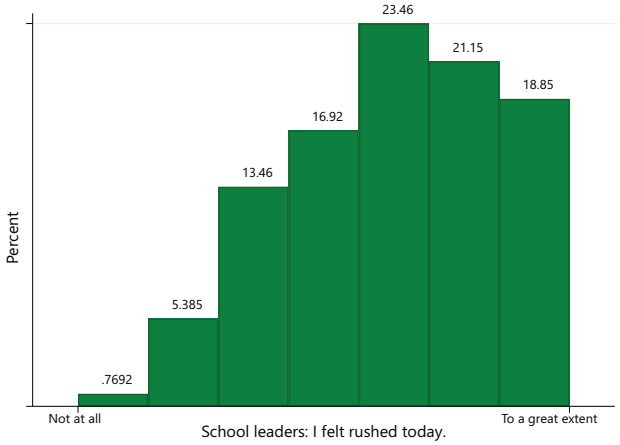
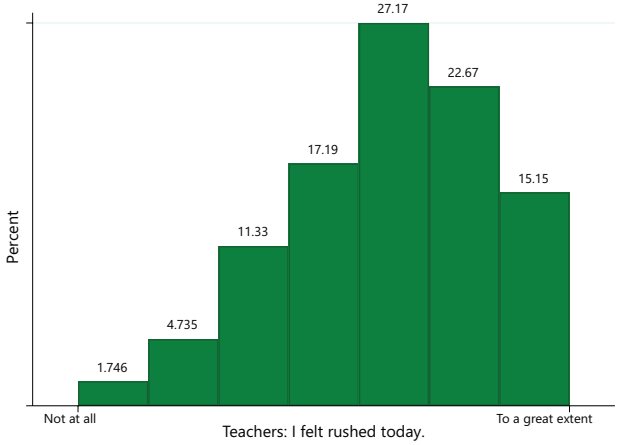


Figure 20: Distribution of responses for 'I felt rushed today'. (teachers, n=3,379)



If respondents selected between 5-7 ('To a great extent' end of the scale), the survey logic then asked those respondents to select all those that applied, from a range of options, reasons why their day had felt rushed. Within the leader group, for 165 surveys, (63% of a possible 260 surveys) responses ranged between five and seven. These responses were provided by 103 school leaders, 66% of the total group of leaders who participated in the project. Table 11 shows how many times each option was selected, noting that respondents could select more than one option, across the sub group of 165 After School Surveys and options are ranked according to frequency of selection. The second column shows the proportion that each response contributed to the total responses selected. To illustrate, the most frequently selected option for those leaders who were asked to explain why they felt rushed was 'managing and responding to student needs/behaviour'. This option was selected 115 times across 165 surveys and constitutes 21% of the total options selected for this question. Again, because the surveys represent an account of a working day, the final column of Table 11 reports the proportion of 165 days for which each of the reasons was presented. More precisely, across 115 (70%) of 165 days represented in the data provided by school leaders, 'managing and responding to student needs/behaviour' made the day feel more rushed for school leaders. The second most common factor contributing to the feeling of being rushed for leaders was 'managing the welfare of staff and/or students'. This factor was selected on 114 (or 69%) of the 165 days represented in the data.

Table 11: Selection of options giving reasons why the day felt rushed (Leaders, n=165 surveys)

Why did school leaders feel rushed?	Frequency	Percent of total responses	Percent of 165 days (rounded)
Managing and responding to student needs/ behaviour	115	20.83	70
Managing the welfare of staff and/or students	114	20.65	69
Communicating with parents/carers	97	17.57	59
Other (open responses)	51	9.24	31
Organising teacher relief	45	8.15	27
Timetable disruptions	45	8.15	27
Managing student teacher/s	27	4.89	16
Lesson preparation	21	3.80	13
Amount of work to be covered in lessons	20	3.62	12
Marking and data entry	17	3.08	10
	552	**100**	

Of the 3,379 After School Surveys completed by teachers, for Q3 'I felt rushed today', for 2,196 responses (65% of total After School Surveys), teachers selected within the range of five to seven, triggering the option of Q4 where teachers could select reasons why their day felt rushed. These responses were provided by 1,228 teachers, 76% of the total group of 1,623 teachers. Table 12 shows the reasons teachers selected to explain why they felt rushed on the day of the survey, ordered from most frequent reason through to least frequent. Across the 2,196 surveys given the option to answer this question, 'managing and responding to student needs/behaviour' was selected as an explanatory option 1,577 times,constituting 20% of all options selected by teachers. Again, the count of surveys equates to the number of working days being described by teachers. The final column reports proportion of the days in which each option was reported by teachers to explain the feeling of being rushed across the day. For teachers, 'managing and responding to student needs/behaviour' was an issue for 1,577 of the 2,196 days of data, or for 72% of total days.

Table 12: Selection of options giving reasons why the day felt rushed (Teachers, n=2,196 surveys)

Why did teachers feel rushed?	Frequency	Percent of total responses	Percent of 2,196 days (rounded)
Managing and responding to student needs/ behaviour	1,577	19.64	72
Amount of work to be covered in lessons	1,240	15.45	56
Managing the welfare of staff and/or students	1,012	12.61	46
Marking and data entry	985	12.27	45
Lesson preparation	935	11.65	43
Communicating with parents/carers	879	10.95	40
Timetable disruptions	596	7.42	27
Other (open responses)	410	5.11	19
Organising teacher relief	209	2.60	10
Managing student teacher/s	185	2.30	8
	8,028	**100**	

Once again, for Question 4, qualitative responses were gathered from participants who had nominated 'other' in answer to the prompt "select activities (all that apply) which made you feel rushed", following a question asking them to indicate on a seven-point scale (from 1, not at all, to 7, to a great extent) how

far they had felt rushed today. For 461 After School Surveys, participants nominated 'other' and provided an explanatory note, all of whom had responded at the higher end of the scale (between 5 and 7) to the question about how rushed they had felt today: the mean score for this group on the seven point scale ranging from 'not at all' to 'to a great extent' was 6.00 as opposed to 4.92 across the entire group.

Table 13: Themes for Q4: responses to 'other' factors that had made teachers and principals feel rushed

Activities outside of face-to-face teaching	Extra-curricular activities
	Playground duty
	Meetings
Admin	Timetabling
	Budgeting
	Scanning and uploading documents
	Organising equipment
	Making entries in OneSchool
	Emails
	Phone calls
'Core' work (reiteration of other options available)	Planning
	Preparing resources for classes
	Assessment
The unusual/unexpected	Changes to routine e.g. excursions, unplanned playground duty, covering other teachers/dealing with staff absences
	A particular feature of leadership roles

Most often, what made teachers feel rushed were organised activities outside of face-to-face teaching. One particularly common issue was the role of extra-curricular activities, the single most dominant theme in the dataset for this question. Work related to "extra-curricular events" included for example excursions, sporting competitions, rehearsals, book week events, assembly performances, awards evenings, concerts, and school camps. Work like this often meant respondents had not had a break that day because break times had been taken up with such activities. Another common activity that took up break times was playground duty. When this was on a day in which another break was filled with extra-curricular responsibilities, for example, it could mean no breaks at all that day. As one respondent explained, "a full day with playground duty and after school meeting leaves very little time to get prepared mentally and physically for classes". Playground duties were also described as making some teachers late for class, which could contribute to feelings of being rushed. Finally, meetings were a further organised activity which could create time pressure. Meetings included, for example, "planning meetings", "complex case meetings", "meetings with stakeholders" and "meeting for moderation". Meetings were described as taking place variously before and after school, and during breaks.

Break time is important for teachers not only because of the need for a break, but also because such time is also needed for other work that teachers are required to do outside of the classroom. A dominant theme in this category was teachers' administrative work. This included activities like timetabling, budgeting, scanning and uploading documents, organising equipment, and making entries on OneSchool. Such administrative, organisational work was also closely related to another common theme, that of emails and phone calls. Often listed as a brief, even single-word entry in response to this question (e.g., "email", "emails", "reading and sorting through email"), this work was clearly experienced as a burden by teachers. Often, such communications involved parents, or were related to student behaviour or welfare.

Additionally, many respondents commented on work that might be considered more 'core' as part of what made them feel rushed, including planning for the classroom. These responses were in many ways, reiterations of options already available for this question, reflecting participants desire to emphasise the impact and complexity of these activities. Respondents described, for example, "planning and preparation of curriculum documents", and "sorting resources for classes" as activities with which they experienced time pressure. This suggests that while activities related to administrative work and extra-curricular activities may sometimes be 'additional' tasks which cause problems for teachers, the intensity of work more central to teaching is also an area that requires attention and recognition. Another category of intellectual work that was described as creating a sense of feeling rushed was assessment. Often this was because of the preparation that had to be done for assessment and the level of oversight it was deemed to require as something fairly high-stakes. Respondents described, for instance, work related to "organising exams", "timelines for setting assessment", "senior assessment preparation" and doing "exam supervision" as work that had made them feel rushed. Because assessment was deemed so important, there were also often instances where individual students needed to catch up, which was a further issue described by teachers which made their work challenging (e.g., "chasing late assessment submissions and supervising students during breaks to complete").

This last point regarding follow-up assessment work also relates to a further theme, identified both here and in our pilot research, regarding the role of the 'unusual' and the 'unexpected' in schools. Much of the work that made teachers feel rushed was that which was not part of routine, or which was given to them at the last minute. This required reorganisation of plans and pushed other work out (e.g., "last minute I was provided some NCT which meant I had to organise notes for the relief teacher who was stepping in for me as well as the prepare myself for the PD I was providing to staff"). Often, the 'unusual' was related to the extra-curricular events described above. The 'unexpected', meanwhile, was frequently related to staff absences, another common theme in the dataset. Respondents described doing "unplanned playground duty", having "merged classes due to being understaffed", or having to "cover another class during my only spare". Indeed, supporting other staff was a further factor that could create time pressure, particularly for leaders "responding to teacher demands" and "supporting staff" with often unexpected needs. On the flip side, some respondents commented that their days had felt rushed due to demands made of them by leadership (e.g., "God calls from Admin"; "dealing with exec"), although this theme was more minor.

Q.5. In hours, estimate how much work you still need to do at home to prepare for tomorrow.

To account for the pressure of work beyond school hours, respondents were asked to estimate in hours the remaining work to be done before the next working day on a movable scale from zero to ten hours. For leaders the average response was 3.11 (S.D. 1.91) and the median response was 3 (IQR 2,4). For teachers, the mean was 2.72 (S.D. 1.88) and median was 2 (IQR 2,4). The first histogram shows distribution of leader responses and the second, teacher responses.

Figure 21: Distribution of estimate of remaining hours of work to be done. (leaders, n=260)

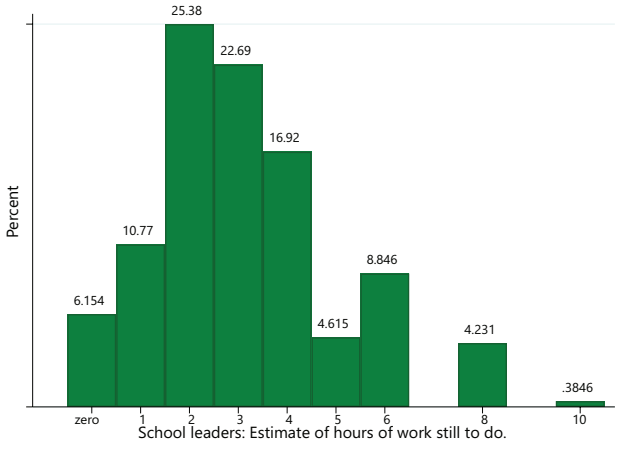
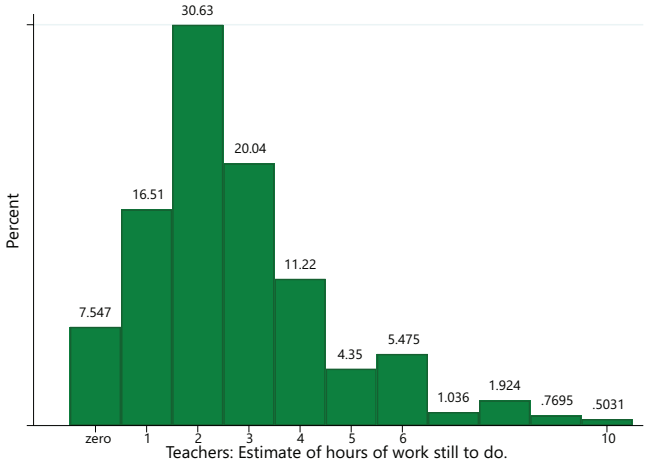


Figure 22: Distribution of estimate of remaining hours of work to be done. (teachers, n=3,379)



Q6. How typical was your experience of work today?

Finally, teachers and leaders were asked to report the typicality of the day on a scale from one (not at all typical) to seven (very typical). For leaders the average response was 5.37 (S.D. 1.53) and the median response was 6 (IQR 4.5,7). For teachers, the mean was 5.17 (S.D. 1.56) and median was 5 (IQR 4,6). The first histogram shows distribution of leader responses and the second, teacher responses.

Figure 23: Distribution of responses to 'how typical was your experience of work today'. (leaders, n=260)

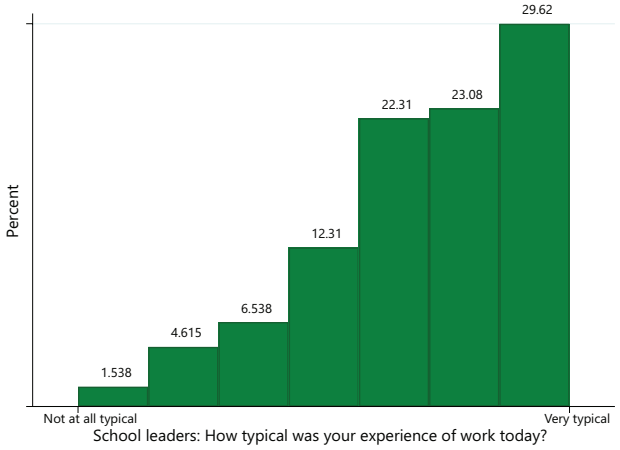
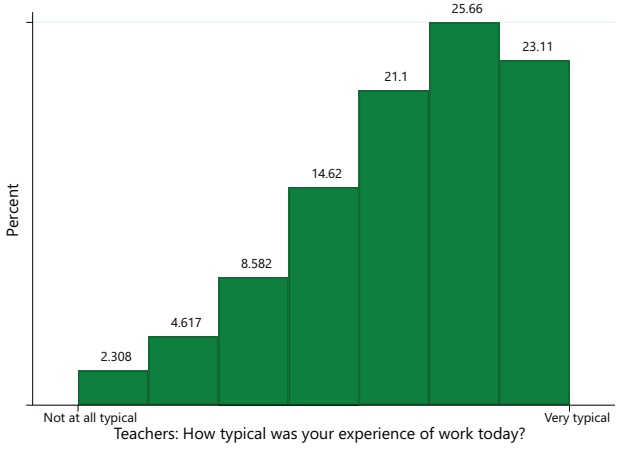


Figure 24: Distribution of responses to 'how typical was your experience of work today'. (teachers, n=3,379)



Q7. Do you have any other comments about your workload today?

The final question of the After School Survey invited participants to share any additional comments about their workload that day. Participants provided 1,194 open responses. These comments highlighted recurring concerns about what made their work feel unmanageable and why they often felt rushed throughout the day. Notably, however, the responses offered deeper insight into how teachers experience the cascading effects of incidents, the continual layering of activities and triaging of tasks, and the overall impact of this complexity on their job satisfaction (see Table 14).

Table 14: Themes to Q7 'other comments about workload'

Work that has cascading effects on the individual	Student behaviour
	Lack of admin support/administrative burden
	Meetings
	Communication
	Recording of incidents (e.g. OneSchool)
	Stress leave
Work that has cascading effects on the school	Staff absence
	Timetable disruptions
	Loss of NCT
	Extra/unexpected duties (e.g. PG or bus)
	Effects on breaks (e.g. lunch and toilet)
	Effects on preparation (e.g. lesson planning)
Constant layering/triaging of tasks	Face to face teaching as core; and then:
	Class interruptions
	Compliance tasks (e.g. inclusive education plans)
	Email and phone calls (e.g. managing parents)
	Marking (e.g. formative feedback timelines)
	Managing teacher aides
	Student welfare
	Collaboration with colleagues
	Staff meetings
	Lesson planning
Impact on work/life balance (e.g. job satisfaction)	Long days (e.g. extracurricular)
	Impact on home life/carers obligations (e.g. marking at home)
	Effect of critical incidents (e.g. emotional burden)
	Effect of no breaks (e.g. fatigue)
	Effect of layering (e.g. exhaustion)

Responses indicated that there were two types of cascading effects, and while these are interdependent, they can be classified as having effects on an individual teacher and subsequently on the broader school community. For instance, a student behaviour incident can trigger a cascading effect that significantly impacts a teacher's individual workload and wellbeing. When such an incident occurs, the immediate priority often shifts to managing the situation, which frequently leads to additional administrative tasks that "create a massive workload problem". Multiple participants discussed how "complex behaviours" are "time consuming" because they require "multiple points of contact between admin [e.g., Principal, Deputy, HODs] and parents". Beyond the coordination of meetings with school staff and the need for

timely communication with parents, teachers are required to document the incident and related details of parent conversations in OneSchool, which adds another layer of administrative burden. Participants observed that entering incidents into OneSchool was "time consuming" and that because "poor behaviour is more prevalent now you spend too much time in planning and preparation time (spares) [or non-contact time] entering this data". As another comment highlighted, "a lot of my time between classes was spent following up on poor student behaviour. The workload felt more stressful because there was no time to recover emotionally from these setbacks and incidents earlier in the day." This sense of overwhelm was common with participants referring to managing student behaviour as "extremely tiring, both physically and emotionally", that it is "wearying, annoying and grossly unfair on the teacher and on other students in the class" and that it "leaves little time for teaching and learning and increases dissatisfaction with work". In some cases, the emotional toll of managing behavioural incidents, coupled with the intense workload of managing that incident, can lead teachers to take a day off to recover: "I am taking sick leave tomorrow for my mental health because of student behaviour today".

A staff absence is an example of a cascading effect that disrupts the broader school community. When a teacher is absent, it often results in timetable disruptions that require other staff members to cover classes, leading to a loss of their scheduled non-contact time, which is essential for lesson planning, marking and other administrative tasks. Participants discussed that this was not necessarily a once-off, and that the inability to find specialist staff in primary schools meant a continuing loss of scheduled non-contact time, "Non contact time is not available as a replacement LOTE teacher has not been found to cover her position while she is on maternity leave". Other comments reflected on how their loss of non-contact time was having an impact on lesson planning and marking time, forcing teachers to take work home with them. "Late nights" and "weekend work" were often referred to. Unexpected timetable changes also necessitated additional or unexpected duties, such as playground duty or bus supervision, further stretching available staff and reducing the time they have for breaks. Many comments observed that they "were not relieved on PGD [playground duty] so did not end up with a lunch break", and that they "had to run for the toilet between classes". Concerningly, "I had no break at all today, which is normal" was a common response. Insufficient time for basic needs like eating or toileting contributes to increased stress and fatigue amongst teachers. These cascading effects not only disrupt the smooth functioning of a school day, but also strain the school's collective resources, staff morale and overall effectiveness, highlighting the interconnected nature of individual roles within a school community.

These cascading disruptions illustrate how single events can lead to a complex layering of additional activities and responsibilities for school staff. As these duties accumulate, teachers are often forced to triage their tasks, prioritising immediate needs over planned activities, which can further intensify their workload concerns. Comments highlighted that the role of teaching has become "reactionary" given "additional tasks are attained as the day progresses". One teacher noted, "I can't manage the teaching *as well as* the planning, meetings, marking, managing student behaviour, contacting parents, managing student wellbeing and managing teacher aides". Some feedback suggested that it was impossible to meet the expectations set by Education Queensland and school leaders especially the need to plan "multiple ICP [Individual Curriculum Plans] and differentiated lessons aligned with cross-curricular priorities, achievement standards and the school's pedagogical framework, while also providing feedback on formative assessment tasks, planning positive reinforcement strategies and addressing student welfare". A significant concern were "the demands and expectations of parents" who are often perceived as "disrespectful", with teachers feeling there is "never enough time to read, answer and action their concerns effectively". Emails in general were viewed as "constant, unrelenting and always requiring unexpected tasks to be completed from them". Teachers often find themselves multitasking, such as "responding to parent emails during staff meetings while also sending documents to colleagues". This constant state of rushing - "I'm always rushing myself and my kids; rushing to NCT, rushing back; rushing to playground duty, rushing back; rushing to finish an activity, and then rushing them out the door for lunch" - leaves teachers feeling perpetually short on time, leading to "daily headaches and exhaustion". This pattern illustrates a never-ending cycle of demands that prevent the completion of tasks within the workday.

The cascading effects and layering of activities in teachers' daily responsibilities significantly impact their job satisfaction and work-life balance. Long days are filled with extracurricular commitments, such as

school concerts, drama performances and sports competitions, often requiring "compulsory attendance and even manual labour that leads to physical exhaustion, headaches, and back pain". Many comments reported spending evenings and weekends marking assessments and providing feedback, with some expected to complete marking over school holidays. The pressure to meet tight deadlines, such as "having assessments marked and ready for moderation within days", adds to stress and disrupts personal time. Teachers with family or caregiving responsibilities face additional challenges, as their professional duties often conflict with their personal lives. Instances where teachers must "stop their work to collect their children from childcare", take "leave for a sick child while still managing marking and reporting tasks", or "cancel meetings due to family commitments", highlight the lack of flexibility and support in their roles. This juggling act leaves teachers and school leaders mentally and physically exhausted by the end of the day, only to face more preparation and marking tasks at home. The relentless nature of these demands leads to a feeling of "never catching up", with some teachers describing their workload as "ridiculous", "unsustainable", "unsafe" and "unmanageable." The increasing frequency of "pulling an all-nighter" to meet these demands reflects the dire state of their work conditions, driving some to consider quitting altogether. This situation underscores the urgent need for systemic changes to support teachers better and improve their overall wellbeing and job satisfaction.

Discussion

To understand these findings, we want to begin with some general points. First, our research aim was to understand the effects of both workload and work intensity of teachers and school leaders. In the section below, we integrate the qualitative and quantitative data collected through the app that shed light on the experience of time poverty. Further, we want to underscore how typical these experiences are and how they are experienced commonly by teachers and school leaders irrespective of demographic characteristics such as years of experience, professional role, type of school, geographic location, or socioeconomic status. We have a time poverty problem in our schools, with multiple causes and influences but with common effects. Grappling with this will be a key policy problem for years to come, but as the evidence below suggests, simple solutions will not be enough to intervene in the complexity of teachers' work.

1. Time Poverty

The first and most significant finding of this research concerns the time poverty of teachers and school leaders. The data collected through the app showed that teachers' and school leaders' experience of the working day evidenced the more "complex temporal patterning of experience" that Wajcman (2014, p. 15) characterised as time poverty. The Before School Survey responses showed that teachers on average slept reasonably well (M = 4.10, SD = 1.51), they felt adequately prepared for the day (M =4.55 , SD = 1.47), and they were generally positive about the day ahead (M = 4.41, SD = 1.40). School leaders' responses support a similar view, although they were slightly more positive in their outlook across sleep (M = 4.17 , SD = 1.58), preparation (M = 4.84 , SD = 1.39) and positiveness about the day ahead (M = 4.91 , SD = 1.36).

During their selected day, teachers and school leaders recorded 30 minutes of their time use in a randomly allocated time slot that occurred between 8am and 4pm. In doing this, we wanted to understand in detail what teachers were doing, and how many tasks they were 'switching' between and 'layering' across. Using data from our pilot study, we have previously explained this as the 'subjective experience of time', arguing that the 'heavy hours' in teaching are a "crucial factor in understanding why teaching has become such an unsustainable profession" (Creagh et al., 2023, p. 2). On average, when teachers and school leaders tallied the tasks they had to do and domains they needed to switch between in their 30 minutes of time use, it felt like they had done 71 minutes for teachers and 82 minutes for school leaders of work in 30 minutes. As a measure of intensity, this shows the feeling of there being more tasks requiring attention than time available to complete them. Further, teachers (M *5.18* = , SD = 3.11) and school leaders (M = 5.77 , SD = 3.42) reported the number of tasks they were 'layering' in that 30 minutes, further demonstrating how complex a teacher/school leader's role is in managing their time use. In reviewing the allocated time slot, we asked teachers to indicate whether they felt they had enough time to complete all they wanted. Teachers' (M = 3.12, SD = 1.62) and leaders' (M = 2.96, SD = 1.62) tendency to the negative end of the scale suggests a frustration that they could not achieve all they wanted in the time slot.

> *I feel that I haven't stopped, barely ate my lunch, spent time doing things for other people and some students were challenging, including one who returned from a suspension without the return to school meeting taking place.*

> *I am tired of feeling exhausted and managing headaches, not having toilet or meal breaks, poor support for additional needs students.*

Ultimately, the positive outlook regarding the day ahead was difficult for most teachers and school leaders to maintain. While they began the day feeling relatively well prepared, by the end of the day they reported feeling rushed across the day and their workload did not feel manageable. For example, teachers' average responses reported a feeling of being rushed across the school day (M = 4.92 , SD = 1.47), and a common perception that their workload on that day did not feel manageable (M = 3.54 , SD = 1.44). School leaders appear even more time poor, with their reporting of feeling rushed (M = 4.96 ,

SD = 1.51), and the manageability of their workload (*M* = 3.25, SD = 1.47) even less positive than that of teachers.

> *I never have enough time. I get to work hours before school starts and I still don't have enough time.*

We also wanted to know how common these experiences were. While we should be concerned about any reports of feeling overwhelmed or frustrated with work demands, the more typical this experience is across a workforce the more pressing the concern should be. At the end of the day, after answering questions regarding how rushed they felt, their sense of accomplishment and the manageability of their workload, participants were asked to indicate on a Likert scale how typical their day had been. The responses of teachers (*M* = 5.17 , SD = 1.56) and school leaders (*M* =5.37 , SD = 1.53) indicate that this pattern was very typical of their role. In other words, teachers and school leaders start the day more positively than they end it, and despite their best efforts to prepare, they are frustrated about the manageability of their workload. The intensity of the demands made of them negatively impacts their sense of accomplishment and satisfaction.

2. Layering of tasks

One of the benefits of collecting data through an app on workload and work intensity is that it shone a light on an aspect of teachers' and school leaders' work that has been often overlooked - the effects of continually having to manage tasks that appear to stack one on top of each other. This layering is produced both in face-to-face teaching and non-contact time (NCT) and to some extent is a common attribute of the master or expert teacher (Berliner, 2004). However, the ability to manage layering is not infinite, there appears to come a point where the degree and complexity of that layering, the multiple domains and processes that need to be cognitively engaged with and the effects of momentary 'blockages' to that flow can become overwhelming. Tasks accumulate over the day and teachers and school leaders start to feel constantly under pressure to make time up in order to achieve what they wanted to (Thompson et al., 2023). Too much layering, or periods of intense layering of tasks, impacts job satisfaction and sense of accomplishment.

> *No breaks due to disruptions in the classroom that are beyond my control and yet I still have to deal with the 'fall out'. Managing student behaviour is exhausting and time consuming and takes away valuable teaching time. Parent and Administrator expectations are so high and yet all that extra work has to be done at home because my work day is full of face to face teaching. I work all day, then come home to work all night just to be ready for the next day. It is ridiculous. No joke, the workload is out of control!*

Layering is exacerbated by the effect of multiple disruptions that accumulate across a day. For example, participants refer to timetable disruptions, the unexpected loss of non-contact time or additional duties due to such things as a lack of relief teaching as creating a stressful and compressed layering of their day. Added to this were the frequency of tasks that seemed constant including the need to communicate with parents, enter data on student behaviour incidents, respond to administrative compliance, be continually available and responsive to emails and meet seemingly unrealistic marking timeframes as issues that diminish job satisfaction. Interruptions compress the time available to respond to tasks that are accumulating, a significant reason why teachers leave work feeling frustrated that they did not achieve what they wanted to. Teachers are forced to manage their primary teaching responsibilities alongside a growing list of secondary - but seemingly, equally important - tasks. This continual juggling act (see also, Heffernan et al., 2022) in the long term appears to wear teachers and school leaders down over time, impacting their job satisfaction and belief in the sustainability of teaching as a career.

> *There are too many 'extra' things arranged both inside and outside of teaching time. Our core business is being undermined. Student behaviour is exhausting and impacting student learning.*

3. Triaging of time

To cope with the layering of tasks and the resultant accumulating workload, teachers often find themselves triaging their time, prioritising immediate and urgent duties over those that require thoughtful preparation or follow-up (Stacey et al., 2022). This often means focusing on the most pressing needs, such as addressing student behaviour and parent concerns via email and phone, while less urgent but more appealing and rewarding tasks like innovative lesson planning are pushed aside. Teachers did not discuss their curriculum work such as lesson planning as a problem causing their time poverty. Rather, they were concerned that this core professional duty that requires uninterrupted time and focus (and importantly, contributes to teacher job satisfaction), was constantly being pushed aside because of the need to respond to more pressing concerns. In a day filled with unpredictable interruptions - many that take up a teacher's scheduled non-contact time - curriculum work is often left for after-hours. This contributes to a vicious cycle where urgent matters consistently take precedence over the critical, yet less time sensitive, tasks that many teachers find rewarding and sustaining.

> *Some tasks won't get done to the standard that I'd like them to be completed because of time.*

> *I could not get many of the things completed that I needed to. I feel stressed thinking about everything that I haven't done and am already planning my to do list for Monday.*

This constant triaging of time forces teachers into a reactive rather than proactive approach to their work (at least during school hours). Recognising that teachers need to triage time to maintain a basic level of functionality across the school day is important because it sheds light on the reality of their working conditions. This understanding highlights the impact of time poverty, including constant interruptions and timetable disruptions, on the quality of teaching and learning, and explains why essential tasks like lesson planning and assessment feedback may be rushed or delayed. It also suggests that policy solutions that aim to 'find time' for teachers, such as giving them AI developed lesson plans (Ministers' Media Centre, 2024), is unlikely to improve the quality of instruction. Indeed, such an approach may further diminish teachers' engagement with the curriculum, reducing their sense of ownership over their work, ultimately working to reduce their job satisfaction. Instead, policies need to focus on the more complex task of reducing interruptions and disruptions to a teachers' work day (e.g., protecting non-contact time and lunch breaks, better managing student welfare needs, and setting realistic expectations for parent communication).

> *My needs as a school leader sometimes seem to be at the bottom of a large list of conflicting priorities. On many occasions my responsibilities do not get done due to being responsive to student needs and parent requests.*

4. Cascading effects

This structuring and triaging of time is consequential and has cascading effects. While disruptions and/or unexpected events can obviously impact the ability to achieve other necessary tasks, the issue is that these disruptions appear to be the new normal across the school day. The issue with cascading effects is that it is increasingly difficult to make up for time that is lost across the school day, and this invariably impacts both individual teachers and the broader school community. For example, a teacher who has to meet with leadership to brief them on a student behaviour incident misses their playground duty, meaning that their colleague does not get replaced and has to do a double shift, and as a result is unable to have their lunch, take a toilet break, or use the break time that they thought they had to communicate with parents. Tasks continue to accumulate, as does the amount of work that needs to be taken home.

> *I still haven't filled my water bottle and it's Wednesday afternoon. Too busy to get a drink of water from the taps. Ugh!*

While some of these cascading effects may be difficult to plan for, there are others that are an effect of policy mandates and interventions. Cascading can be what Ball (1994) terms 'second-order effects' that refer to the demands and often unintended consequences of policy shifts and requirements. For instance, increased accountability measures in schools requiring detailed monitoring and reporting of student behaviour have significantly altered the daily responsibilities of teachers. Behavioural incidents must be documented and entered into a student management system like OneSchool (Clutterbuck et al., 2023). As a result, teachers find themselves dedicating significant time to these administrative tasks on top of trying to recover learning time lost to the initial incident, communicating with parents and school leadership. What might initially seem like a straightforward requirement for record-keeping quickly escalates into an administrative burden, as the cumulative time spent on data entry adds up over the course of a school week or term.

> *I was unable to complete any duties of a DP today. All day was spent on keeping complex students in the right place, working with their families and ensuring safety of the students and others. I am feeling very overwhelmed at losing hours of work time to crisis management. It now needs to all be recorded in OneSchool.*

The cascading effect of this change is twofold. Firstly, there is an immediate disruptive impact on classroom dynamics when teachers are required to pause instructional time to address behavioural issues. Secondly, the increased administrative workload of documenting this behaviour creates a subsequent flow-on effect that permeates the entire school day. As teachers become preoccupied with the demands of data entry and reporting, their capacity to plan and deliver engaging lessons diminishes (Fitzgerald et al., 2019). Moreover, the growing perception of being overburdened with these non-teaching duties can lead to frustration, stress, and even burnout among staff, further impacting their effectiveness in the classroom (Creagh et al., 2023). Over time, the constant juggling of teaching responsibilities with administrative tasks can erode the professional satisfaction of educators, influencing their morale, job satisfaction and overall well being (Collie & Mansfield, 2022). While the primary goal may have been to increase accountability and ensure consistent management of student behaviour, the unintended consequence is a significant diversion of teachers' time and attention away from pedagogical activities to compliance tasks.

5. Work-life balance

These effects compound and accumulate - the teacher or leader who needs to complete more work at home (with an average of 3 hours for leaders, and 2.7 hours for teachers of work still to do) because of various disruptions feels more pressure for their home responsibilities as well as school responsibilities, exacerbating the lack of time for recovery. Marking assessments with tight deadlines appeared to be a particularly problematic expectation in this regard, as increased pressure is placed by education systems on the collection and use of 'data' (Clutterbuck et al., 2023). This is problematic first because of respondents' self-reported frustrations with these pressures. Qualitative responses indicated that time poverty was understood to be related to a range of health problems; indeed research suggests that teachers with poor leisure and recovery time are at risk for work-related illnesses (Peixoto da Silva & FIscher, 2020). The second reason it is problematic is because research also suggests that a positive work life balance supports 'job performance' (Cho et al., 2023; Johari et al., 2018), suggesting systems are not doing themselves a long-term favour when teachers' work-life balance is not effectively supported.

> *Pressures to complete assessment tasks, lack of resources to provide suitable differentiation for high needs students, high personal cost of teaching resources - staff not even supplied with whiteboard markers we have to purchase our own.*

> *I was unable to attend a funeral for a colleague due to no replacement staff available.*

What is often neglected in discussions of teachers' work, is the reality that teachers, like all professionals, have complex lives outside of their work that require thoughtful management. Indeed, respondents' work often caused conflict with family responsibilities. This finding is contrary to the popular view that teaching is a flexible, family-friendly profession (Lampert et al., 2023). Yet the expectation remains

that teachers will continue to meet all in-school responsibilities, including planning relief lessons and preparing detailed resources in advance, even when unexpected events arise, such as a sick child or a family emergency. This need to plan for their absence creates yet another layer of work, adding to an already overwhelming list of tasks. The additional burden of ensuring continuity in their absence, which often involves detailed instructions for relief teachers, creating lesson plans that align with curriculum goals, and anticipating potential classroom challenges, further complicates their workload. The expectation that teachers seamlessly manage their work/life balance (given they have the benefit of 10 weeks holiday per year) likely leads to stress and burnout as they constantly assess the demands of their professional roles with their personal responsibilities. Research is emerging that calls for teachers to be able to more readily access flexible work arrangements to better manage their professional and personal lives, which may help retain teachers in the profession longer term (Felstead et al., 2024; Ekman, 2024).

> *I am so tired and it is only Tuesday. Lost my voice with constant challenging behaviours from children.*

> *Too much to do and not enough time. Working through meal breaks is an everyday event. No breaks even when feeling sick. So many emails to attend to when I get home from school because I just cannot do them while teaching full time. Marking is also an at home job as well as planning and endless lesson preparation for coming days and weeks.*

6. Time pressure, professional satisfaction and consequences

Finally, this raises a range of questions about the medium and longer term impact of time poverty on teachers' professional satisfaction, and the consequences of this impact. It is clear that the participants who recorded their time-use using the app were very aware of the negative impact of both the volume of work and the layering of tasks that left them feeling that their workload was unmanageable leaving them feeling constantly rushed and under pressure. Furthermore, the quantitative data suggested that for a large majority of teachers, this experience was typical of their working lives. Prior research has demonstrated that time pressure is a significant factor in teacher burnout, as it leads to emotional exhaustion, decreased job satisfaction, and increased motivation to quit (e.g. Demerouti et al., 2001; Skaalvik & Skaalvik, 2020). Many of the things now taken for granted in schools such as core preparation work being done after hours, feeling rushed during the day without an ability to pause or take a break and the high frequency of meetings, administrative work and documentation have been found to contribute to feelings of burnout (Skaalvik & Skaalvik, 2016).

> *I kept my head above water but there was no time to plan engaging student-centred activities.*

> *There is always a feeling of being inadequate. I also feel guilty that I don't have the answers for other staff or the students regarding their behaviour.*

What emerges from this project reinforces the relationship between the experience of time and job satisfaction. Teachers and school leaders report that time poverty prevented them doing the things that they valued in their work well. Their desire to craft interesting and innovative lessons, to provide meaningful feedback on student work, to provide support for students and their wellbeing during complex times was impacted by their time poverty. And this robbed many of their satisfaction in their work, leaving many feeling demoralised and that they were failing in their responsibilities. The sad reality is that many of the participants in our study are worried about the sustainability of teaching as a career given the time pressure they find themselves dealing with every day.

> *Managing student behaviour is extremely tiring, physically and emotionally. Leaves little time for teaching and learning and increases dissatisfaction with work. It's wearying, annoying, and grossly unfair on the teacher and on other students in the class.*

Conclusion

Thematic Summary

1. Time poverty: teachers and school leaders, on average, start each day more positively than they end it, and despite their best efforts to prepare, experience their workload as unmanageable.
2. Layering of tasks: the work of teachers and school leaders frequently features multi-tasking and task layering, with this 'juggle' often becoming overwhelming.
3. Triaging of tasks: to manage the 'juggle' teachers and school leaders resort to strategies of triage, whereby some work tasks ultimately remain incomplete or 'leftover' for after hours.
4. Cascading effects: task layering and associated triaging has cascading effects, where it is increasingly difficult to make up for time that is lost.
5. Work-life balance: cascading effects of time poverty negatively impacts teachers' personal lives.
6. Time pressure, professional satisfaction and consequences: cascading effects of time poverty also impact teachers' medium and long-term professional satisfaction and the sustainability of their roles.

Summary of Implications

1. Systems need to better understand the problem of time poverty - it is not just about hours worked, but the nature of this time and its subjective effects.
2. Such effects must be understood in the context of modern schooling systems such as that in Queensland, where accumulating work pressures mean disruption and disorder feature daily, and are the norm rather than the exception. Days rarely end as expected when they begin.
3. The school day therefore has to feature opportunities for teachers to make up for time that is lost due to unexpected events and disruptions.
4. However, it is clear that the current system of Non Contact Time (NCT) is not working. NCT is, itself, a victim of the cascading effects of time poverty, either taken from teachers in order to replace sick colleagues or becoming wholly consumed by unexpected disruptions.
5. This shows that it is the ecology of work within schools as institutions that is failing - not individuals.
6. In the current context, featuring twin pincers of attrition and lack of available relief teachers, finding solutions is more critical than ever.

In conclusion, our research highlights both the complexity and the widespread nature of time poverty for teachers in Queensland public schools. It suggests that neither current ways of thinking about teacher workload nor current strategies to alleviate workload and retain teachers are sufficient to understand and address this critical issue. Furthermore, our research suggests that it is the ecology of teachers' work within schools as institutions that is failing them, and ultimately their students. Given current teacher shortages, themselves both symptoms of and key contributors to time poverty, searching for and finding solutions is now more critical than ever.

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