

Temporalities of care in networked learning: A sociomaterial study of post-pandemic LMS practices in Indonesia

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Abstract

Learning Management Systems (LMS) have become an integral part of teaching in Indonesian higher education, extending beyond their emergency role during the Covid-19 pandemic. Through the national SPADA initiative (Sistem Pembelajaran Daring Indonesia, or Indonesian Online Learning System), the government mandates universities to use the platform as part of everyday teaching and learning practices. This move not only redefines how learning and teaching are experienced by teachers and students but also entangles new temporal pressure and fragmentation shaping the enactment of care. Drawing on Sharma's (2014) concept of chronopolitics and Tronto's (1993) ethics of care informed by a sociomaterial perspective, this study investigates how lecturers enact care across temporal and digital structures in post-pandemic Indonesian higher education. It specifically explores how the technological entanglements reconfigure lecturers' temporal rhythms, educational care relations and labour dynamics as they adapt to institutional demands of LMS use. This study employs a qualitative, participatory methodology combining photovoice and semi-structured interviews with ten lecturers teaching in different universities across Indonesia who actively used LMS platforms. Participants generated photographs that matter to them, depicting workspaces, tools (digital and non-digital), and humans or non-humans that they felt represented their practices teaching with LMS platforms. The photographs were used as prompts during interviews. Reflexive thematic analysis was employed to interpret the data. Findings suggest that LMS platforms reshape how learning takes place and transform teaching into distributed and fragmented networks. While LMS are designed to simplify teaching, they paradoxically generate new forms of invisible care work, intensifying lecturers' temporal pressures through monitoring and surveillance, and prompting performative behaviours to ensure their labour is recognised. Lecturers develop 'radical' strategies of resistance and self-care, such as delegating administrative tasks, enlisting surrogate labour, or setting strict boundaries on availability, to reclaim temporal control within the temporal architecture of LMS platforms. This paper contributes to sociomaterial and care scholarship by showing how the chronopolitics of digital infrastructures redistribute temporal power, reconfigure educational relations, and shape the enactment of care in networked learning. It argues that sustaining care in networked higher education requires recognising these hidden temporal burdens and reimagining institutional practices that value the embodied, emotional, and material dimensions of academic work.

Keywords

Care, Temporalities, LMS, Sociomateriality, Photovoice, Networked Learning, Post-pandemic, Indonesian Higher Education

Introduction

Learning Management Systems (LMS) are a well-established technology of networked learning, but have now taken on a new role subverting conventional approaches to learning and teaching after they established themselves as critical infrastructures during the Covid-19 pandemic. With physical classrooms closed and face-to-face classes suspended, universities relied on these platforms to maintain teaching and learning. In Indonesian contexts, despite the return of in-person meetings post-pandemic, LMS continue to be emphasised as a blended delivery option. The Indonesian Ministry of Higher Education, Science and Technology mandates the use of the *Sistem Pembelajaran Daring Indonesia* (SPADA/Indonesian Online Learning System), the national LMS platform

across universities (Spada Indonesia [Indonesian Online Learning System], 2025). This ongoing role for LMS shows that the platforms are no longer temporary solutions to a crisis, but have become an integral part of teaching in Indonesian universities.

Within networked learning scholarship, attention is given to how technologies, human relations and collaborative practices intertwine to connect people, resources, and knowledge across time and space (Networked learning Editorial Collective, 2021). LMS are a technology where these connections are enacted and mediated within blended learning environments. Rather than functioning as neutral tools, LMS act as active agents that interact with and shape the experiences of lecturers in their everyday teaching practices. This includes how lecturers experience and organise their time across synchronous and asynchronous activities. From a sociomaterial perspective, these platforms not only mediate teaching but also co-constitute lecturers' pedagogical practices since digital platforms, personal routines, gadgets, and academic activities are mutually entangled (Griffiths & Dickinson, 2025; Mörtzell, 2024). Their temporal experience of teaching is thus shaped by the interplay of material, social, and digital factors (Gourlay & Oliver, 2018).

While temporal aspects of networked learning have received attention in research (Burke and Manathunga, 2020; Feldman and Czerniewicz, 2024; Gourlay, 2014), less attention has been given to how care is enacted within these temporal structures created by digital infrastructures such as the LMS. Care involves attending not only to students' needs, but also to other often neglected forms of labour including temporal work carried out by lecturers. These dimensions frequently remain invisible within digital education contexts. Understanding the temporality and power dynamics surrounding care in digital teaching environment is therefore essential. This study thus investigates how lecturers enact care across temporal and digital structures in post-pandemic Indonesian higher education. Specifically, it asks:

1. How do lecturers experience and negotiate time within LMS-mediated teaching practices?
2. How is care enacted by lecturers across the temporal structures shaped by the LMS?

Research Context: Covid 19 and the Shifting Pedagogical Practices in Indonesian Higher Education

The Covid-19 pandemic resulted in lockdowns around the world, forcing universities to move teaching online rapidly in order to survive. Many teachers were unprepared for this, however, and learners were left struggling with inadequate infrastructure to participate equitably (Czerniewicz et al, 2020). In 2014, prior to the Covid-19 pandemic, the Indonesian government launched SPADA to support massive open online course (MOOCs) and provide open educational resources (OER) for higher education. In its initial year, six universities involved in SPADA offered 30 courses to 4,200 students through a credit transfer mechanism. By 2019, SPADA was used by 54 universities and 18,138 students (Belawati & Nizam, 2020).

In the time of Covid-19, following the government's direction to "study from home", all universities were instructed to prepare for online learning at short notice (Kementerian Pendidikan dan Kebudayaan [Indonesian Ministry of Education and Culture], 2020). To support this shift, the government emphasised the development of online learning platforms to be used by lecturers and students across the archipelago (Nizam, 2020). SPADA, previously limited to selected universities, was made accessible to all higher education institutions in Indonesia, and universities were encouraged to access and share online learning materials and modules freely (Nizam, 2020). These initiatives accelerated large-scale adoption of LMS-based teaching in Indonesia and showed the government's commitment to digital learning. However, this rapid transition also reconfigured lecturers' experiences of teaching, as their work became mediated through digital systems that changed the temporal and spatial practices of their pedagogy. The pandemic not only accelerated the adoption of LMS but also reshaped teaching practices, relationships with their students, and patterns of work.

In the post-pandemic period, Higher Education Institutions in Indonesia have tried to re-establish previous norms and operational practices. However, teaching with digital technologies through synchronous and asynchronous activities remains mandatory by the Directorate General of Higher Education (Sutrisno, 2022). Consequently, universities have continued to develop blended learning through the LMS alongside the required face-to-face attendance for lecturers and students (Indonesian Ministry of Education, Culture, Research and Technology, 2022; Ratnaningsih et al., 2024; Wahid et al., 2023). As universities continue the transition to this blended learning model, concerns have emerged about maintaining educational quality (Karjo & Andreani, 2023; Ratnaningsih et al., 2024), particularly since e-learning implementation in Indonesia presents challenges.

At the policy level, this continuous emphasis on blended learning is linked to broader national agendas of digital transformation and equitable access for higher education. The Indonesian government previously included digital technology as one of the six national mainstreaming agendas for the 2020-2024 National Mid-term Development Plan (RPJMN 2020-2024). This commitment is further strengthened in the RPJMN 2025-2029 document (Kementerian Perencanaan Pembangunan Nasional [Ministry of National Development Planning], 2025), which specifically mentions “the development and strengthening of the digital education ecosystems” as a way to counter long-standing issues such as unequal access to education and education standardisation within the fragmented contexts of Indonesian archipelago. With this policy, through SPADA Indonesia program, the government advocates LMS as an infrastructure that is expected to enhance equal learning participation and institutional accountability within Indonesian higher education.

While these policy initiatives aim to accelerate access and quality, the change of practice to blended learning with the LMS has principally transformed the role of lecturers. They are now required to be both content experts and skilled in digital pedagogy. This dual responsibility is reflected globally: lecturers worldwide experience significant increases in workload as a direct result of policy mandates to incorporate digital technologies into everyday teaching practices (Kennedy et al., 2022; Littlejohn et al., 2021; Santiago, 2023). These pressures have led to concerns about burnout and the sustainability of LMS facilitated teaching practices, especially in institutions with limited resources and support. These shifting demands have not only redefined what it means to teach, but also how lecturers care for students, themselves, and their work within the new temporal and spatial arrangements mediated by LMS.

In this paper, we draw on Sharma’s concept of chronopolitics (2014) to explore the temporal as a form of social power and social difference. Rejecting the idea that the world is speeding up, or that technologies consistently accelerate life, Sharma asks instead: for whom does life speed up? Was this what they wanted? Who is forced to wait so that others can be fast? What sociomaterial architectures allow and sustain these tempos? These questions invite critical engagement with temporalities, and will shape our analysis of the work of care.

Care Theories

Care has been a subject of scholarly discussion across multiple disciplines for decades (see, e.g., Noddings, 1992, 2012; Puig de la Bellacasa, 2011, 2017; Tronto, 1993, 2013). Noddings introduced the term *pedagogy of care*, drawing on mother-child relationships to describe the relational dynamics expected between teachers and students. She frames care as a reciprocal process which involves modelling, dialogue, practice, and confirmation, with an emphasis on empathy and emotional attentiveness, relational orientation, nurturing and caregiving, and responsiveness (Noddings, 2012). These qualities of care are often associated with the feminine. However, Tronto (1993) argues that care is not just feelings (a disposition), but should also include actions (practice), understood within a larger political scope. Tronto (1993) characterises care as the work involved in *maintaining, continuing, and repairing* the ‘world’ to make it as good to live in as possible and to support the well-being of those living in it. The term ‘world’ encompasses “bodies, ourselves, and our environment”, which allows ‘care’ to address not only human actors but also material elements and the environment in which care is practiced. Moreover, it is equally significant to recognise Tronto’s attention to care for the self. This aligns with Hobart & Kneese’s (2020) discussion of ‘radical care’, which underlines the importance of nurturing one’s own well-being and resilience while enacting care for others. For Tronto, this is part of ‘collective care’, in which individual well-being is closely connected to the well-being of others and the broader community. Tronto also notes that care is unequally distributed across society, where power relations and political hierarchies shape who performs and who benefits from care work. This unequal division of labour produces what Tronto (1993) calls “*privileged irresponsibility*”, allowing those in higher social or institutional positions to remain free from the burdens of care that are carried disproportionately by those in less powerful roles.

While Noddings conceptualized care primarily as a human-to-human relationship, Tronto expanded this view to include non-human entities as recipients of care. Extending this further, Puig de la Bellacasa (2011) highlighted that non-humans can be both “objects of care” (being cared for) and “active mediators of care” (enacting care practices). As a result, technologies, as material elements, can also be understood as parts of “matters of care”: sociotechnical assemblages that enable various forms of care work and caring relations among people, technological systems, infrastructure, and temporal contexts. In this notion, care is framed as entangled in the dynamics of human-material relationships which allows humans to affect and be affected by materiality. Consequently, in this research, adding the LMS to teaching not only facilitates new forms of practice, it also

actively influences how lecturers and students relate to each other, and changes how they experience time. The temporal demands of digital platforms shape lecturers' daily routines and, in turn, affect how care is enacted.

Care Theory and Education

Care is often seen only as a background aspect of education: something presumed and expected, but rarely discussed. However, education can instead be understood as a continuous configuration of care, constituted through the interplay of emotional, pedagogical and also material relations that sustain collective learning (Anderson, et al., 2020; Zakharova & Jarke, 2022). Studies alluding to care in education present different views. Noddings (1992) considers care as a “bedrock of all successful education” and conceptualises it as emotional and intellectual practices. She argues that when teachers care, they will truly “hear, see, or feel” what students are trying to convey, with attentiveness and engrossment toward students closely associated with the notion of care. An ethic of care informs other attentive, responsive approaches such as culturally relevant pedagogy (Ladson-Billings, 1995), although these developments rejected links to Noddings's essentialised gender roles. Other scholars understand care to encompass embodied, ethical, and relational dimensions that shape teaching and learning, rather than merely reflecting emotional and interpersonal connection. For example, Puig de la Bellacasa (2017) reminds us that care is never a singular act but an ongoing, situated practice entangled with material constraints. Her analysis highlights the importance of attending to undervalued aspects of educational practice. In Indonesian blended learning, by regulating interactions, resources access, and teachers' workflow, LMS platforms influence the way care is delivered. To sustain teaching as a continuous configuration of care, lecturers have to deal with not only teaching materials but also the LMS as a new space in which they relate to students. In this sense, care is understood as a situated practice entangled with technology, space and time. Mol et al., (2010) introduce the term “tinkering” as a way of understanding care as a practical and hands-on experience, something that is always emergent and situated in specific practices. They illustrate this empirically in clinics and farms, but the concept can also be applied in education to understand how lecturers sustain care by adapting to and dealing with pedagogical and technological demands within everyday practices of teaching. Wu (2022) offers a related rethinking of care through the concept of *troublecaring*. Drawing from feminist technoscience, including Haraway's (2016) practice of ‘staying with the trouble’, Wu challenges the logic of *troubleshooting* where technological failures are seen as disruptions to be fixed. Instead, she suggests lecturers should engage with breakdowns as sites of relational and speculative care. Rather than restoring previous order, *troublecaring* involves staying with these troubles by attending to the emotional and temporal labour that arises when digital systems falter.

While *troublecaring* draws attention to the situatedness of attending to breakdowns, care in educational settings also unfolds across broader temporal scales. This invites reflection on how care is enacted not only in immediate pedagogical encounters but also in longer-term questions of the sustainability of teaching practices. Following Tronto's (1993, 2013) argument that care must extend beyond individual actions to encompass institutional arrangements, this perspective recognises that caring in education involves negotiating between short-term responsiveness and long-term responsibility. The complexity of care theory makes it a useful analytical lens to view various educational practices, especially with the growing integration of technologies like Learning Management Systems (LMS).

Temporalities and Chronopolitics of Care

Tronto's observation that care is unequally distributed across society is usually evidenced in terms of the volume of work undertaken. However, Sharma (2014) has argued that power also becomes visible through analyses of the temporality of work. Temporality is not simply the accumulation of ‘clock time’; instead, she argues that peoples' “experiences of time depends on where they are positioned within a larger economy of temporal worth (p8). This account of the lived experience of time resists contemporary narratives of acceleration and intensification; her argument, like Tronto's, is that these experiences are not evenly distributed through society, and that instead of “a perceived fast world full of busy people needing more time is the structural reality that not everyone is equally out of time [...and that we] must recognize how keeping people in and out of time is a form of social control” (p25).

This argument provides the context for *chronopolitics*: the politics of temporal labour, of having to wait for someone more important, or speed up to match a pace set by someone else, or endure for longer because your time is worth less than someone else's. Taxi cab drivers provide Sharma with a concrete illustration of these conditions – waiting for passengers, rushing to meet their deadlines, working long hours for low wages – which have consequences for their wellbeing. As Sharma argues, temporality is an embodied experience, and not all bodies are taken care of.

While Sharma's full analysis incorporates further elements (such as the creation of infrastructures and practices that help individuals to manage these conditions), in this paper we focus on the connections between chronopolitics and care politics, exploring the ways in which the tempo and rhythm of care is experienced in educational practices.

Methodology

In this study, we developed a qualitative, participatory methodology combining photovoice and semi-structured interviews to understand how care is enacted within teaching with the LMS. Ethical approval was given by the UCL Institute of Education. Our selected methods, grounded in feminist epistemologies, emphasise *situated knowledge* (Haraway, 1988) and participatory approaches (Brown, 2024; Wang & Burris, 1994, 1997). Participants generated photographs that matter to them, transferring the authority and responsibility for documenting practices from researchers to participants (Brown, 2024; Chen, 2023; Coffey, 2023; Sutton-Brown, 2014; Wass et al., 2020), giving participants more agency in setting the agenda for interviews. Our participants are ten lecturers teaching in different universities across Indonesia, from both state and private universities, who actively used LMS platforms. We provided guiding questions to help them decide what to photograph. These questions supported reflection while still allowing them to choose what was meaningful to them. The photographs could depict workspaces, tools (digital and non-digital), and humans or non-humans that they felt represented their practices teaching with these platforms. These images were used as prompts, or a "can-opener" (Brown, 2024), during interviews, which triggered our conversations around sociomaterial care and the temporal dynamics of teaching within blended learning. In total, our participants generated 249 images, although only those they chose to discuss were used as prompts during the interviews. Due to geographical constraints, our interviews were conducted and recorded online via Microsoft Teams, with phone recordings as backup. The interview sessions varied between 48-120 minutes in length, and were transcribed manually. We employed reflexive thematic analysis to interpret our data. Our experiences with LMS-based teaching helped inform analysis of how teaching is conducted using these systems. Additionally, the first author's positionality as an Indonesian lecturer contextualise interpretations. Familiarisation with the data started with closely examining participants' photovoice images, manual interview transcription and reading the transcripts several times. Regular conversations helped clarify new meanings, and how these relate theoretically to sociomaterial care and networked learning. We annotated key points and statements as preliminary interpretations. These annotations were synthesised and collated into a codebook of 52 different codes. For this paper, we focus on themes related to the spatiality and temporality of digital learning to explore its connections with care relations.

Findings

Care in Disrupted and Maintained Networks

The photovoice activities and semi-structured interviews generated rich opportunities to explore and refine our understanding of how care is enacted across the networked space of LMS-mediated teaching. As the LMS reshapes how learning takes place, lecturers' attention shifted from bounded physical spaces to connected networks of virtual and digital environments. Despite the institutional expectations that the LMS would create organised teaching environments, what we encountered instead were fragmented spaces and broken networks. These fragmented spaces often made learning more difficult, requiring lecturers to make extra efforts to connect with students. For example, one teacher described:

During an online class, when I check and call my students, suddenly I hear their voice, but they are actually on the move. They say, ‘I’m on a motorbike,’ or ‘I’m on the train’. Those kinds of situations make it hard for them to concentrate, to answer questions, to join class activities, or even just to pay attention – Participant 5 (F)



Figure 1: Students’ Fragmented Engagement in a Zoom Class

In this sense, motorbikes and trains and other transitory places become parts of networked ‘classrooms’. This also illustrates how teaching is fitted in to accommodate other activities in which students prioritise, illustrating lecturers’ temporal labour, “the experience of laboring within a temporal infrastructure while being cast outside it. [...] There are different struggles over time that occur when one’s labor entails directly synchronizing to the time demands of other populations’ temporalities” (Sharma, 2014: 57). While this example shows the flexibility of networked systems, it also shows the politics of how lecturers are made attend to students’ needs across unpredictable, distributed contexts. Teaching in this way demands additional efforts to enact care, while students hold the practical power to prioritise other activities over participating in teaching.

Another notable incident reflects what we describe as “silence in the system,” where lecturers remain attentive and ready, but student engagement is partial, delayed, or absent. One participant reflected on this experience:

I prepared the LMS discussion carefully and waited for their (students) responses. Some students replied, but most remained silent. It felt like my efforts are not enough. – Participant 4 (A)

This silence highlights the fragility of the networks within the LMS learning, particularly in terms of responsive care. Despite the participation and commitment of lecturers, their efforts were not met with expected responses, leaving them waiting. As Sharma describes of ‘micropolitics of maintaining rhythm’ taxi drivers experience, “How they understand time is in large part structured and controlled by the time of others. While there is a rhythm to social life, it is neither an equitable nor egalitarian rhythm.” (Sharma, 2014: 79).

When teachers’ attentive care is not reciprocated with responsiveness, it fails to be what Tronto (1993) describes as ‘good’ care (in which attentiveness, responsibility, competence and responsiveness are aligned), breaking the sense of connection within the network. Similarly, another participant described the challenges she encountered when her students did not turn on their cameras on zoom during synchronous meeting. She described:

‘Miss, I am sorry I cannot turn on my video, I just woke up’. There are so many excuses (from my students). That’s why only a few are visible on (Zoom) screen. – Participant 5 (F)

This illustrates that care in disrupted networks goes beyond delivering content. Lecturers must continuously engage in relational and emotional negotiations, adapting to partial engagement with students and their fragmented circumstances. In these contexts, care is not only a pedagogical act but also a form of ongoing adjustments to people, technology, their rhythms and fragmented spaces, in order to sustain teaching practices.

Alongside these relational negotiations, lecturers’ teaching involved continuous technical maintenance and repair. Some lecturers spent much of their teaching time fixing the LMS rather than focusing on pedagogy:

We often spend time fixing and handling technical issues. It takes our time a lot. – Participant 9 (M)

Uploading a document took so long that we weren’t even sure if it uploaded. – Participant 10 (L)

Lecturers faced competing demands of their time, being pulled between teaching and technical issues. When technological disruptions occur, lecturers must decide whether to address the issue immediately or seek external support, which interrupts the flow of teaching, as teachers must wait for a technician to arrive. Even when technicians' work is marginalised relative to the tempos of teachers, constantly poised to maintain the pace lecturers expect, teachers and students still have to wait for them to arrive and to fix. As Sharma notes (2014: 74), making people wait is an exercise of power – here, students wait on the teacher, who waits on the technician, who waits in the service of the LMS. What was in policy to simplify teaching, lecturers explained, produced new layers of complexity, shifting their focus from pedagogy to 'troubleshooting' the technology, or else expanded the continuous configuration of care that constitutes education by adding technicians into the network.

Very often, when we try to mark attendance or use certain features, the application says it cannot connect to the internet. Other apps or websites work fine, so it's not an internet issue. The problem only occurs with Edlink.
– Participant 9 (M)

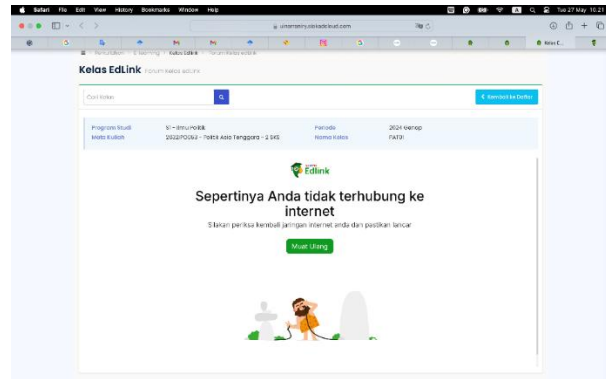


Figure 2: LMS Access Error

As well as interrupting teaching, these errors generated additional labour. Tasks assumed to be streamlined by the system instead required lecturers to repeat their work manually. One participant described the frustration of having to re-enter student grades:

I had already entered the scores in the LMS but couldn't export them to Excel (for reporting purpose), so I had to manually re-enter grades for 30–40 students. It was frustrating because the system is supposed to be digital, but the process was still manual as I had to submit the Excel file to the academic office as required. – Participant 3 (K)

Similarly, problems with student submissions also created additional layers of labour:

Students often can't submit their assignments through the LMS (system errors). When this happens, I told them to send their work by email. But with so many emails, it's hard to keep track. Sometimes a student's submission is missed when I've already entered grades, and later they complain about their score. Then I have to check again, search through emails, and make sure their work is counted. – Participant 9 (M)

These examples demonstrate that the LMS, designed to simplify teaching, paradoxically generates new forms of care work. Taken together, these experiences show that care in networked education must be sustained in many different ways, including through acts of maintenance and repair. These may appear as mundane practices, but are practical and material engagements that are necessary to keep teaching going. These accounts show how care is not merely a disposition, but an ongoing, distributed practice of keeping things (relationships, technologies, and pedagogies) working, in which the power to make others fit their work around some other tempo shifts between teachers, students and technologies in complex ways.

Temporal Pressure, Surveillance, and Self-care

In addition to the relational and technical practices of teaching with the LMS mentioned above, concerns were also expressed about how lecturers endure temporal pressures and institutional monitoring. One participant described the constant performance required by the system:

If we only watch (stay silent), and the lecturer doesn't type or move the cursor, the system immediately stops tracking time. The time spent stops. This affects the payment. – Participant 1 (S)

This vignette illustrates how teaching is conducted under the watchful eye of a temporal architecture – “built environments, commodities and services, and technologies directed to the management and enhancement of a certain kind of subject's time” (Sharma, 2014: 20) – designed to accelerate and intensify teachers' work. The monitoring of time, clicks, and activities are all set up and observed through the system as a performative enactment of Indonesian policy. If teaching practices are not observable, they do not count as “teaching practices”. As a result of this, lecturers are required to sustain observable activity (e.g., moving the cursor) to ensure their labour is recognised, even if moving the cursor is not needed for pedagogy. This time tracking, combined with unreliable system recording, created tensions between performing teaching work and enacting responsive care. The digital systems designed to support teaching instead burdens lecturers through surveillance.

During full online teaching, our classes were recorded by the central system. For example, if I taught for 6 hours, the recording sometimes only registered 2 hours because of an error. That meant I lost 4 hours of teaching credit and was not paid. – Participant 7 (E)

In response to this situation, some lecturers engaged in strategies to anticipate the system's limitations. Our participants described new forms of temporal labour created to make their teaching fit within the temporal architectures imposed on them:

Some lecturers sometimes ask their child in junior or senior high school to just open the LMS and keep clicking around. They don't need to comment, just click next, back, forward, download the materials, and so on, just to make it look like they are active in the LMS. – Participant 7 (E)

I usually extend my teaching by 10 to 20 minutes. For example, if I'm required to teach for 6 hours, I make it 6 hours and 20 minutes to anticipate any shortage caused by network errors. – Participant 7 (E)

These examples highlight how the temporal architecture of monitoring, forces lecturers to sustain the pace of their work, even if this is to the detriment of the quality of that work, or adds childrens' labour to the network. Lecturers' care practices must be accommodated within these temporal architectures that demands their pedagogical labour must fit with institutional expectations of continuous, trackable activity.

Faced with these pressures, lecturers have developed strategies to manage their workload and sustain their well-being. These strategies are intended to reclaim control over time and resist the temporal and spatial demands imposed by the system. For instance, some lecturers relied on administrative staff to help complete tasks related to payment and remuneration:

To comply with campus requirements, especially for attendance tracking through the LMS, admins often step in to help us input the necessary data so that we still get paid. – Participant 5 (F)

Additionally, as lecturers workload became increasingly heavy, some drew boundaries to protect their personal and emotional well-being. Participant 2 (B) shared:

...I set specific time for supervision to only be on Tuesdays and Fridays. I also told the students not to text or call me. Just come directly and wait! . – Participant 2 (B)

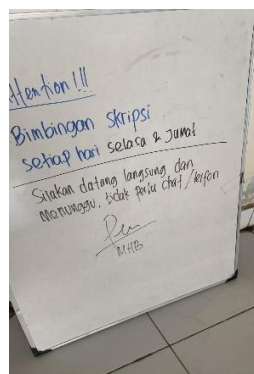


Figure 2: Setting Boundaries to Manage Temporal Pressures

This lecturer wrote clear instructions on a whiteboard for students about supervision times. He asked his students to only come on Tuesdays and Fridays, and not to text or call them outside of those times. This boundary setting may seem like a withdrawal, but was intended as a radical form of self-care (Hobart & Kneese, 2020), a reversal of temporal politics that keep lecturers constantly working and waiting in online discussions. By setting a boundary, the lecturer attempted to regain temporal control and sustain care in a more balanced way. However, to be truly radical, such tactics need to reconfigure rather than enable social relations; if they merely address the symptoms of “the biopolitical economy of time [...this instead] turns the imperilled desk worker into a renewed temporal subject better adapted to a life spent at the desk” (Sharma, 2014: 85).

Conclusion

The LMS may be a familiar technology, but by bringing networked elements to previously bounded classroom experiences, it has changed learning and teaching in important ways. The continuities of educational relationships, made visible through care ethics, have become entangled with inconsistent and competing temporalities brought together by new technological networks. New power relationships are enacted as people and things are made to wait, or are fitted in around practices that are given higher priority.

Like many places around the world, the policy in Indonesia mandated LMS use at a time when access to physical spaces was disrupted and now seeks to normalise LMS use as an integral part of Higher Education. What this paper shows is that this normalisation reconfigures both the relations of care that constitute education, and also the tempos of educational work by teachers and students. As a temporal architecture, it enables forms of surveillance that drive intensified, performative behaviours by teachers. Ironically, the technological network also creates new forms of fragmentation that need to be managed, both by making teaching fit in around other parts of students' lives and by introducing new vulnerability when the unreliable technological infrastructure fails. Consideration of chronopolitics – the micropolitics of who is expected to synchronise to other peoples' pace and rhythms – shows how these new forms of labour fall disproportionately on teachers, who in turn try to manage the situation by drawing in new actors to support them, including technicians, administrators and even children. While some teachers use boundaries as a form of self-care to manage these pressures, only time will tell whether these are sufficiently radical acts to reconfigure these new networked relations, or merely a quick fix that masks symptoms while leaving the underlying issues untouched.

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