Timescapes when everything happens all at once: Educator temporalities in an unequal crisis

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Abstract

This paper focuses on aspects of time and educators' timescapes during the Covid-19 pandemic. It contributes to a larger discussion about changing discourses and practices of temporality both during and after a crisis, especially those enabled by technology and neoliberal contexts. Situated within the unequal and diverse South African landscape where the pandemic overturned traditional educational timescapes, the paper explores the experiences of educators from different education settings - rural, urban, school, higher education and provincial education departments and considers three interrelated questions: What did educators' timescapes look like during the crisis of the pandemic? What was the role of technology in changing educators' timescapes? How were educational inequities manifest in the timescapes which emerged?

To analyse the educators' experiences of time, teaching with technology and networked learning during the pandemic, the paper draws on Adam's (1998, 2004, 2021) theorisation of time. Adam argues that time is relational and composed of irreducible elements that are not always easily visible. Experiences of how time is represented or visualised include temporality, tempo and timing, as well as the past, present and future. None of the elements of time operate in isolation; they mutually implicate one another highlighting the ways in which we perceive and interpret time in our lives and the world around us.

The paper discussion highlights the use of technology and networked learning linked to pedagogical changed routines and organisation that made educators readily available to their students when face-to-face interaction was not possible. While this was beneficial to students (and parents), this resulted in a blurring or conflation of educators' work and personal lives. Educators describe experiencing time and space as scrambled, compressed and/or porous, having to negotiate new rhythms and patterns of work that require reorganising and managing their lives differently. In addition, educators reported experiencing an intensification of time and work during this period, as they struggled with the pace and tempo of teaching and learning in varied education contexts.

In conclusion, the paper suggests that the unique historical circumstances of the pandemic created particular conditions for online learning with some of the technologies rapidly inserted into the education system during this period remaining uncritically in place, further highlighting the need for ongoing research in areas of time, technology and networked learning, especially in diverse and varied educational settings.

Keywords

Time, timescapes, temporality, technology, networked learning, South African education, Covid-19

Introduction

This paper addresses an aspect of modality which is under-researched in education both generally and particularly - that of time. Our study explores how educators' timescapes were jangled by the intense crisis caused by the Covid-19 pandemic as well as by the concomitant temporal affordances of technologies rapidly scaled into teaching environments.

The research site is South African education, where the shift online necessitated by sudden lockdowns, occurred very unequally (Parker, Morris and Hofmeyer, 2020). In higher education, better-resourced universities went online immediately, while others delayed going online by months or taught multimodally with both analogue and digital technologies. In the school sector only 11,7% of schools, mostly in urban areas, offered remote learning options during 2020, with the majority of schools opting for rotational learning where students only attended school on certain days each week (Statistics South Africa, 2022). Despite education institutions and educators' best efforts, over 1,1 million children between the ages of 5 and 18 were out of school during the 2020 academic year (Statistics South Africa, 2022). The country was not alone in this regard as the pandemic exposed global

educational and technological inequalities with at least 500 million students unable to access remote learning worldwide (UNESCO, 2020).

For many, perhaps most educators, the online pivot during the pandemic was their first exposure to networked digital technologies and their effects. But they did not experience these effects in isolation; they were simultaneously experiencing the dramatic effects of the pandemic itself. Like everyone else, educators experienced a polycrisis and were disorientated by the abrupt shattering of both their professional and their personal worlds. Using metaphors of time and space St John Mandel (2022) explains vividly how, "Pandemics don't approach like wars, with the distant thud of artillery growing louder every day and flashes of bombs on the horizon. They arrive in retrospect, essentially. It is disorientating. The pandemic is far away and then it's all around you, with seemingly no intermediate step."

Thus, educators' visceral experiences of the pandemic effectively collided with the affordances of digital technology which, inter alia, enable speed and acceleration in teaching and learning. This compression unsurprisingly put them under immense pressure. Indeed, as the forces fused, the challenges were exponential. The pandemic and insertion of digital learning in education caused a jarring of (dis)continuity and disruption which Burke and Manathunga (2020) suggest involved an "intensification of time". For educators, the discourse of "anywhere-anytime" teaching dramatically became very real as learning environments shifted from physical locations to virtual spaces.

In the decades prior to the eruption of Covid-19, networked societies had already emerged as new social structures linked to redefining the material foundations of human existence, space, and time (Castells, 2009). Although the social forms of the "space of flows" and of "timeless time" (ibid) had a dramatic social and economic impact in globalising societies from the new millennium onward, they had had little impact on deeply entrenched educational practices. There had certainly been promises of "anywhere-anytime learning" for students as new unbundled technology-mediated forms of provision emerged; these had been largely exploratory in the lifelong learning sphere outside of traditional formal education. The implications for educators were not the focus of such promises.

The pandemic, especially in the early days, overturned traditional educational timescapes. Drawing on the experiences of educators from different education settings - rural, urban, school, higher education and provincial departments- this paper addresses three interrelated questions: What did educators' timescapes look like during the crisis of the pandemic? What was the role of technology in changing educators' timescapes? How were educational inequities manifest in the timescapes which emerged? While time and space are closely linked, the focus of this paper is on time in terms of the complex, variable and altered social conditions in education during the pandemic.

South African education

Prior to the pandemic, most education institutions in South Africa were moving in some form or another towards using technology in teaching and learning. Institutions better resourced reported more extensive use of technology, while other, less well-resourced institutions, as well as those situated in rural areas where connectivity might be limited, made use of the technology available to support administrative tasks or some aspects of teaching and learning. Challenges around access to devices, the internet and data within the unequal South African education system have been relatively well documented, focusing on implementing and integrating technology in educational institutions to align with the globalised world (Czerniewicz, Agherdien, Badenhorst, et al., 2020; Czerniewicz, 2022; Dlamini and Coleman, 2017; Padayachee, 2017).

With the physical closure of educational institutions due to the pandemic in March 2020, various education institutions within the South African education context, either mandated the use of digital platforms for teaching and learning (in the case where the platforms already existed) or introduced new or additional digital platforms to facilitate the teaching and learning process. Arguably, educators were well aware that the needs and realities of students in the country differed significantly. However, most of this realisation related to physical access to devices, data and the internet.

The impact of the rapid integration of technology into teaching and learning during the pandemic has received a great deal of scholarly attention since 2020, both in South Africa and globally. However, receiving little attention has been the impact on educators' timescapes and the temporality of teaching and learning. We therefore delve into educators' temporal experiences as technological systems and practices became embedded into the diverse and differentiated educational contexts in which they taught.

Time in Education

Theorising time as an active phenomenon with its own characteristics and effects in political and social terms, Grosz (2004, p.5) states, "Time is neither fully 'present', a thing in itself, nor is it a pure abstraction, a metaphysical assumption that can be ignored in everyday practice. It cannot be viewed directly, nor can it be eliminated from pragmatic consideration. It is a kind of evanescence that appears only at those moments when we are jarred out of our immersion in its continuity, when something untimely disrupts our expectations."

Despite time playing a central role in all human lives, aspects of time in education, both in online and face-to-face teaching and learning contexts, have received little attention, especially compared to space, in the time-space axis (Barbera, Gros and Kirschner, 2015; Burke and Manathunga, 2020; Gourlay, 2014; Leaton-Gray, 2017). As noted by several authors, research has tended to focus on aspects of spatial considerations in education, and aspects of "[t]ime and the temporal … have been ignored, forgotten or subsumed" within spatialisation projects (Lingard and Thompson, 2017, p.2; Decuypere and Van den Broeck, 2020).

Human experiences of time have changed - accelerated - with the introduction of technological time. Educators now inhabit a realm of 'network time' that "colonises the university, its people and its processes" (Hasson, 2017, p.76) creating significant challenges to humans, whom Hassan suggests, are 'analogue creatures' and who now have to mediate a digital world. Similar to Adams' (1998) work on timescapes, networked time can be seen as an additional form of temporality that operates through digital connections - the smartphone, wireless computer connections, apps etc - accelerating what we do on a daily basis, where we cram more tasks into each hour and day, believing that we are becoming more efficient with our use of time.

In education, research on aspects of time concerning teaching and learning is most often discussed in relation to online or distance learning. Raddon (2007), for example, explores narratives of distance students' stories with regard to how they are situated in a socio-historical time and space as they balance and negotiate multiple roles (working, domestic, studying) in their lives. Barbera, Gros and Kirschner (2015) conducted a systematic literature analysis of articles relating to research on time in education over an 11 year period. Their research concludes that the concept of time has played almost no role as a variable in education and educational technology research, despite the recognition of students' time constraints as a significant factor for educators and students in online or distance learning institutions.

Sheail (2018a, p.462) focusing on flexible time in relation to the 'anytime anywhere' trope in online distance education, argues that "too little attention has been paid to education's time-consuming practices, often perpetuating a notion of teaching and learning … as atemporal and free from the constraints of time". Sheail argues that digital education involves "complex, multiply located and temporal negotiation", proposing the term 'transtemporality' to critically consider the various locations, times and temporalities that are interwoven in digital online learning spaces for distance and part-time students (2018b, p.67). Similarly, Bennett and Burke state that one's timescapes are not all the same and differ depending on social location/space/position; "time does not exist apart from context" (2018, p.915) requiring a more careful consideration of the 'where' (space/location) and 'when' (time/temporality) of education, especially in the online digital context. This is seen in the data presented later, where educators from varied education contexts discuss their experiences of teaching during the pandemic, as well as the multiple complexities and differentiated learning opportunities of their students given the students' context, subjectivity and positionality.

In a related study on the digital world in relation to time and space and its impact on students, Decuypere and Simons (2020) discuss what they refer to as the 'contemporary learner', who operates in new 'times and spaces' shaped by varied digital educational opportunities. This 'contemporary [digital] learner', they suggest, is faced with the opportunity to learn in different forms of time and space, ones that operate outside of linear or clock time and networked spatialities that exist beyond brick-and-mortar institutions. Linking to Castells (1997) notion of 'timeless time' and 'space of flows', the authors suggest a more fluid form of time and space, what they describe as a new digital temporality that is characterised by its accelerating nature, should be considered in relation to educational endeavours going forward.

What is notable about the discussed literature on time in education, is that most studies have focused on online or distance learning where the insertion of digital technologies in the context of teaching and learning is characterisable by its accelerating nature, that is, an increase in quantity, size, and frequency of activities within a particular time period, leading to an acceleration of the pace of learning. Also noted, is the important role that social position and context play in how digital learning is experienced. Thus, when online learning was abruptly taken up by educational institutions combined with the panic and urgency caused by the start of the pandemic lockdown, the data discussed later shows how the educators' timescapes were disrupted and accelerated in multiple and complex ways. This, in relation to the ongoing policies of social distancing, quarantining and isolation meant that for nearly two years in most educational institutions, time and space in relation to learning

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looked very different to what educators and institutions had come to expect regarding institutional learning. This left educators and their students to make sense of new and different forms of learning across different spaces and timescapes.

The study

The data for this study were gathered through four focus group discussions held in September 2021 involving nineteen full-time educators. The educators worked in a wide range of educational settings, including rural and urban schools, higher education institutions, and district offices. All participants were completing postgraduate studies and were invited to share their experiences of teaching and learning with technology during the pandemic. The questions posed to participants were intentionally open-ended to capture a diverse range of experiences across various educational contexts.

Out of the total of nineteen research participants who took part in the study, eight were high school educators teaching in rural (one educator) and urban (seven educators) school settings. Six participants were primary school educators, all working in urban school environments, with two of the primary school educators teaching in public schools that received support from private donors. Additionally, there were three participants who held positions as lecturers in higher education institutions, one participant working as a subject advisor in a rural district, and one educator who taught English online for an international company. The schools represented in the study covered a range of quintiles[1] from 1 to 5, with two of the educators teaching in private schools.

The research received ethical clearance from the university's ethics committee, and informed consent was obtained from all participants. Due to the country's level 4 pandemic conditions at the time of the research, the focus group discussions were conducted online using MS Teams. This virtual platform facilitated the participation of educators from different regions, resulting in a wealth of diverse insights into their teaching experiences during the pandemic.

Conceptual Framing

To analyse educators' teaching with technology during the first, very demanding year of the pandemic, we use Adam's framework of timescapes. Adam's framework is recognised as the most robust for understanding temporality. Adam (1998; 2004), in her theorisation of time, argues that time is relational and composed of irreducible elements that are not always easily visible. For example, clock and calendar timing is visible; however, socio-cultural time, or how time is experienced, is less visible. Understanding and researching time, therefore, "involves combining into a coherent whole the incompatible time logics that currently stress and stretch our lives and entails rendering explicit what is currently known implicitly" (Adam, 2021, p.xxi). To do this, we need to understand diverse practices and their associated timescape features interact and operate in relation to each other and "their temporal logics, which are not necessarily compatible with the logics of other work time systems"; while at the same time recognising when conflictual processes arise, how to take into account temporal needs at all levels (Adam, 2021, p.xxi).

The way time is experienced, represented, or visualised is not a linear progression of moments or a single uniform phenomenon. It exists in a complex landscape and comprises various irreducible features across different social contexts, cultures and groups, and includes time, temporality, tempo and timing, as well as the past, present and future (Adam 2004; 2021). By combining the various elements of timescapes, "*patterns* of rhythmicity, periodicity and cyclicality" show how time has been socially constructed, framed, boundaried, and externally imposed in our lives (Adam, 2008, p.8; 2021, p.xix). None of the elements of time operate in isolation; they mutually implicate one another (Adam, 2021) highlighting the ways in which we perceive and interpret time in our lives and the world around us. In the analysis below, we begin each section with an explanation of each key dimension of the conceptual framework and then provide the relevant analysis.

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[1] The quintile system was developed to redress past inequalities and provide equitable funding to all government schools in South Africa post-apartheid. Schools are divided into 5 categories based on the poverty, unemployment, literacy rate and infrastructure of the surrounding community. Quintile 1 schools, the poorest, most impoverished schools, receive the most funding; while quintile 5 schools, wealthy affluent schools, receive the least amount of state funding per learner. While the system is regarded as flawed because some schools in more affluent areas serve students who travel from less affluent areas, the quintile system provides an indicator to categorise schools according to the allocation of state funding.
https://wcedemis.westerncape.gov.za/wced/findaschool.html

Analysis

Temporality

Temporality refers to how time within a system is lived and experienced by individuals as a process of change (Adam, 2021, p.xix). It includes the processual, changing and cyclical aspects of life, such as growth, decay, living and ageing, and so forth. Sharma defines the temporal aspect of time as "lived time … structured in specific political and economic contexts" (2014, p. 9). Temporality highlights how time is created in our social interactions; how we live, use and know time. As part of a timescape, temporality of social life does not operate in isolation. It includes cultural practices, technologies and commodities, policies, plans, and how we protect or boundary our time in relation to external systems, people, systems, institutions and ideologies of time, highlighting that "we are time, that we embody and have of time encoded within us … we live, use, know and create time in interaction" (Adam, 2021, p. xx).

During the pandemic, patterns of rhythmicity (Adam, 2008) which structured educators' time no longer flowed as expected when the regularity and cyclic nature of educational schedules ceased, quite dramatically, to shape teaching habits with the onset of emergency remote teaching. The modalities literally changed overnight. P1, a high school teacher at a private school described her experience as: "*If I look back in March 2020 … on the 19th of March we had like an emergency meeting on this is how you use Teams and then our next meeting was on Teams. So it escalated very quickly.*"

The 'normal' processual aspects of educational life shifted immediately but this was not a once-only event. They continued to shift repeatedly requiring educators to negotiate continual unstable temporalities. A lecturer at a public Technical and Vocational Education Training (TVET) college explained: "*How we deliver content is normally through the normal classroom setup. We normally have a class, we have a projector, we have a whiteboard and normally you would give the learners' handouts as part of teaching instrument. But during the pandemic we had to adapt most of the time … We had to use WA most of the time as means of technological teaching methods.*" Similarly, a teacher at a public, economically diverse high school states succinctly, "*It was quite chaotic compared to a normal school day*".

The decision to change modalities of teaching was thrust upon educators, who were left to make their own plans, with little 'procedural participation'. An educator in a public primary school that receives private funding noted: "*…it was completely forced - you didn't have a choice … we went from face-to-face … into lockdown, we suddenly had to think of going online, but there was no strategic planning done for it. It just knocked everybody – like, find a way to continue teaching and learning.*"

Some educators attempted to manage anxiety by consciously replicating conventional face-to-face temporal schedules online using social media tools (in this case, Facebook). An educator who teaches at a (different) public school that receives private funding described how her school made use of these tools: "*We created a group and uploaded files, PDF files and word documents onto Facebook … sent the learners out their timetable … and posted the lesson or the questions … so we had a timetable and like a normal school routine, we even had breaks.*" Educators also noted that using technology changed how students engage with learning processes. An educator points out: "What's nice … is that when we record the lesson, the learners can go back to the lesson and then use that for revision purposes." An educator who is the director of a Science, Technology, Engineering, Art, and Math (STEAM) Innovation Center at a private school, added that technology can help to manage unpredictability by providing dual modalities: "Our kids who are in isolation that can't come to school, they'll still attend online while we busy teaching in the classroom. … Kids who for example are feeling sick or kids who maybe had some kind of injury, etc, they'll be attending online and so even after COVID kids who are not able to come to school, maybe an operation, they will still attend online."

Tempo

Tempo, a central feature of all time processes, refers to speed and intensity. Tempo is "system-specific, variable and contextually unique" (Adam, 2021, p.xx). In the capitalist world, time is a commodity, thus in society in general, tempo equates clock time with money, as tempo considers how much activity can take place in a given timeframe. The affordances of technology which enable speed, therefore, pertain to tempo, as does the lack of access to technology. In addition to describing the speed, pace and intensity at which activities take place, also important is what happens when there is a change in tempo or a clash of tempi among those involved in activities. Thus, power relations are relevant to tempo in terms of both human and non-human agents.

Tempo is relevant to institutions as well as to systems. During the early days of the pandemic, at the institutional level, tempo was erratic and uneven. While the closure of the physical institutions for a period of time brought about an abrupt change to the academic year, subsequent part opening or remote learning of institutions was *ad*

hoc and on-the-fly, inevitably impacting the regularity and tempo of teaching and learning, and educators' ability to prepare.

Institutions with pre-existing online structures were able to move more seamlessly to different forms of teaching and learning, while others made use of whatever was available to continue teaching. This impacted the pace and tempo of learning as the pandemic forced education institutions to rearrange their academic calendars while at the same time being sensitive to students' home circumstances. These differences in tempo were echoed at the beginning of the 2021 academic year when a Department of Education district official, explained the contrast in educators' experiences of curriculum backlogs: "*When I started visiting schools this year, I tried to establish what was the backlog. But when I talked to the schools, the affluent schools they would tell me no, we don't have a backlog ... we were teaching - teaching continued. We used Google Classroom. We used MS Teams ... teaching continued. So, the challenge was with the other schools was they had huge backlogs.*"

At the micro level, within classrooms, because of inequitable access to resources in the student body, educators also had to manage several tempos simultaneously using different technologies to do so. A teacher describes the pressure of doing so: "*,..we need to be sensitive about what's happening in everyone's family.... some children are very advantaged. They are there every day they have someone to help them and other kids I'm racing through the course like a quick crash course just to get marks to be able to pass. So, my colleagues and I are struggling ... I mean, it's just you don't know where to touch, and where to go because it's so fast changing the fast pace of people being [tested] positive, going into quarantine, now this child needs to be uploaded on Google Classroom, while that one wants WhatsApp and that one wants a hard copy.*"

An educator notes that while online teaching and learning assisted educators in staying in touch with the learning of the students, it did not necessarily mean that the tempo of teaching and learning during the pandemic was able to align with institutional calendars and curriculum expectations. Included in this challenge was knowing what learning was taking place and whether the students were keeping pace with the curriculum requirements: "*With the whole online teaching at the beginning of the pandemic, the biggest risk for us was the academics of learners, because some of them really struggle in class already and we struggled to keep them up to date. And obviously with COVID they spend a lot more time at home and a lot of our learners come from bad backgrounds.*" This observation points to the role of home environments in supporting - or not supporting - the required pace of learning.

It is also of interest how, as things became more settled, newly introduced technologies now set the tempo of educational activities: "*... to upload tasks, the classwork and videos, and then each morning we have Google meets. So that's for the morning - like announcements and everything. So that is what we do daily. All our announcements and everything is on, like a platform, and about two years ago we didn't - everything was handwritten and then we started switching over, which is great.*"

The role of platforms in setting teaching tempos became a feature of reorganised timescapes.

Timing

Timing, as a feature of timescapes, highlights the interactions that take place between individuals and collectives within daily routines and schedules of social life (Adam, 2021, p.xx). It articulates how the different elements of life synchronise and are compatible with the social, political, economic, religious and socio-technical context in which individual lives are situated. It includes the choices one makes and the control one has over what needs to be done in which timeframe within one's routine or schedule. To organise and manage life, timing is required to synchronise, integrate and create boundaries between various aspects of one's work and personal life. Relevant too is the speed of change which most often relates to aspects of technology (Adam, 2008).

For the educators, one of the most challenging facets of changes in timing during the pandemic related to what they described as the changed boundaries regarding what was acceptable times for students and parents to contact them. With the significant changes in the clock timing of when teaching and learning took place - which moved for many to 'any time any place' during the pandemic - communication structures between students, parents and educators seemed to assume the same form. A teacher at a public primary school sums it up: "*My private life and my school life ... there is no line anymore*". Another teacher elaborates: "*It's like there isn't a boundary anymore because we are now linked with WA and email and all of these things and so in that sense, it's very difficult and you can't really switch off because you know everyone has access to you all the time.*"

Some educators were intentional about not giving parents access to their personal numbers; however, other forms of technology granted them access as explained: "*We don't give them (parents) our cell phone numbers and we don't have to have WA groups because it's your personal device, but then they message you via MS Teams from their child's account. They can see that you're online because of your little display thing shows that you're online if your Teams is open but you're not actually there, but they message you ... So that's quite frustrating.*"

Educators describe feeling that everyone having permanent access to them online during the pandemic as an invasion of privacy and indeed a form of cyberbullying: "*The other thing that was of concern for us as teachers*

was cyberbullying. And not necessarily on the kids, but as the teachers, because now we are on a platform where parents can reach us basically 24/7 ... you are basically putting teachers on a 24/7 call system. Because now parents are not even respecting the fact that you know at 2 o'clock school closes - this is cut off time. But, yet at 6, 7, 8, 9, 10 in the evening I'm still receiving work messages requesting me to attend to certain things".

It was not only parents and institutional management who expected a continuous connection, but students too: "And also students demanding time. Let's say on a Saturday evening … they have access to your phone … So they just call you, 'ma'am, can you quickly respond? Then on the Monday, you are asked why you didn't respond to that phone call. They called on a Saturday at 6 pm. Now I have to explain why I couldn't answer that phone call … So I feel like for them to have so much access to us, is invading our privacy and our time or our space and having to just move away from work, because it's weekend we need to shift away from work … those are the things that I noticed from using the Internet and teaching using the technology." While all educators experienced this invasion of their private time (even at night), those with more access to resources were able to respond strategically: "Our numbers are available now on the WA groups, and most of the teachers are complaining parents inundate them with calls and messages throughout the night. That was the biggest risk that we now experience. We had to get other phones for private use."

As with all aspects of educator experiences, timing dislocations were experienced differently according to social and economic contexts.

Past-present-future

Adam contends that human beings and their life worlds are "uniquely located in a past-present-future continuum" (2004; 2008; 2021, p.xx). She refers to this aspect of time as temporal modalities, noting that human beings embody our past and present and "live, imagine, design and make futures on a daily basis" (Adam, 2021, p.xx). On this continuum, we remember and anticipate, and both the past and future act as a guide to orientate how we live life with purpose and motivation, expectation, hope and trepidation. Embedded in socio-natural environments, people are both past and future-oriented, pirouetting and swivelling with skill and ease in this vast extension of their respective presents (Adam, 2021, p.xx). Humans, therefore, make choices in relation to past experiences and the future by considering risks, changes and possibilities of success. Futures are created within the present, despite the future being unknowable. We make decisions with a vision of what we want for the future. For example, in the realm of social science, we work towards a vision of a good society or quality education and then suggest strategies that focus on change towards this ideal.

Within the focus group discussions, the participants made constant reference to what they considered had been 'normal' in the past, while trying to make some sense of the present that, at the time of the interviews, was still situated in pandemic conditions, while at the same time tentatively mentioning the future. Because the 2020/21 teaching year for educators was dominated by aspects of technology to mediate education in various forms during the pandemic, it is unsurprising that most of their future-related comments focused on the role that technology had played and a consideration of what this meant in the future in education.

Educators believed that the use of technology for teaching would continue. Educator P17, who teaches at a school that made a significant move towards the entrenching of technology in teaching and learning, moving from FB and WA to the establishment of a Moodle platform, emphasised: "*I definitely think learning online will continue*". This view is confirmed by a lecturer at a TVET college who also felt that going forward technology and online learning would play a prominent role in education: "*I think there is no turning back from online. Well, its online education or online learning - we are going forward. There is no turning back. For me this is my first time of being online when I have classes ... I have always done face-to-face learning, but this year it was my first time of being in Zoom meetings and Teams so it means that this is our future.*" Another educator adds an interesting observation about how this will happen: "*I think the private sector is most likely going to step in. They're going to see education as a booming industry for them and learning would definitely continue and grow online.*"

Educators expressed mixed feelings about future teaching environments mediated by technology. On the one hand, they saw positive aspects. A teacher at a government primary school explained how various digital tools had been brought in: "*So the technology aspect has now been incorporated into the ... school - that was actually a plus point [of the pandemic] for us.*" While a teacher at a private school suggests that moving educator development course online has had advantages: "*I think there is the big advantage ... it has given us access to people around the world. I've been able to attend courses and seminars and webinars and stuff like that, from different presenters literally all around the world which previously you've had to pay thousands of rands to go there and to listen to the speakers.*"

Others are more sceptical about the role technology will play. A teacher at a school that introduced Moodle as a LMS during the pandemic questioned what the institutional management in her context wanted to achieve with the use of technology going forward: "*I remember when they wanted to introduce Moodle for us. Nobody explained to us why we needed to use Moodle or how we're going to use Moodle or what you want me to do with*

Moodle ... is this a way of you controlling what we are doing, or is this you watching us what we do? Or is this spying on us to see whether we are doing our work? ... Are you spying on me to see whether I'm actually teaching? You don't believe us?"

Educators also spoke about how using technology going forward can save time and money. A teacher who teaches at a public high school that serves a poor community which in the past had been used to host additional lessons on a Saturday in certain subject areas for students from other schools, described how they have moved to doing online tutoring so both teachers and students do not have to physically travel to the school for classes: "*The virtual tutoring, I think will carry on because now they will save time and money ... now you're doing it [tutoring] from home*". The educators also pointed out that saving time meant saving money for management and for themselves. Administratively, they were sure online would continue: "*I think all our subject meetings they'll [Education Department] definitely keep on doing online because it saves time not having to drive around and all the things that go with that. All our moderation is also now online, so it saves time.*" They felt that this would happen at all levels of the education system: "*Normally in the past we used to have physical [face-to-face] training ... Now management changed that to have virtual training. So in the past we would have spent a whole weekend at some place where they have to pay for our accommodation, pay for the food and all of that, now they want to have it virtually. So definitely ... It will continue virtual meetings, virtual classrooms and all of this will definitely continue because most institutions feel that it is cheaper. Even at the universities, where we are studying at the moment, ... the lecturer said 'I'm comfortable with these virtual classes that we have at the moment, so I won't have any physical contact with you guys'. So ... it's working out for them too, so it will definitely continue, it won't stop.*"

Pedagogically, they pointed out that new apps enabled students to do more within allocated times. Referring to a particular app, a teacher pointed out: "*... [it has] math activities ... mini quizzes.... the learners ... can do as much activities as they possibly can and then it marks itself so the teachers can just load the data from that.*" Also, class time can be more effectively time utilised with learners working on educational apps both in school and out of school: "*So whenever a teacher is absent and didn't leave work for a learner ... we give learners tablets. ... Every learner has their own login details, so they do the Learning app and they do extra maths when the teacher is not there and during the holidays and at home for extra work. ... [and] our principal gives a prize for the learner who accesses or spends the most time on the [educational] app.*"

Negotiating time in the present and the future are thus changed by apps on platforms.

Concluding Discussion

"Time keeps everything from happening all at once" is a well-known aphorism. The early days of the Covid-19 pandemic were a rare historical moment when time's conventional parameters and logic in education were scrambled. Everything did happen all at once, and for the educators who took part in the focus group discussions, time during the pandemic was also experienced unevenly in contextually and differentiated ways. The use of technology and networked learning linked to pedagogical changed routines and the organisation of how and when teaching and learning took place, made educators readily available to their students when face-to-face interaction was not possible. While this was beneficial to students (and parents), this also resulted in a blurring or conflation of educators' work and personal lives. Educators describe experiencing time and space as scrambled, compressed and/or porous, having to negotiate new rhythms and patterns of work that require reorganising and managing their entire lives differently. Educators reported experiencing an intensification of time and work during this period, as they struggled with the pace and tempo of teaching and learning in varied education contexts.

The pandemic also opened the doors to the discourse of flexible learning, with possibilities of hyflex forms of delivery becoming part of mainstream options and an opening up of blended learning possibilities going forward (Bennett and Burke, 2018; Fielding, 2016; Houlden and Veletsianos, 2021). While this discourse existed before the online pivot as an approach to free students from the constraints of time, pace and place in their learning, the promise of flexible learning is not sensitive to all involved in the process (Parker, Morris and Hofmeyer, 2020; Soudien, Reddy and Harvey, 2022). For educators during the pandemic, this discourse carried the threat of 'all the time' and 'everywhere' (Williamson, Eynon and Potter, 2020). Undoubtedly, all educators' routines and lives were disrupted with negligible time to renegotiate the terms and conditions under which teaching with digital technologies would take place. But for some educators the pressure on their time was even worse; for those teaching in challenging environments - both their own, and their students - the pressure to do it all while finding extra time for the most needy, was particularly extreme. Educators were at the heart of the educational crisis and were often the ones to negotiate solutions to digital and related divides.

Educators were the ones who were most aware of the inequities of digital literacy, internet access, erratic/ no connectivity, and a myriad of other complexities of teaching and learning online for institutions, educators and students. This in turn meant that it was the more advantaged students and educators with fewer barriers who were

(and will be) likely to reap the benefits of more flexible delivery. This is ironic given that such forms of education could provide real options for students who currently spend a large amount of time and money on travelling to access the education they desire and deserve. The pandemic polycrisis also shone a piercing light on the implications for resource constrained educators and their own time.

While the pandemic created particular conditions for online learning, some of the technologies rapidly inserted into the system during this time period have remained uncritically in place in numerous educational contexts going forward. As are other scholars (for example, Cañares and van Schalkwyk, 2022; Facer and Selwyn 2021), we are concerned about the use of technology as a promised neutral future-orientated solution, a generic remedy for so many context-specific educational challenges. In particular, our research has highlighted the negative consequences for educators' personal timescapes as well as for the teaching project itself.

At the time of the dramatic temporal changes during the pandemic, there was a strong belief that 'things would never go back to the way they were before'. This paper shows that there were indeed significant and real changes. However, this study, of course, tells only a partial story. Even though the focus groups were diverse in several ways- location (rural/urban), type of institution (public, private, public-private) and level (primary school, high school, college, university), level of poverty where the institution is located (as measured by quintiles) - it is of note that the more vocal voices were from educators from the better-resourced institutions where technology was available in some form. For many, the crises of poverty that deepened during the lockdowns - such as school lunches no longer being available to students for whom that was the only meal of the day and students learning at homes and in communities where there was minimal to no adult support - trumped all other considerations.

Nevertheless, this partial story, situated in pandemic conditions, contributes to a larger one about changing discourses and practices of temporality both during and after a crisis, especially those enabled by technology and neoliberal contexts. Aspects of these changed temporalities which infiltrated teaching and learning practices will remain well into the future, while others will return to what had been the norm. Of these changes, some may be advantageous to educators, and many seem likely to be detrimental. Which will remain and whose interests will be served, only time will tell.

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