Teachers and Teaching
theory and practice

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/ctat20

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To cite this article: Louise Gwenneth Phillips, Melissa Cain, Jenny Ritchie, Chris Campbell, Susan Davis, Cynthia Brock, Geraldine Burke, Kathryn Coleman & Esther Joosa (2021): Surveying and resonating with teacher concerns during COVID-19 pandemic, Teachers and Teaching, DOI: 10.1080/13540602.2021.1982691

To link to this article: https://doi.org/10.1080/13540602.2021.1982691

TEACHERS AND TEACHING
https://doi.org/10.1080/13540602.2021.1982691

Routledge
Taylor & Francis Group

Surveying and resonating with teacher concerns during COVID-19 pandemic

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ABSTRACT

The COVID-19 pandemic jolted teachers to the front line of complex, under resourced negotiation of quality distance learning, whilst also being key communicators with students and families about how to be COVID safe. Media reports debated preschool and school closures and child safety, but scarcely considered teachers. Motivated by the silencing of teachers and extraordinary changes to education, we gathered as a group of nine educational researchers located in Australia, New Zealand, Singapore and U.S.A to create a survey platform for teachers' lived experiences of the impact of COVID-19. Our survey asked 22 questions and attracted 624 responses. This article focuses on question 12: What are the issues you are struggling with and need support with? Drawing from Latour's provocation we distil key 'matters of concern' from the data, illustrated by excerpts from teacher responses and echoed by the authors' COVID lived experiences as interwoven blackout poetry. Our collated experiences highlight struggles with online learning, connectivity/communication with students and families, quality of teaching, and workload, and the need to value and invest in education and the professionalism of teachers to address these struggles.

ARTICLE HISTORY
Received 2 February 2021
Accepted 25 August 2021

On the 11 March 2020, the World Health Organisation characterised the COVID-19 virus spread as a pandemic (WHO, 2020). To reduce the spread of the virus many national governments issued directives enforcing university, college, school and early childhood settings closures, or restricting grouping and social distancing practices whilst they remain open. Teachers across all sectors significantly reconfigured their teaching and practices at very short notice. The pandemic changed how millions across the world were being educated (Tam & El-Azar, 2020), with teachers on the front line 'rapidly mobilising and innovating to facilitate quality distance learning for students in

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confinement, with or without the use of digital technologies' (International Task Force on Teachers for Education 2030, 2020) and being key communicators about how the virus spreads and how to keep safe and supported. Media reports debated preschool and school closures and child safety, but scarcely considered teachers.

Motivated by the silencing of teachers and extraordinary changes to education, Author 1 put the following call out on Facebook and emailed to international collaborators on March 25th:

- Calling all educational researchers
- I've been thinking a lot about how we can be useful during COVID-19 times and reading a lot on Facebook about schools being closed in same nations and not in others and then we have our Higher Ed teaching & learning changes with much going online. So how about we develop a study on Teaching & Learning in COVID-19 times—collate case studies from around the world that we can get out quickly through public domains so there is sharing & broadening of approaches. I recognise we won't have access to visit schools to do ethnographic work, so we could create a survey and invite teachers to write/ document their lived experiences. Who's in? reply here or by email

Kathryn Coleman, Esther Joosa, Susan Davis, Chris Campbell, Melissa Cain, Geraldine Burke, Jenny Ritchie and Cynthia Brock responded to the call. We are all teachers and educational researchers, located in Australia, New Zealand, Singapore and the U.S.A. We saw a need as educational researchers to document the impact on teaching and learning: to gather the lived experiences of rapid pedagogical change, innovation, novel partnerships, and enhanced questions of access and equity.

From the significant wealth of data the resulting survey generated, this article reports on some of the key concerns of 'matters of concern' expressed by teachers across multiple sectors and sites. Snapshots of experience presented as 'black out poetry' are shared by the authors, who are all teachers as well as researchers. These experiences as well as significant concerns raised by teachers within survey responses are presented and highlight the ongoing need to value and invest in education and the professionalism of teachers.

Methodology

Our team of nine collectively developed a 22 question qualitative survey to gather teacher voiced experiences of teaching and learning during the COVID-19 pandemic.

We chose qualitative survey-based methodology to enable widespread access during COVID-19 restrictions. The survey consisted of questions which invited in-depth responses as to how teachers were making sense of the COVID-19 impacts upon teaching and learning practices, and how their understandings influenced their practices (Maxwell, 2009). Drawing from a long tradition of narrative-based methods being employed to understand teachers' lived experiences, we sought to create a platform to hear teacher voices and stories about their work and their lives (Elbaz-Luwisch, 2007). We designed our survey with open-ended questions aligning more with the style of an

interview, offering prompts for participants to share their stories as to how they were navigating the changed teaching and learning context. Respondents could choose to respond to whichever questions motivated them.

The survey included six demographic questions and 16 open-ended questions on how COVID-19 has impacted teaching, student learning and wellbeing (see Table 1).

Created on Qualtrics, the survey link was distributed through education networks in early childhood education, schooling, higher education, inclusive education, literacy education and arts education that the research team members had association with.

Table 1. Teaching and learning in COVID-19 times survey questions.

Demographic Data
1. In which country do you teach? In which state do you teach?
2. What is your teaching context:
Early Childhood Education Settings (e.g., preschool, kindergarten, childcare)
Primary School
Secondary School/ High School
Tertiary Education
Other _____
3. Teaching Qualifications:
Diploma
Degree
Post-grad
Research Degree (PhD, Ed D)
4. How long have you been teaching?
5. A. What is your specialisation?
B. If you are a discipline specific teacher, please select teaching area–
Visual Arts
Performing Arts
Language & Literacy
Mathematics
Science
Humanities & Social Sciences
6. What age bracket are you in?
20–29
30–39
40–49
50–59
60–69
70—
Impact of COVID-19 questions
7. How has COVID-19 impacted your teaching & learning?
8. What is different about your delivery?
9. How has the children's/students' learning been affected?
10. How are you addressing diverse learning needs and approaches, cultural relevance and cultural responsiveness in the altered practices to teaching and learning?
11. What are children/students' questions and concerns and how do you address them?
12. What are the issues you are struggling with and need support with?
13. If you have moved your teaching online what platform/s are you using?
14. If you are teaching online what have you changed in regards to your teaching to support students?
15. What are the strategies that your students are using to study online?
16. Who and what are your key knowledge sources for teaching remotely?
17. What new partnerships have you formed to deliver teaching and learning?
18. What innovations have you forged or experimented with?
19. Please share a story of a successful teaching & learning encounter. Include a unique url (e.g., dropbox page, Instagram page) with max. of 5 images of artefacts as relevant. Please make sure images have no identifying features (e.g., no people, no local signs)
20. What have you learnt about yourself and your teaching?
21. What helps you get through each day?
22. What do you think your students have learnt broadly about these changes (such as about humanity, about themselves as learners)?

The distribution therefore was predominantly within Australia, New Zealand, Singapore and the USA, applying purposive sampling to collect a diverse array of teaching experiences in varying contexts. Participating teachers were also asked to pass the survey onto other teachers they knew who may be interested, to increase respondents through snowball sampling (Goodman, 2011). Ethical clearance was obtained through James Cook University's Human Research Ethics Committee. Survey responses were stored in a secure Qualtrics account on an Australian server following Australian Government requirements.

The survey opened on the 4 May 2020 and remained open for the rest of 2020, despite the original intention of having it be open for two to three months. With phases of lockdowns and school closures varying across nations, we decided to keep the survey open to capture different points of time in probably the most dramatic interruption to education since World War II.

Matters of concern

We see this pandemic as a time to attend to matters of concern, as Bruno Latour (2004) proposed in *Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern.*

Latour (2004) challenges sociologists to move beyond critique (questioning representation) to acknowledge matters of concern, proposing that there can be three positions: fact, fairy (fantasy, imagined) and fair. He asks, what if critique could offer possibilities for 'generating more ideas than we have received, inheriting from a prestigious critical tradition but not letting it die away, or "dropping into quiescence" like a piano no longer struck' (p. 248). We are not solely seeking facts, nor to questioning perspectives, nor seeking to represent, but to offer an account of what is a 'fair' critique from the perspective of a group of teachers and students.

The matter of concern that we attend to is the lived experiences of teachers during the COVID-19 pandemic in 2020. This is the gathering, 'an issue very much in there' (p. 233), to which we draw readers' attention. Our qualitative survey created a 'gathering' where matters of concern pertaining to education could be documented.

To realists, who want 'facts'/ statistics, we argue that a generous sharing of rich storied accounts of the grit of the lived realities of teachers provides a much deeper insight into what is going on in education during the one of the most widespread global pandemics in human history. We are asking the classic ethnographic question: 'what is going on here?' (Spradley, 1980, p. 73). Though we could not do ethnographic observations of the teaching and learning sites, we have relied on the generosity of teachers sharing their descriptions, their words that invite the imagining of context. As Latour (2004) queries:

> Why can't we ever counteract the claim of realists that only a fare of matters of fact can satisfy their appetite and that matters of concern are much like nouvelle cuisine—nice to look at but not fit for voracious appetites? (p. 237)

We, in particular, ask readers to listen, hold, consider and act upon teachers' responses to our survey question 12—What are the issues you are struggling with and need support with? Just as Latour (2004) invites critics with 'Yes, please, touch them, explain

them, deploy them.' so we can move beyond iconoclasm, and in this context, the ongoing public slander of teachers (e.g., Duffy, 2020) and the devaluing of educational institutions (e.g., Scott, 2010).

Key matters of concern: what are the issues you are struggling with and need support with?

When we closed the survey at the end of 2020, 624 teachers from across the world (mainly from Australia, New Zealand, Singapore and the U.S.A) had responded.The majority form primary education, followed by secondary, tertiary, other, then early childhood (See Figure 1). Interestingly, 43.5% of respondents had more than 21 year s teaching experience (See Figure 2). In answer to this particular question regarding the issues with which they were struggling, they had contributed a total of 19,843 words. On entering these words into Voyant Tools (an open-source data visualisation software) we first utilised the tool 'TermsBerry' which combines 'the power of visualizing high frequency terms with the utility of exploring how those same terms co-occur' in proximity with one another (Voyant Tools, n.d.). 'Students' was mentioned 328 times, followed by 'online' (159); 'learning' (146); time (144); and 'work' (137). The words in the outer ring of the TermsBerry shown in Figure One below were mentioned approximately 20 times. The larger the circle and centrality within the cluster indicates a higher

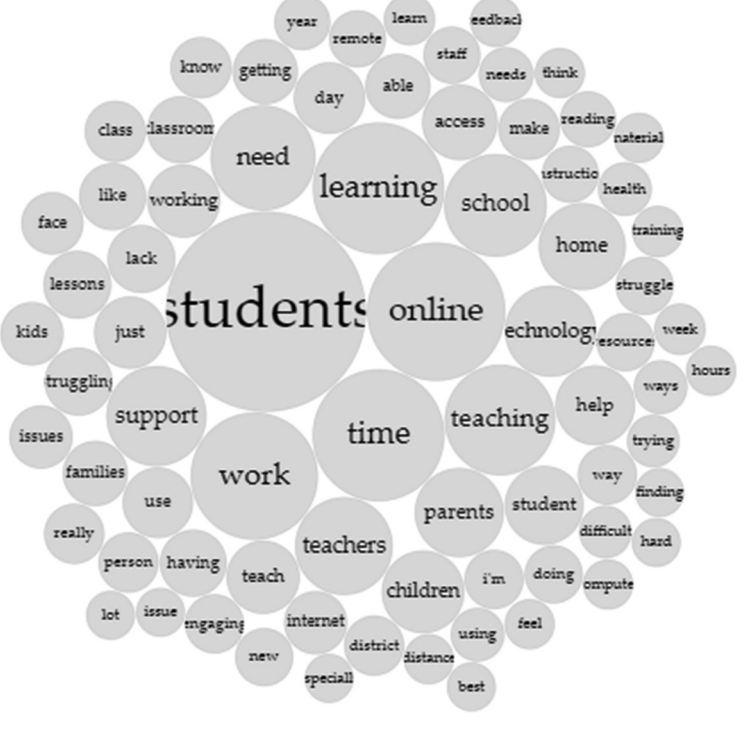

Figure 1. Voyant TermsBerry of 624 teacher responses to question 12.

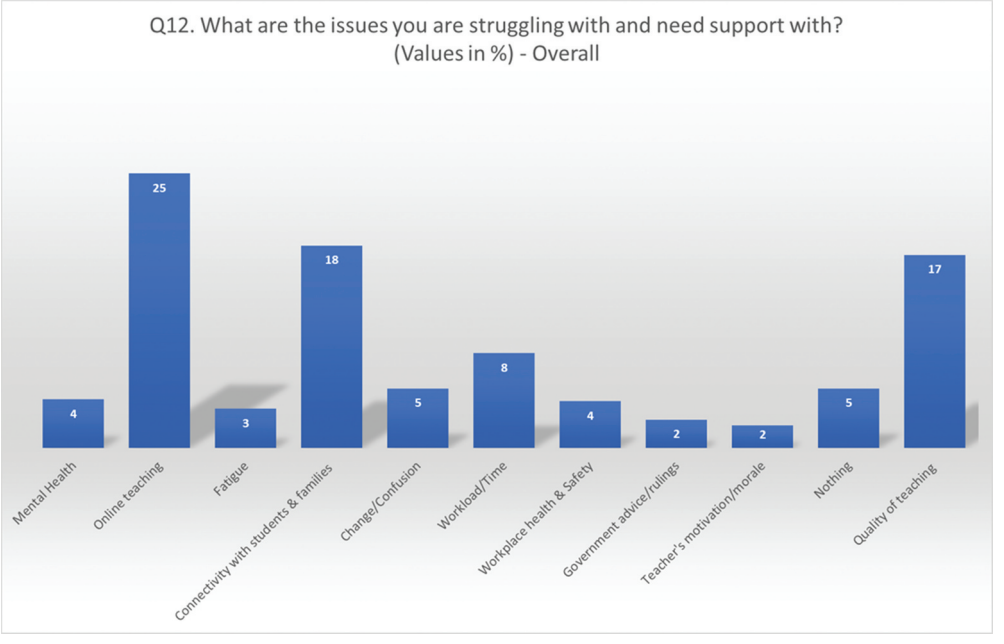

Figure 2. Bar graph of frequency percentages of what teachers struggled with across data set from all nations.

frequency of mentions (online the voyant tool is interactive, so that when you hover over a term the number of mentions appear along with highlighting correlating words in data).

Figure 2 reveals that students were the main focus for teachers who took our survey. The frequency of 'online' is also understandable as it has been widely publicised that education contexts with available internet shifted to online pedagogies to reduce social transmission of COVID-19. Furthermore, facilitating learning is the core purpose of teaching, therefore a major concern and challenge for teachers was to ensure that students were actually 'learning', despite the pedagogical shift to the online circumstances. 'Time' and 'work', the next most frequently occurring words, speak to the increase in workload and additional time required to create, maintain and facilitate remote learning. Use of the Voyant correlations tool clarifies how 'time' is referred to with other terms, which include 'preparation' (most frequent) 'don't', 'properly', 'extra'. 'Work' correlated most with 'hours' then 'weekend' and 'unrecognised'. These Voyant tools enabled an instant overview of visual patterns in the data. To understand at a deeper level what teachers struggled with, the qualitative data was read for patterns of repeated struggles. The following were identified as recurring struggles: quality of teaching/pedagogy; workload; online teaching; mental health; government advice; change/confusion; connectivity with students and families; fatigue; motivation/ morale; and health.

The 624 responses were then sorted under each of the identified struggles. Below is a graph of the percentages of these struggles across the entire data set.

The following sections will discuss the four most mentioned struggles: online teaching; connectivity/communication with students and families; quality of teaching; and workload/time. We open and close each section with black~~ed~~ out[1] poetry crafted from each author/researcher's story of teaching in COVID-19. Voices of our lived realities woven with surveyed teachers are offered as a mechanism to echo the resonance of these struggles between researchers and participants. Each of these four struggles are illustrated with discussion of excerpts from the survey data that captured the range of across the nations, and contextualised with media, other studies and policy documents.

Online teaching

Chris (central teaching unit academic at Australian university)

lockdown in March,
move everyone online
support space
to set up and lead a university-wide daily drop in session for academics
facilitate online workshops each week to support staff.
very time consuming to prepare and conduct

In reading and coding the data for patterns of issues of concern, online teaching was the most frequently mentioned issue across the whole data set, and by U.S.A and Singapore teachers, and third by Australian teachers and equal third by New Zealand teachers (along with 'nothing'). Teachers shared constant struggles with the limitations of connectivity/access, and reliability of digital technology. Some examples are as follows:

> Often students would not have enough bandwidth to support everyone in the household being online. They would be on and off or their audio wouldn't work. (USA)

'Connectivity is appalling preventing online learning in regional areas of the state.' (Australia)

> No one has universal access to devices and/or connectivity. There is no "silver bullet" for remote learning. (Australia)

> Some of our families didn't have internet or enough data to connect. (New Zealand)

> The students who had no device have some catching up to do. (New Zealand)

According to the latest National Center for Education Statistics (US Department of Education, 2020), only 85.4% of USA households have internet access, with variations across states, from 77.7% in Mississippi to 90.1% in Washington. Internet access varies significantly across Australia, from 77% of households in remote areas to 88% in metropolitan areas (Australian Bureau of Statistics, 2018). Despite 30 major community organisations appealing to Australian Government for support for the 2.5 million households without internet access, at the start of the pandemic in March 2020 (Hunter, 2020), little occurred to address the gap. Access to internet and technology disproportionately affects Aboriginal Australians, Torres Strait Islanders and Māori in New Zealand. In some remote Aboriginal communities as few as 2% have internet access (Makwana,

2020). These low access rates are due to reduced internet coverage in their home area and inability to afford internet coverage and digital devices. In one survey of 217 senior students in New Zealand 'more than 50% of whānau [families] only had an internet-enabled phone in the household that tamariki [children] were trying to use for their remote learning' (Ngāti Whātua Ōrākei and Koi Tū: The Centre for Informed Futures, 2020). As a small island state, Singapore enables internet access to 98% of households (Infocomm Media Development Authority, 2020), though poor families are still disadvantaged due to inability to afford devices and internet coverage. As the emphasis on online teaching and learning continues globally, the inequitable issues of access need addressing to urgently attend to the accelerating widening digital divide.

Many teachers expressed their struggles with online teaching as being inadequately prepared and informed, requiring a need for more training and support in implementing effective online teaching.

> We were provided very little training - we had one week to prepare for the change and it was primarily with how to use Zoom. (USA)

> I was actually overwhelmed by the tsunami of advice and offers of online resources and tools - too much and un-curated so it wasn't helpful at all (New Zealand)

> Need help with technology as a non-tech savvy person. Have had to do a lot of things 'alone' where there used to be help. Teaching has become much more complicated online. (Singapore)

Teachers were suddenly expected to be digital learning designers and facilitators regardless of their previous expertise or experience. These results have been echoed in surveys of teachers in Austria, Germany and Switzerland (Huber & Helm, 2020), China (Zhang et al., 2020) and South Africa (Czierniewicz, 2020) (to name a sample), all pointing to the inequity of delivery capacity and resources.

Another concern with online learning is regarding what many teachers see as the limitations to this modality for learning. Many teachers are drawn to the profession for the live kinaesthetic spark of joyous productive learning, and so struggled with the reduced relationality online teaching provided.

> I've taught for 50+ years but had no idea how to make online teaching as effective as my face-to-face teaching . . . it's not about "computer programs" as much as it is about how to provide interaction and collaboration opportunities within online teaching. (USA)

> I didn't realise how much I use body language in the classroom to monitor students' progress as they are working, so I found it difficult and to me consuming to monitor depth of understanding - it was easier to look at completion rather than actual understanding. (New Zealand)

> Eye to eye teaching where body language communicates in a way that online teaching can't do. Relationships are developed and it is easy to see who is struggling and who is not at a glance. (New Zealand)

> IT tools cannot fully support a larger class . . . not everyone is able to speak at one time. Due to lack of eye contact and body gesture. (Singapore)

Online teaching and learning engages primarily with two senses (vision and hearing) and a restricted window into a student's world during co-present experiences. Teachers across the world have repeatedly expressed frustration with this limitation, especially early childhood and performing arts teachers who are trained in embodied teaching learning. The following struggle speaks further to this felt reduced connection with students and families.

Esther (Independent Researcher, Singapore):

deformed reality.
magnified the reliance on digital technology and the need to ask more profound questions
The omnipresence of technological advances revealed new oppressors and challenges.
Technical connectivity opened doors for me to enter global dialogue.
new directions and shared ideas
bridge the many dichotomies across multiple geographical, educational, cultural contexts.

Connectivity with students & families

Jenny (early childhood education academic at a New Zealand University):

staring at and talking to my laptop screen
students' plea for connection

Online sharing of a video of a waiata [song sung in te reo Māori, the Māori language] isn't the same as a face-to-face class standing and singing together.

The most mentioned struggle by New Zealand teachers, second most by U.S.A teachers, third most by Singapore teachers, and equal fifth (with change/confusion) most mentioned in Australia was connectivity with students and families. Emergency remote learning spawned a disconnect with many students and families, who had little or no internet access when this by far was the default mode for teaching and learning during school closures across Australia, New Zealand, Singapore and USA.

> Many of our families are struggling financially, some have lost jobs. We have set up a pātaka - donations of food to give to our families. We also really struggle with digital access and are trying to find ways through this. We also have some families whose children have still not returned to school- we are working on this currently. (New Zealand)

> Kids who are dealing with challenging home lives, lack of parental involvement, students who are food and home insecure, students who do not have access to technology and/or reliable Internet, how to support students whose parents/family members have contacted COVID and are really sick, how to reach students and families who will not return my emails or phone calls. The list goes on … (USA)

> Connection—Some kids connected regularly, while some NEVER logged on and interacted. (USA)

> as Indigenous Connections person … I contacted all 60 students to ensure they had the technology that was required. This was exhausting and frustrating as many families could not access the survey on our school communication platform (Compass) … the school could not quickly provide enough devices or the family could not follow up by collecting the device or settle to school work. I have enabled some welfare for some families but it could be a very big job. (Australia)

The desperate pleas from teachers to address this sense of widening disadvantage are palpable; these pleas illustrate teachers' roles at the frontline of this pandemic.

While teachers had great concern for their students they felt conflicted by the ways their pedagogical praxis was restricted. Concurring with other studies, such as the Watermeyer et al.'s (2020) research of COVID-19 impact on UK universities the move to online teaching and learning generated feelings that pedagogy had been reduced to 'the fulfilment of rudimentary technical functions' (p. 9). Rose (2017) emphasises, that our decisions as educators should not merely be about enhancing how and what to teach by using 'clever presence-enhancing techniques and strategies' (p. 23), but must be about overcoming the challenges to facilitating and maintaining caring relationships with students. Emphasis on relationships and relational pedagogy has also been foregrounded by educational theorists and researchers in recent times, countering the hegemony of performance data driven agendas (e.g., see Bingham & Sidorkin, 2004).

Teachers in our study also highlighted the limited social connection online teaching enables with their students, and that the engagement that was possible did not provide the same rich relational nature of face-to-face teaching.

> Not being able to connect with all my students, and the lack of the natural relational aspect of face-to-face learning. (New Zealand)

> I struggle with how to connect with students through the virtual format. It is difficult to keep the attention of a Kindergartener for more than 20 minutes. We had class meetings once a week that were synchronous. After 20 minutes, they were exhausted and so was I. I am unsure how that online learning can be effective for this age. (USA)

> I just want to see my students in person again. (USA)

> The students need in person support to succeed. They are going to have six months or more of interrupted schooling. (USA)

> I struggle to have the same warm, rich, engaged relationship with students online. (USA)

Relationships with families were also affected.

> Parental emotional states and expectations - they have to cope with working from home and minding their child(ren). Emotions can run high and some parents vent it out on teachers, forgetting that teachers are also working and having their own family issues to settle too. (Singapore)

Teachers struggled to attend to highly demanding parents and enable communication with difficult to reach parents/guardians. The 'lost' students, those that teachers were unable to reach for months, were a major concern to many teachers with this plea often noted.

> How to reconnect with the children after missing lessons for up to two months (Singapore)

> I am struggling with being shut in. I am losing some students who won't answer communication requests and don't have supportive parents. (Australia)

> I need support for those students that are not engaging. How do I reach them? (Australia)

Teachers were acutely aware of enhanced disconnection with students, with the disconnection markedly affecting some students more than others.

Kathryn (an arts-based educational researcher)

the urge to capture, archive, curate and collect
with my students and colleagues.
renewed connection to Country and site,
new collaboratives and cooperatives with others to activate.
varying stages of 'lockdown'.
a new, needed resilient community of art and design educators.
an ecology of digital spaces and times to be

Quality of teaching/ pedagogy

Melissa (Arts and inclusive education academic at Australian University):

you can get pretty close to the same quality experience using digital technologies, but there is something about being in the same physical space that can't be gained online.
I missed my students. The sensitive conversations and quirky jokes.
teaching and learning is visual, aural, kinesthetic and tactual.
a whole-body experience.

Most teachers are very committed to providing quality education for their students. Concern for reduced capacity to provide quality education was the most frequently mentioned struggle by Australian teachers, second most by Singapore teachers, third most by U.S.A teachers, fourth most by teachers from the collective group of other nations, and sixth by New Zealand teachers. Teachers reported that the quality of their teaching was compromised due to reduction in contact hours and teaching staff (in many education contexts casual staff were cut due to reduced income (e.g., see Harris et al., 2020) as well as inequitable internet access.

> Institutional requirement to teach the same amount and quality of content in shorter contact hours and with fewer teaching staff. Also students not having equitable access to online environments. (Australia)

Overlapping with points made earlier, most teachers specifically wrote how the quality of teaching was impacted by online learning due to the loss collaborative learning, embodied, emplaced, multi-sensorial learning

> The issue of parity is concerning as the students simply cannot meet some critical outcomes of the course, namely collaborative learning (Australia)

> many physical education lessons that require contact sports have to be replaced. Some lessons with group engagement and project works have to be called off for lower levels as they are not advanced enough in technology to carry forward meetings online. (Singapore)

> I need help learning how to connect the class community through online learning and how to develop engaging lessons that don't require students to spend all day every day on the computer. (USA)

> How to make synchronous learning more motivating as I use a multi-sensory approach to reading and it is difficult doing this through a computer (USA).

Emphasis was most often placed on the limitations of online learning, as it was directly compared to the live classroom experience from which teachers and students had suddenly departed. It is also worth noting that 58% of respondents had over ten years teaching experience, with the default experience being face-to-face with some online teaching incorporated. The online screen only provides in most uses a window to a talking head. Teachers are trained to assess whole bodies in relation to social and physical environments. The isolated talking head only provides the teacher with a small percentage of the in place embodied data they were used to reading and responding to for teaching in the moment. With minimal observation data, teachers also reported struggling with identifying ways to meaningful differentiate to meet learners' diverse needs.

> Differentiation especially for students that struggle as learners with academic content and focus. Also students that do not live in homes that are easily adaptable to remote learning. (USA)

Barriers to access that exist for students with disabilities were also noted by teachers to have been further aggravated when learning is facilitated online, including barriers that haven't been experienced previously. A Global Education Monitoring (2020) suggests that 'for children with even mild learning difficulties, such as attention deficit disorders, finding the self-motivation to work independently in front of a computer is a major challenge', and that 'losing the daily routine that school provides adds a significant layer of difficulty for learners with disabilities who are sensitive to change, such as those with autism spectrum disorder' (para 3). Socioemotional support can be a significant factor in the development of children with disabilities, thus not being in daily contact with their peers, classroom teacher nor access to advisory visiting teachers during COVID-19 restrictions has had a significant impact. Challenges in accessing and receiving adjustments are underscored by teachers not having the experience or skills to design online learning that is 'truly accessible to students with a wide range of disabilities' (Chugani & Houtrow, 2020, p. 1722). The swift change to online learning has impacted all students and teachers, but it is clear as Houtrow et al. (2020) suggest, 'we are all weathering the storm together, but we are not all in the same boat' (p. 415).

Some teachers also pointed to a struggle with facilitating real world learning.

> I want to make the content relevant to the real-world because teaching online as we were in the classroom no longer made sense. (USA)

We imagine many teachers and students questioned what is real, and how to make sense of the world, as they experienced the social distancing, isolation, physical and mental illness of the pandemic. The worlds (by this we mean not just planet earth, but also individuals' life worlds) as teachers and students knew have dramatically changed and teachers are genuinely concerned about how to provide their commitment to quality education amidst new world orders (e.g., see Jones, 2020).

Geraldine (arts academic at Australian University):

challenges and provocations tug everyday teaching and learning.
adjusted, reimagined and re-designed pedagogical approaches
hauled up by *@home* restrictions
shift across a/synchronous/flexible/restricted and face-to-face learning,

ethics of care and the forging of a creative community of practice sing out,
presence through absence with each other.
art-making and responding, our *@home* activities call on 'make-do' creativity
building intersections through art, community and our environment
excited and exhausted.

Workload

Louise (early childhood education academic at Singapore campus of Australian University):

instructed to reduce sessional budget by a half
teaching workload quadrupled
health and wellbeing crumble.

In reading and coding the data for patterns of issues of concern, workload was the second most frequently mentioned issue that teachers struggled with in Australia, and the third most mentioned issue in the collective other nations (including U.K, Canada, Sweden, Fiji, Japan, Nigeria), fourth in New Zealand (equal with change/confusion), and fifth in U.S.A. Correlated with 'work', the matter of concern of 'time' as the third and fourth most frequent words draw attention to workload. Many exclaimed with succinct comments such as: 'The workload has been huge!!'

Some Australian teachers listed the competing workload demands:

> most of my weekend is spent preparing, marking, giving feedback, uploading videos and lessons . . . I forget how to talk about anything else with people I know who aren't teachers. I struggle to sleep at night for thinking

> It is very time consuming. Although I am getting paid for 3 days of work, I need to work 5 days in order to prepare the online lessons, make sure students are supported, email students, and make the videos.

> I am finding I am working almost non-stop through the day into the evening without feeling I have 'done everything'.

And then on top of suffering what became untenable workloads, teachers also reported that their efforts were not publicly recognised and in fact often shamed (e.g., see Wilkinson & MacDonald, 2020).

> Parents are emailing constantly looking for extra support in delivering content, the media and the court of public opinion are attacking teachers as lazy and selfish while they work all day to produce resources, supervise essential worker's children, respond to parent and student emails, mark student work AND manage their own families through this crisis. The mental health load is far, far higher than usual.

Many pointed to insufficient time to create suitable interactive online materials.

> they are expecting teachers to use all their time to make it work; however, that then leaves no time for teachers to prep good lessons, to read through and evaluate and comment on student work, and to breathe. We will be working more than two jobs, plus doing split shifts, and we will break. (Canada)

> Time—It actually takes MORE time to teach online than in person, and it never "turns off". I have students who would message me even as late as 10:00 pm at night, so I felt I never had any time to enjoy my family. (USA)

The compounded effect was that some teachers questioned if they could continue teaching as the workload was unsustainable.

> Going through this - I was tested for Covid, not feeling safe, and then seeing teachers belittled in the media, has made me come to the realisation that I don't want to teach anymore. (Australia)

As education academics, our workloads also escalated to unsustainable levels (as noted in our interspersed blackout poetry of our lived encounters of COVID-19), so we readily resonated with workload struggles as foregrounded in our early public piece on the study 'Exhausted beyond Measure' published online in The Conversation (Phillips & Cain, 2020). Workload was also impacted and will continue to be in the future as many teachers lost their jobs due to institutional budget cuts from reduced income, especially in the higher education realm (e.g., see Friedman, 2020).

Sue (arts education academic, Australian University):

for the students,
the complexity of their lives magnifies – some are juggling full-time work,
full-time study, and now overseeing their children's at home learning as well.
some have job offers waiting if only they can finish this last course
For them I am positive, professional, supportive and encouraging.
swept along by forces and arcs of history and humanity,
Our university called it early, our campus will close, redundancy is on offer.
I teach my last class ever

Necessary future actions for equitable education for all

What question 12 of this survey study has told us about matters of concern for teaching and learning in COVID-19, is that society needs to demonstratively value education, both in attitude and resourcing. There are some signs of COVID-19 being a catalyst for changing attitudes to education, such as Australian journalist David Penberthy's (2020) declaration that 'one of the most derided professions in this country has historically been teaching' and that homebased learning was nudging a 'national rethink when it comes to the perception of teachers'. One positive move in societal attitudes to education and teaching that COVID-19 provoked is that as families engaged in home-based learning, they came to understand further the role of the teacher (e.g., see Muir et al., 2020).

Cindy (literacy chair at U.S.A University):

Some districts and schools are merely trying to stay afloat
educational lives severely disrupted,
curriculum developed for an online venue at home.
family members participate with children
online language and culture materials;
entire families benefit

The teachers in our survey told us that additional resourcing is required in:

- equitable access to online learning,
- teacher training and professional development in online learning (not just in how to use, but how to design quality differentiated education with the online tools), and
- staffing (to undertake the additional design and resource creation work required, and support student and families relational work within workloads).

Although COVID response and recovery efforts are focusing largely on medical intervention and economic recovery, governments also need to significantly increase and refine investment in education. 'Given the high risks of increased disparities, marginalized students must be a high priority in COVID-19 education response strategies' (Azevedo et al., 2020). The countries participating in this study are on global scales higher socio-economic and well resourced but investment in education is variable. For example, the Australian government spent 1.8% of GDP in 2019–2020 on education (Parliament of Australia, 2019), this is significantly less than the world average in 2017 of 4.529% (The World Bank, 2020), New Zealand 6.3% in 2017, Singapore 2.9% in 2013, U.S.A 5% (last available data for each) (The World Bank, 2020). In September 2020, UNESCO (2020) forecasted that there is a US$148 billion annual financing gap in low- and lower-middle-income countries to achieve the United Nations Sustainable Development Goal 4 of inclusive and equitable quality education for all by 2030. And that is a conservative estimate which does not consider the unknown futures of this decade.

What our findings indicate is that teachers experienced key matters of concern as they responded to changes to teaching required because of the COVID pandemic. They worked hard, were challenged, but were also resilient and resourceful. Education can certainly be 'reimagined' (e.g., see United Nations, 2020) and it will have to be as the impact of challenges such as COVID 19 continue. However, as many policy documents recommend fair and just resourcing is necessary, and more consideration of teachers and teaching is required of COVID response and recovery planning, along with respectful recognition of the teaching profession and teachers' essential societal contribution.

Note

1. Drawing from black-out poetry technique, we have masked our initial storied lived realities to reduce the content to be more condensed, intense and germane.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the Griffith University; James Cook University, Singapore.

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