

Paradigms lost and gained: Stakeholder experiences of crisis distance learning during the Covid-19 pandemic

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ABSTRACT

The physical distancing requirements designed to slow the contagion of COVID-19 instigated sweeping changes to the education sector. School closures in 193 countries (OECD, 2020) brought significant disruption to education and to the lives of children, parents, and teachers. This study explored the experiences of school stakeholders during this period of crisis distance learning (DL). The perspectives of participants in six discrete focus groups of pupils, parents, and teachers at a private school in Dubai, United Arab Emirates, were subject to thematic analysis. Researchers identified three key themes, including 'a need for stakeholder support', 'curriculum delivery implications', and 'educational outcomes of crisis distance learning'. Conclusions and recommendations will be of interest to researchers, teachers, school leaders, and teacher education providers.

KEYWORDS

Distance learning, digital education, COVID-19 pandemic, student engagement, stakeholder experiences

INTRODUCTION

Concomitant with the wide-reaching health and economic impacts of COVID-19, the education sector, from primary to tertiary, was significantly disrupted. Most governments worldwide mandated school closures in an attempt to stop or stem the spread of the virus (OECD, 2020). Whether this strategy reduced virus transmission is contested (Auger et al., 2020; Esposito & Principi, 2000; Viner et al., 2020), and the impact of school closures on student outcomes remains to be seen (Golberstein et al., 2020; OECD, 2020). Although schools closed, education provision continued, facilitated through a rapid transition to distance learning (DL) and unprecedented use of technology by teachers and students.

DL and student engagement

The concept of DL is not new; it has evolved over several centuries (Harting & Erthal, 2005; Sumner, 2000). Much of the DL literature focusses on the tertiary sector and mature students' choice to learn through this medium. Even though the use of various DL technologies had grown exponentially before the COVID-19 pandemic, traditional (face-to-face) educational institutions remained the usual site of learning in primary and secondary education. Technology was typically used as an adjunct learning support rather than as a medium for teaching in itself (**Correia et al.**, **2020; Hol & Aydin, 2020**). In this form, it has played a supportive role in facilitating learning. Meta-analyses show a positive, albeit modest, impact of such technology usage on learning effectiveness (Chauhan, 2017; Cheung & Slavin, 2013), and some subject areas (**mathematics**, **science and technology, and language**) are more suitable for this type of teaching (Chauhan, 2017). How online education may support students to learn has been examined at length. A large-

scale meta-analysis found that technology-enhanced learning environments are successful through boosting student motivation **for science** (Nikou & Economides, 2016). Though this may be the case for technologies used in face-to-face teaching, it is not necessarily applicable to online courses where engagement is typically lower (Bernard & Amundsen, 2008; Bullen, 2007). Student engagement in DL is also well-researched (Henrie et al., 2015; Imlawi et al., 2015; Schwarz & Zhu, 2015). Engagement can be defined as participation, commitment, investment, or effortful involvement in learning (Henrie et al., 2015; Reschly & Christenson, 2012). An advantage of online learning highlighted by Luo and Yang (2016) is that it permits learners to engage with materials in a way they choose and at a time they want. This means that they may study alone; DL is, by definition, characterized by physical separation **and lacking the physical classroom environment's opportunities for social connection.**

Connections: The role of the teacher

Alongside the autonomy inherent in DL, maintaining a social connection is crucial in the learner's satisfaction and perceived learning (Gray & DiLoreto, 2016; Richardson et al., 2017). Contact with classmates and teachers, and synchronous communication can mitigate the aforementioned reduced engagement in DL courses (McBain et al., 2016). Sumner (2000) proposed that "technology has always had an intimate relationship with distance education because it mediates the separation between teacher and learner" (p.271). As in the traditional classroom environment, the onus is mainly on the DL teacher to maintain student engagement. Encouraging student curiosity, enhancing teachers' social presence, and fostering a sense of belonging are highlighted as predictors of engagement in the online classroom by Jeffrey et al. (2014). Alongside this,

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Bridgstock (2013) suggests that teachers should be familiar with different types of software and use various platforms to this effect. Thus, the demands on the DL teacher are arguably more than in face-to-face education. Their preparedness for, and their attitude towards, DL is an issue of prime importance.

Teacher experience

Buy-in to the concept of learning through technology is vital, so whether teachers embrace technology may be a deciding factor in its success (Wen, 2016). The speed with which the transition to DL occurred in the 2020 pandemic meant that few teachers had time to consider the practical implications of this medium of teaching, much less be convinced by its merits. Some educators view DL negatively, citing lower educational quality and the challenges of lengthy preparation time (Graham & Jones, 2011; Porter & Tiahrt, 2016). Even as technological advancements create seemingly streamlined ways to deliver taught content in distance-learning environments, teacher resistance remains. Trust and Whalen (2020) report that 61% of K-12 teachers sampled in the early stage of the emergency distance transition felt overwhelmed by the vast array of potential online learning resources and tools. Forty-five per cent of academic leaders believe that it takes more faculty time and effort to teach online (Allen & Seaman, 2013). Indeed, this report tracking ten years of online education found this belief to be more evident in leaders with greater exposure to online teaching. With the vast number of DL technologies offered in order to simplify courses (e.g., lecture-capture software, video tools, academic integrity tools, web-based sharing and collaboration tools), instructors may have technology overload (Allan, 2009; Karr-Wisniewski & Lu, 2010; Lee et al., 2016).

Teachers' ability to interact with students differs in an online setting. Traditional face to face teaching provides more direct verbal and non-verbal cues, many of which are not visible online (Kozar, 2016). Teachers may feel confident in their classroom-based teaching abilities; they may be less so when educating in an online environment (Archambault & Crippen, 2009; Sato & Chen, 2019). Nonetheless, there are opportunities to be gained in the shift to online learning in that teachers can innovate their practice (Burke & Dempsey, 2020; Doucet et al., 2020). For example, educational strategies can move from teacher/ subject matter-centred to student activity-centred (Rapanta et al., 2020). The judicious adoption of educational technology is at the heart of this matter (Teräs et al., 2020). However, it should not be assumed that all students are equally equipped to use technology effectively.

Impact on children: Practical and emotional considerations

The learner's ability to comfortably use technology is also fundamental, and independent learning is a beneficial online education outcome (Coyner & McCann, 2004). However, Henderson, Selwyn, and Ashton (2017) discuss the gap between the potential and the reality of digital technology in education. The utility of Prensky's (2001) oft-cited term 'digital native' has been questioned (Akçayır et al., 2016; Bennett et al., 2008). Helsper and Eynon (2013) argue that uncritical use of such nomenclature is unhelpful, citing differences in how, why, and where young people use technology (e.g., for entertainment and communication rather than for educational purposes), suggesting that some are more adept at using technology than their peers. Younger children benefit from synchronous delivery of classes (Hodges et al., 2020). Synchronous learning

has dual advantages of structure and social connection- both of which are impacted in a shift to distance education.

Teachers have an influential role in fostering social connections (Doucet et al., 2020), which can be built into the curriculum (Lowenthal et al., 2020; Zhu et al., 2020). Parents, too, are fundamental in supporting children's learning in a DL environment. Helsper and Eynon (2013) state a need to understand the relationship between children's use of ICT and family learning- i.e., how parents can support their children in using digital devices to assist learning. Curtis and Werth (2015) suggest that "parents should be available to monitor, mentor, and motivate students" (p. 163). In the emergency DL of the Covid-19 pandemic, the need to help with their child's learning posed significant challenges to many parents (Cluver et al., 2020). Indeed, questions regarding 'how much parental help is helpful' have been posed by teachers attempting to gauge subject comprehension (Doucet et al., 2020). Pandemic-enforced DL meant that many parents and teachers struggled to provide the 'right' amount of support (Rasmitadila et al., 2020; Dong et al., 2020; Kim & Asbury, 2020; Parczewska, 2020; Reich et al., 2020). There is also a need to explore how families (parents, children) and teachers navigate 'blurred boundaries' at this time of educational disruption (Richmond et al., 2020). Kim and Asbury (2020) suggest benefit from triangulating teachers' realities of DL with those of students.

Rationale and aims of the study

Before the COVID-19 pandemic, digital technology was embedded in the human condition, in social and personal spheres, industry, and education. However, in a short time-span, how schools

employed technologies changed rapidly. Many of the world's education systems went from 'bricks and mortar' establishments to a nearly exclusively DL format. From the outside, it appeared that educational delivery seamlessly transitioned through school stakeholder mass-mobilization. This educational transition was unprecedented, and there is, as yet, a dearth of information on how stakeholders (students, teachers, and parents) adjusted to this seismic shift. Thus, our study aimed to explore the perceptions of these three key stakeholder groups qualitatively. In late May and early June 2020, Middlesex University Dubai partnered with a private school in Dubai, UAE, to conduct a series of focus groups with purposively-selected students, teachers, and parents, from primary and secondary groupings. This forum provided these key stakeholders with an opportunity to share their thoughts. **The main research question was, 'how do key stakeholders describe their experiences of transitioning to distance learning?**

METHODS

Design and Participants

This study utilized an exploratory, qualitative approach. Participants were stakeholders (teachers, students, and parents) at a private school in Dubai, UAE. The school has primary and secondary school streams with approximately 120 teachers, teaching 1,400 pupils ranging in age from 4 to 18. Stakeholder groups from both primary and secondary schools were represented in this study. Permission to conduct the research was granted by school management, and the university ethics committee granted research approval. The study comprised six focus groups (n = 31) held in late May and early June 2020. All groups comprised five purposively selected participants, except for the secondary school teacher group, which had six participants. Focus group members were

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selected based on their ability and willingness to provide rich data about their DL transition experiences. Only one participant in the teacher groups was male. All members of the parent focus groups were female. The student groups had gender parity. None of the teachers had previous online teaching experience, and all had taught at the school for at least one academic year.

Materials

The research team developed the discussion groups' topics based upon their academic literature review and subsequent critical discussion with peers. Questions varied between the focus groups; they focused on stakeholder transition to distance learning across practical, physical, and psychological aspects. Example items from the two student focus groups included "*How do you feel about learning from home*?" Teacher focus groups included discussion points such as "*Please share your experiences of transitioning to online teaching*." The parent focus groups included questions such as "*Please discuss your thoughts on distance learning continuing into the next academic year*."

Data collection

Researchers piloted one focus group (with all stakeholder groups represented) in advance of data collection **to gain participant feedback on the questions/topics for discussion**. None of the participants in the pilot study participated in the later data collection process. This pilot study proved invaluable, as it highlighted a need to revise and rephrase the topics and questions, especially for the primary student group. For example, instead of asking, "To what extent do you feel connected to your friends whilst in the distance learning environment?" the

facilitator asked, "How do you keep in touch with friends since you started learning from home?" Due to physical distancing requirements at the time of data collection, the research team conducted all focus groups online using video conferencing software. Two members of the research team facilitated all six focus groups. Informed consent was obtained from all adult participants in the teacher and parent groups. Parental informed consent and student assent were obtained for child participants. The teacher, parent, and secondary student focus groups were approximately 45 minutes in duration. The primary student group, designed to be shorter due to the participants' age, lasted 30 minutes.

Analysis

The focus groups were held online using video conferencing software which provided automatic transcription. Researchers audited these verbatim transcripts for accuracy against the audio files. All data were analyzed through a six-stage recursive process of reflexive thematic analysis (Braun & Clarke, 2006). Two research team members (MB and LH) conducted data analysis, engaging first in data familiarization. Following this, the researchers coded the entire dataset, and these codes were then used to identify emergent themes from the data. Initial themes and subthemes were reviewed and defined and, after this process, three overarching themes remained.

Reflexivity

At the time of interviewing, participants were approximately two months into lockdown and online learning. The researchers involved in this study are all educators with first-hand experience of the transition to distance learning. Accordingly, we had our assumptions regarding the aspects of DL

that would be valued most by students (e.g., synchronous learning, communication with teachers and peers) and those that would pose potential difficulties (e.g., navigating the new technological landscape). Additionally, one of the research team had been supporting their children's home learning. While these factors gave us greater understanding and an opportunity to build rapport with participants, we were mindful that our subjectivity could influence our data collection and, indeed, our analysis of data. Because of this, we kept a detailed paper trail, documenting any decisions relating to analysis. We had frequent research team discussions to ensure that the participants' voices, and not our own, came to the fore.

RESULTS AND DISCUSSION

Data analysis led to the development of three distinct overarching themes representing stakeholder experiences of crisis distance education during the pandemic. These are illustrated in Table 1 and are discussed below.

Table 1.

Identified themes and subthemes

Overarching themes	Subthemes
Curriculum delivery implications	<i>Time to reflect: bringing the curriculum online</i>
	À la carte learning
A need for stakeholder support	Teacher and student training
	Supporting parents to support learning
Educational outcomes of crisis distance	Learning lost
learning	Skills gained
Curriculum delivery implications	

Curriculum delivery implications

As observed by all stakeholder groups, the online timetable and class structure differed in several aspects from that of the physical classroom. One central theme evident in the data related to curriculum delivery, with teachers, students, and parents discussing various ways they adapted, and had adapted to, the new DL environment.

Time to reflect: bringing the curriculum online

Given the speed with which the school pivoted to a DL model, teachers had little time to augment the curriculum. However, at the time of data collection, two months into DL provision, they were able to reflect on what worked well and on what did not. There was a belief among

some teachers (and other stakeholders) that the traditional curriculum could not be transplanted wholesale into the 'crisis distance education' setting.

I don't think the syllabus can be taken, then replicated online, and effectively administered, online. I think there needs to be a rethink of how certain subjects are taught. For example, how maths is taught versus how science is taught versus, you know, how is music and drama taught. (Secondary parent)

I've had to rethink how you would plan a curriculum that students can only do with limited material, without you physically there, unable to put a pencil on their hand. And sometimes that's a good thing, actually. It just means using technology in different ways. When you are demonstrating work, giving students feedback... we have the technology to do that digitally. So I think if you're tech-minded, it's a little bit easier, and if not, then it's just a learning curve. (Secondary teacher)

Some teachers and students looked to the future of distance teaching and learning:

I think that the curriculum needs to be revised slightly. If not taking things out, just focusing on key skills. Every child in the world is going to be in the same position when we go back in September. I think that would take off pressure off parents. It would take pressure off teachers, and it would just create those foundations that these kids need to continue their education. (Primary teacher) Page 13 of 46

If I was in charge of online learning, I would honestly look at the syllabus. If this is our new normal, it would have to change because fitting what was our everyday life to something completely different - it's like putting two wrong pieces of the puzzle together. It won't work in the long run. (Secondary student)

This has happened, and it was all very reactive, and we didn't even expect distance learning to continue for longer than a few weeks. But if we're looking at doing this in the long term, I think that the wider system honestly needs to be rethought from both an academic and a well-being point of view. I think that should be aiming for quality education over quantity. (Secondary teacher)

This echoes the suggestion of Hoffman (2018), who proposed a need to 'push against' the traditional view of the online platform as needing to replicate face-to-face teaching. Teachers recognized the challenges faced by parents and children in the crisis; they did not expect that students would learn the same way online as they did in school. Moreover, they were willing to relinquish their tried and tested classroom practices to operate in the new DL environment. This approach was valued by parents, who were grateful to school management and the teaching staff for the rapid and relatively smooth transition to online learning.

I'm really happy with the way they brought home learning to this point. Now, obviously, I think there's some areas they can improve on. Maybe more live lessons, or more one-on-one support, or small groups, different levels. (Primary parent)

There were some learning curves at the beginning and to try and get everybody up to speed on the IT, but once they dialled in after two weeks, it went very well. It's a very positive experience. (Secondary parent)

I personally think within the short notice what schools do get up to, they have done a decent job and I cannot complain. (Secondary parent)

Other researchers found similar parental appreciation for teachers' efforts during the DL period (Asbury & Kim, 2020; Bubb & Jones, 2020). The parents in the current study acknowledged the school's challenges in offering an entirely new learning provision in such a short timeframe.

À la carte learning

The rapid shift to online learning impacted some school subjects more than others. An interesting theme that emerged was how parents mooted the idea of an 'à la carte' timetable. Some classes (live instruction) and subjects were prioritized above others. Non-core subjects (e.g., art, physical education) were regarded as more expendable by parents who were now responsible for overseeing their children's tuition. One aspect of DL in which they took control was the learning schedule. Unsurprisingly, this was evident among the primary school participants, as younger children needed greater parental support in engaging with learning:

It was fine, actually. I made an agreement with the school to manage my time, because I work long hours each day, and I didn't want the e-learning to stress me more than I am stressed anyway from work. I said I'm not going to support anything with non-core subjects.

My kids will be focusing on mathematics, English, and science. [The teacher] was absolutely fine. She said 'yes, let them focus on this'. (Primary parent)

My suggestion would be to use the timetable as a guide. My child didn't fare well - quarter to 8 to quarter to 9, you've got maths. First thing in the morning, you've gotta have your maths head on. There were times he didn't want to or he just wasn't there with it. So we've been using the timetable as a guide, and by the end of the day, we have ticked everything that we've had to do. (Primary parent)

A primary student also commented on the need for selective learning, saying "I guess we should focus more about the core subjects. So we need to have our brains switched off on something else and switched on, on math, English, and science." Minimizing the number of subjects/ classes allowed students to engage more with the live sessions and core subjects. Adaptability was vital to the successful management of home learning. Similarly, Moss et al. (2020) noted that teachers prioritized focus on core skills.

The practicalities of supporting children through DL were challenging to parents. Some parents augmented their daily schedule to suit their preferences and to what worked best for their family:

I followed the timetable to a tee until I realised I'm going to have myself demented by doing this. I need to relax. So I gave him the option of 'right, we've got these topics to do today. So, what are we going to do first? The only things we have to stop for are the live sessions, and I can't change those, but these are your topics. You choose'. (Primary parent) I find it very difficult because secondary and primary have got different blinking lunchtimes! So for the time that I'm cooking lunch for [my older child], I'm supposed to be helping [my younger child] with their school work. So it just didn't work. It was like crazy! (Primary Parent)

A more relaxed approach to the timetable appeared to benefit parents' psychological well-being in the current study; this echoes earlier findings by Wang (2020) concerning pandemic DL, and earlier, by Lois (2006). Garbe et al. (2020) suggest a need for educational flexibility to prioritize parental mental health during DL. The acceptance of DL 'personalization' and the need to rethink how to deliver quality education in the current circumstances illustrated parents and teachers' pragmatism. These findings are in line with Doucet et al.'s (2020) call to put 'Maslow before Bloom' and accept that children's emotional and safety needs take priority.

A need for stakeholder support

Evident from interviews with teachers, students, and parents was a perceived need for stakeholder support. These differed between participant groups. For teachers and students, these instrumental supports related to the use of software and the DL platforms. Teachers also recognized a need for parents to be supported in managing their child's DL.

Teacher and student training

The perceived need for various forms of training emerged across all stakeholder groups to varying degrees. All teachers were pedagogically capable within the physical classroom. However, they identified a need to upskill competencies in DL and educational technology. Teachers had to quickly become conversant with a range of online teaching tools without formal training.

If e-learning will continue, a couple of the teachers from each year should go and be certified in digital learning. The school needs to support the teachers with digital information. (Primary parent)

We had no training on this. We've had no... we've not been able to watch the perfect lesson. The perfect digital lesson from anybody, So we really have nothing to go on. We have no idea what we're doing. And which is a lot of pressure. (Primary teacher)

Concern over the lack of training was not solely focused on teachers. Some participants' felt that even ostensibly technologically-literate students needed extra guidance.

We take for granted that students can do stuff. You show them, right? Even though I've shared my screen and I'm taking it step by step there's always someone who says, 'where's the work request?'. So, I do think the students need some technological training in e-learning platforms we are using so they're not getting stressed out. (Primary teacher)

I think we should have question time at the end, because sometimes we don't. Everyone doesn't get their question answered and then they don't know exactly what to do. (Primary student)

We don't know about things in advance. And then, it just impacts everything. Everyone's getting messages quick and fast so things can be missed. Students haven't had proper training on the platforms that we use. (Secondary teacher)

I realize a lot of us are very new to using our devices the way we do now, and so a lot of us have struggles getting things uploaded and getting onto the call, passwords and signing in. So a lot of us can feel a little overwhelmed sometimes. (Secondary student)

Trust and Whalen (2020) noted that teachers can be overwhelmed with the range of technologies on offer and that a lack of preparation to use these tools can lead to barriers to effective instruction and can increase teacher stress. König et al. (2020) reported that early career teachers who, according to Prensky (2001), are 'digital natives' can struggle with the use of technology for this purpose. Drane et al. (2020) also question the extent to which students interact with educational technologies, suggesting that many lack the skills and confidence to use these tools effectively.

Supporting parents to support learning

Along with a perceived need for teacher and student training was a belief (exclusively communicated by primary teachers) that some parents required guidance in their support of DL. Specific forms of parental 'helping' were viewed as problematic. It is important to note that

although teachers pointed this out, they appreciated that parents were trying to best support their child's learning.

Adults helping them in tasks is something that you can tell. Certain children wouldn't be able to answer all the challenge questions, for example, for math correctly. And you kinda feel like you can't support them, because of that reason, because parents will be completing a task for him. (Primary teacher)

I'm not sure about the old ones, but there's the parents sitting with [younger children], just off-screen. We find that the parents are giving a lot of answers, which is great in some ways. But then, we need to see what children can apply completely independently and without that constant adult input that they wouldn't be getting in the classroom. We see the children are not having enough time to apply independently what we're teaching, And we need to see how they can complete that without the adult miming them the correct answer across the screen. (Primary teacher)

They're not able to make mistakes and see where they've gone wrong. Because, like we said previously, the parents are whispering the answer over the top of the screen and showing them the answer, how to do it. (Primary teacher)

Primary teachers highlighted this concern, but it was also mentioned by one primary student, who stated, "It is unfair for some kids to do the work while some other kids, their parents do their work." Parents reported changed perceptions of what was required in their new role, admittedly over-helping their children in the early days of the DL transition. Similar findings of reduced student independence in DL during the pandemic have emerged (Bubb & Jones, 2020). Parents may benefit from guidance on what is expected of them in supporting their child's education (Doucet et al., 2020). Some parents remarked that they are not qualified teachers. As a result, they may not be aware that providing their child with additional 'help' is counterproductive. The belief that parents were overly supportive of their child's learning was not evident among secondary teachers. Typically, older children are more autonomous in their learning, needing less support from parents. Only one secondary teacher mentioned parental involvement in DL, noting their personal belief that this should not be encouraged:

I personally try, especially with distance learning, to make a concerted effort not to involve them. They need to, obviously, know the decisions that are being made for the students, but in terms of the day-to-day lessons, I personally don't think they should be sat in support with their children. The lesson should be structured so that children can make progress on their own, that's my belief. (Secondary teacher)

Educational outcomes of crisis distance learning

Two months into the lockdown, it was possible to identify aspects of education that were lost and gained through the introduction of DL. The loss of some key features of teaching and learning was, in part, compensated by gains in technological abilities.

Learning lost

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3	Many concerns highlighted earlier regarding delivery changes are linked with skills that may have
4 5	
6	been lost to the pupils, impacting their preparedness for progression into the next grade.
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8 9	
10	Coming to the end of this academic year already. I'm worried about where my children
11 12	
12	are now. This term three is when we give our children the biggest push, and one-to-one
14	
15 16	input. I know where they need to be ready for next year and I know exactly what I need
17	to do each day to make sure I get every child there and I give them all the support they
18	
19 20	need to get them there. (Primary teacher)
21	
22	
23 24	So they're not showing enough independence to start year 6. And you're thinking about
25	so they to not showing chough independence to start year of this you're uninking about
26	what comes after that, secondary? (Primary teacher)
27 28	
29	
30 31	When I was first planning my lessons, when it first came out, I was massively over
32	when I was first plaining my lessons, when it first came out, I was massively over
33	planning and the students just weren't going through it. [In class] when I talk, students
34 35	· L
36	listen. Then they get on with the task, and then we give feedback or whatever. And I try
37	to structure my online lessons in a similar way, but it was just far too much content. I've
38 39	to structure my omme ressons in a similar way, but it was just far too much content. I ve
40	got friends at other schools, and they've all found exactly the same thing. (Secondary
41 42	
42	teacher)
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45 46	
47	I'm concerned - one of my children is going to move from primary to secondary,
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49 50	there's going to be a massive change. (Secondary parent)
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Also identified by others (e.g., Garbe et al., 2020; Middleton, 2020), the current study found stakeholders questioned children's academic progress during DL. Wyse et al. (2020) contend that academic decline may occur and that a larger number of students may need additional intervention but suggest that this worry may only be realized at a later stage. Indeed, Niemi and Koussa (2020) argue that the academic impact of the enforced shift to DL cannot be known now since it is difficult to assess the extent of *real* learning.

Skills gained

One key benefit gained from the transition was the fast-tracked preparation of stakeholders for a technology-driven future. Interactions in the digital environment are becoming more the norm, and the upskilling of students (and indeed, teachers) may prepare them for an increasingly challenging job market. Indeed, some saw value in the DL environment as providing learning in itself, outside the subject content.

One of the biggest advantage, knowing that we are a global community. It just makes them ready for the future, you know, because nowadays, you do business via the internet, that which is a good thing. (Secondary parent)

The positive I would focus on is the innovation that's happened with this time. How people have adapted. I think that's a very interesting thing to see. And it's really inspiring to see how people can change so quickly. (Secondary student)

One big advantage I can see, in this collaborative world, not only they had the data, the topic, at their fingertips, they also found it very useful to interact with their teachers, as well as with their teams, without any problem, thanks to technology. So, one big advantage that I've seen is, there was no limitation of where they have to start, where they have to stop it was available for them throughout (Secondary parent)

Shin (2020) and Stefanile (2020) propose that DL crisis teaching marks a turning point in teaching, with the latter author suggesting that educators will continue to upskill pedagogically. Indeed, teachers in the current study appreciated their new skills. Initially daunted by the need to pivot online and familiarize themselves with a suite of new technologies, at two-months into DL they valued the outcomes.

We've been up-skilled now and learned all these new things and new technologies that, you know, is going to improve learning. We never could have got that far, not quickly, if we were just in school. It's really been forced upon us, and, as a result, I think there's a lot of good going to come out of it. (Secondary teacher)

At the start of this I was like a complete technophobe and then now it's like, kind of built the skills that I need, these 21st century new skills. I've had to do it, which I think has been great. (Secondary teacher)

I've been using some new software called Desmos. It is really amazing for mathematics and science. All the kids login and every time the students do a question it's live, and it goes

across and it ticks if they've got it right. If kid has a question, it pops up. And the kids love it and they seem to be getting through a lot more content. So, I really like the fact I've been pushed out my comfort zone to look at different ways in using technology within the classroom. (Secondary teacher)

I know that we're looking at innovation in the school in September and how we can then adapt it in that kind of way. And still use technology the technology that we have used now, because the children are so familiar with it now, and that we can use it in September, and because they're comfortable. (Primary teacher)

As evident in their narratives, teachers became more confident in using various educational technology platforms over time. Student engagement was a significant consideration in their assessment of educational technology platforms. Teachers looked to the future with a clearer understanding of how these technologies might help their practice in engaging students beyond the crisis.

CONCLUSIONS AND RECOMMENDATIONS

The study aimed to explore stakeholder experiences of the transition to emergency DL during the Covid-19 pandemic, a 'reflection-on-action' as suggested by Rapanta et al. (2020). Findings suggest that stakeholders held nuanced views about this shift, valuing several aspects of it while proffering suggestions for further improvement. The findings fall into three distinct areas 'curriculum delivery implications', 'a need for stakeholder support', and 'educational outcomes of crisis distance learning'.

This research identified a need for differential supports (training and guidance), for parents, students, and teachers. The training needs of the latter two groups related to the use of technology, specifically teaching platforms. Wolverton et al. (2019), advocate a minimalist approach to DL. Sonenshein (2017), in a similar vein, suggests that educators limit the amount of training for teaching DL courses to that which is directly applicable and useful. This is of particular relevance in the longer term, when school management can give time and space to consider teachers' training needs.

Several participants argued that parents over-assisted their children in coursework, making it difficult to assess whether real learning had occurred. Teachers preferred parents to give their children the freedom to make mistakes. Nonetheless, greater parental involvement in teaching had some positive outcomes. Parents took a more active role in their child's education. They were empowered to select what they wanted their child to learn, and many prioritized core subjects. In light of the challenges facing all stakeholders, teachers accepted this. McAleavy and Gorgen (2020) suggest that online teaching should not try to mimic the entirely synchronous teacher-student engagement of the conventional school and, building on the work of Anderson et al. (2001), argue that the remote teacher starts at a disadvantage in terms of social interaction. They must, therefore, deliberately strive to remedy this, making students aware of their teaching presence through many different forms of dialogue with remote students: instructing, guiding, questioning.

Teachers voiced concerns for the academic progression of students and questioned their preparedness for the following academic year. They recognised that this would only become

evident at a later stage and that, until then, the focus should be on psychological well-being. However, the shift to DL was not solely deficit-based; teachers and parents appreciated the development of children's technological skills. The leitmotif of participants' narratives was that of adaptation over time, with teachers and parents making the best of a challenging situation. The three themes we identified lead us to echo the sentiment of Todorova and Bjorn-Andersen (2011, p. 597), who, in the wake of a natural disaster, asked about their DL shift "Did it work? Yes. Was it a walk in the park? No." Teachers, parents, and children in the current study similarly made the best of a challenging situation. The use of digital technologies to educate in crises shows innovation and resilience (Ayebi-Arthur, 2017; Dhawan, 2020; Tull et al., 2017). However, there is no real precedent to the current crisis, and the most practical action is to take best practice examples from distance learning and the UNHCR's 'Emergency Handbook' (Doucet et al., 2020).

Implications

Digital literacy must be at the heart of endeavors to prepare teachers (both preservice and in-service) for future crises. Teacher educators should focus on enhancing teachers' digital literacy – not just in using technology as an adjunct in the physical classroom but also in teaching *through* digital technology. While appreciative of teachers' efforts in learning to navigate the new digital learning environment in such a short time, some parents believed this to be a short-term solution. Teachers and parents suggested the need for e-learning training. Equipping teachers with skills needed to effectively deliver blended or online education (including fixing technical issues on digital platforms) was regarded as vital to the longer-term implementation of e-learning. While this can be achieved at the preservice level, it is also attainable by providing continuing professional development opportunities to in-

service teachers. As a clear visual representation, the Technological Pedagogical and Content Knowledge (TPACK) framework (Mishra & Koehler, 2006) is a pedagogical model for teaching online. It brings together the more traditional teaching of content knowledge and teaching knowledge, with technical knowledge. In an ideal online teaching environment, all three of these areas intersect. McAleavy and Gorgen (2020) detail the time taken to deliver DL and suggest the notion of creating, curating or adapting resources. In response to school closures, the Commonwealth of Learning (CoL; 2020) has published a quality-assured guide to online learning resources. Ministries in other countries have done the same. In China, Huang et al. (2020) developed a Handbook on 'Facilitating Flexible Learning during Educational Disruption'. Based on secondary sources, they identify the challenges of student engagement in a remote setting. They propose pedagogical priorities in recreating a typical classroom's learning atmosphere, namely building community, providing timely feedback, and reducing competition.

In the context of the current crisis, the OECD (2020) framework recommends that governments curate catalogues of high-quality education resources aligned to local curricula. Policymakers can help by providing centralized guidance on appropriate learning resources. Regarding national and systematic policy, McAleavy and Gorgen (2020) suggest a set of recommendations for educational policymakers. Among these is the need to understand the challenges and limitations of self-paced and student-directed learning, support teachers through the curation of learning resources, and plan for school re-opening and beyond. These recommendations complement our findings in which stakeholders reflected on past and current practices, and looked towards the next academic year having learned and accomplished much in a short time. This study's findings are by no means a definitive account of all discussion points raised in the focus group. However, they offer some

insight that the researchers believe may help schools and the global education sector as a whole, and scholars of pedagogic disciplines. The narratives of those touched by the pandemic are essential; how they lived through this crisis and navigated their way through a range of new educational technologies and interactions deserves to be heard.

Limitations

This cross-sectional study focused on one educational community's experiences, a sample of relatively high socioeconomic status individuals living, working, and studying in the UAE. Looking at a less materially privileged sample would likely tell a different story, as emerging studies show a more significant impact of the DL shift on financially disadvantaged families (Adedoyin & Soykan, 2020; Drane et al., 2020). Data collection took place two months after the move to DL. Though this allowed participants to reflect upon their earlier experiences of the shift, this cross-sectional study captured participants' experiences at a moment in time. Longitudinal research could provide a greater degree of insight into how the learning process continued. Garrett Dikkers (2015) noted that teachers who previously taught online might take some new competencies with them back to their face-to-face classrooms, including increased confidence and improved pedagogical practices. As schools return to face-to-face education, it will be interesting to assess whether teachers retain any DL strategies and technologies used in crisis teaching. It will also be essential to explore the long-term impact of this shift to crisis DL (educationally, psychologically, and socially) and further assess the benefit and harm resulting from increased use of technology (Epps, 2020).

Closing remarks

Lastly, and importantly, we concede that the pandemic teaching of 2020 was not a wholly authentic example of 'distance learning'- i.e., learning designed with this modality in mind. Fisher et al. (2020) refer to the pandemic-related shift to distance learning as "crisis teaching", Hodges et al. (2020) as "emergency remote teaching", and Jandrić (2020) as the "forced digitalization of teaching and learning". The latter authors, along with Haßler et al. (2020), suggest that the pandemic has shown the need for flexible education models. Such models need to be ready to respond to future unforeseen challenges. Indeed, we may be in "the initial stages of a revolution that will fundamentally redesign the educational landscape we are familiar with, and in ways that have not even been imagined yet" (Hall et al., 2020, p. 439). Equipping teachers, children, and parents with the skills and knowledge needed to maximize learning in this new landscape will be a vital first step.

Conflict of interest

The authors declare that they have no conflict of interest.

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Table 1.

Identified themes and subthemes

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