International Section

Examining the Remote Teaching Experiences of International Educators during the COVID-19 Pandemic

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The COVID-19 pandemic caused abrupt school closures and transitions to emergency remote teaching, which impacted millions of educators worldwide. Given an overall lack of international perspectives in related research, there is a need to work toward gaining a more comprehensive understanding of the impact of the pandemic on teaching. This study utilized the restorying framework as an approach to narrative inquiry and interviewed a group of educators from countries outside of the U.S. about their teaching-related experiences, difficulties, and desired support during the pandemic. By reshaping their verbal descriptions into cohesive stories, we constructed and illustrated themes that highlighted similarities in struggles with intensified teaching conditions and differences in availability of electronic devices, internet access, and technological training. The study presents insights on preparing for a post-pandemic world and future emergency remote teaching situations with respect to increasing collaboration, providing mental health support, designing professional development programs, and addressing resource disparities.

Keywords: COVID-19 pandemic, international educators, remote teaching, emergency remote teaching, online teaching, restorying, narrative inquiry In response to the COVID-19 pandemic, schools throughout the world closed and transitioned to emergency remote teaching (ERT), defined as "a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances" (p. 6), and educators in K-12 environments were forced to rapidly re-design, develop, and implement their curricula without adequate support (Barbour et al., 2020). Based on the data provided by the United Nations Educational, Scientific and Cultural Organization (UNES-CO) (2020), school closures occurred in 191 countries, and at least 1.5 billion students and 63 million educators worldwide were affected. Throughout the closures that lasted an average of 224 days, 186 countries offered different forms of ERT through radio, television, mobile phones, online platforms, and other distance learning tools (International Bank for Reconstruction and Development [IBRD], 2021).

While higher-income countries utilized online platforms, lower-income countries relied more on television and radio broadcasting. Moreover, in lower-income countries, over 700 million students did not have access to a computer and the internet in their household. In addition, many educators received minimal technological training (IBRD, 2021; UNESCO, 2020). For instance, although 200 undergraduate pre-service teachers (PSTs) in Ghana were expected to engage in ERT, their teacher education program did not provide access to teaching resources or training. Furthermore, over 90% of the PSTs who participated in off-campus training had to use their mobile phones and purchase additional mobile data to support their training and teaching (Debrah et al., 2021). Along with insufficient technological access and training, educators in lower-income countries encountered diverse challenges related to prolonged school closures, severe teacher shortages, and greater learning losses. International educators struggled with a lack of student participation, parental involvement, psychosocial/emotional support, enforced health/hygiene guidelines, and institutional funding, leading to greater reliance on external donors (IBRD, 2021).

In contrast to the diverse challenges of lower-income countries, the challenges of educators in higher-income countries centered around technological access/training and mental well-being (Crompton et al., 2021). For example, in a survey administered to 325 K-12 educators in the United States, more than half of the educators felt overwhelmed by all the available online learning resources/tools and struggled with a lack of knowledge about online/remote teaching strategies and quality internet access for students (Trust & Whalen, 2020). More specifically, educators were concerned about students from low-income families who lacked access to the internet, electronic devices, and a conducive home-based learning environment leading to severe learning losses (Dorn et al., 2020). Educators also noted an urgent need for opportunities to practice administering virtual assessments,

differentiating online instruction, and utilizing online instructional tools (Reister & Rook, 2021). Regarding mental wellness, a survey administered to over 1,000 K-12 educators across the United States indicated that approximately 75% of the educators were frequently stressed, 50% felt burned out, and 25% experienced symptoms of depression throughout the pandemic (Steiner & Woo, 2021). Furthermore, many educators struggled with pandemic-related anxiety and trauma because they could not access appropriate mental health interventions and support services (Horesh & Brown, 2020).

Although educators worldwide dealt with personal pandemic-related stress and encountered great difficulties in suddenly transitioning to remote teaching (Epps et al., 2021), there is a need to better understand the diversity of teaching experiences during the pandemic and further examine the differences between lower- and higher-income countries (UNESCO, 2021b). The current study aims to address this need through a qualitative analysis of eight international educators using a restorying framework, discussed in the following section. It seeks to contribute to the body of international and comparative research examining teaching experiences during the CO-VID-19 pandemic to help better respond to emerging teaching needs in contextually appropriate ways (Chan et al., 2021; Gerber & Leong, 2021; Oleksiyenko et al., 2021; Sahin & Shelley, 2020).

THEORETICAL FRAMEWORK

From a sociocultural theoretical perspective, this study views the individual teaching experiences of international educators as interactions with their students, colleagues, administrators, and other educational stakeholders in social activities, which are "culturally, historically, and institutionally situated" (Cole & Wertsch, 1996, p. 252). To visualize the complexities of social activities, holistic activity system models have been developed to illustrate the influence of mediating factors (e.g., communities, rules, goals/object, divisions of labor) on the outcomes of activities (Johnson & Golombek, 2010) (Figure 1). In addition to mediating factors, Talbert and McLaughlin (1992) developed a model illustrating the influence of contexts on teaching in which classes are "permeated by multiple layers of context, each of which has the capacity to significantly shape educational practice [and] are much more varied, embedded, and interactive in their effects on teaching practice" (p. 28) (Figure 2).

In the field of education, models and frameworks have been developed to illustrate the influence of mediating factors and contexts on specific aspects of teaching, including teaching identity, capacity, motivation, satisfaction, vulnerability, burnout, and agency (Grossman, et al., 1999; Kelchtermans, 2005; Lasky, 2005; Skaalvik & Skaalvik, 2010; Talbert & McLaughlin, 1992; Thoonen et al., 2011).

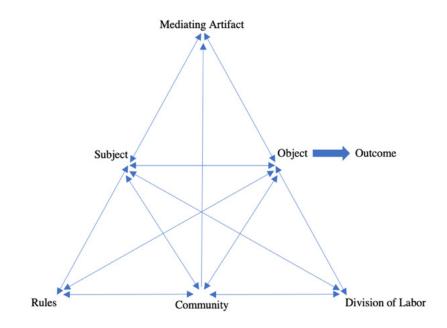


Figure 1. Collective Human Activity System Model.

Note. Adapted from "Research on second language teacher education: A sociocultural perspective on professional development," by K. E. Johnson and P. R. Golombek, 2010, p. 9. Copyright 2011 by Taylor & Francis.

For example, Skaalvik and Skaalvik (2010) developed a model to describe the influence of belonging, emotional exhaustion, value consonance, supervisory support, colleague/parent relations, time pressure, and disciplinary issues on the association between teaching satisfaction and the desire to leave the teaching profession. Additionally, Thoonen et al. (2011) developed a model to explain the interconnections between teacher motivation, transformational leadership, professional learning activities, school organizational conditions, and teaching practices.

Furthermore, classroom activities can also be viewed as multi-leveled and dynamic (Lantolf, 2000). As individuals may engage in similar activities with different motives/goals, there is a possibility that "different activities might be underway at any given time, despite the fact that all of the participants display the same or similar overt behaviors" (p. 12).

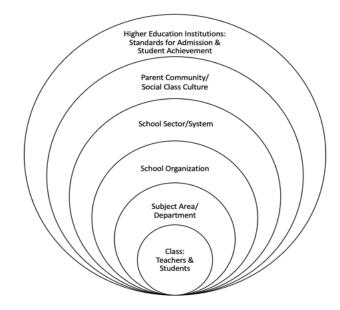


Figure 2. Multi-layered Contexts of Teaching Model.

Note. Adapted from "Understanding teaching in context." by J. E. Talbert and M. W. McLaughlin, 1992, p. 32. Copyright 1992 by Jossey-Bass.

Moreover, there is also a possibility that activities may reshape or shift into another activity while unfolding. Therefore, the process of experiencing and internalizing activities through the mediated mind is a unique cognitive, behavioral, and affective process shaped by a multitude of internal (e.g., beliefs, values, mental frameworks) and external factors (Ball, 2000; Cole & Wertsch, 1996; Grossman et al., 1999; Lantolf, 2000). Throughout the internalization process, individuals will grasp concepts/ideas, extract personal meaning, and create new perspectives that will influence their future judgments, predictions, behaviors, beliefs, attitudes, and decisions (Ball, 2000; Wyer & Srull, 1986).

METHODS

Taking into consideration the influence of mediating factors and contexts on teaching experiences along with the unique internalization of each individual experience, the present narrative study aims to describe the teaching experiences of international educators during the COVID-19 pandemic using the restorying framework (Creswell, 2013). As an approach to narrative data analysis, the restorying framework aims to analyze "experiences as expressed in lived and told stories of participants" (Creswell, 2013, p. 70). Restorying is a collaborative process in which researchers and participants collect descriptions of experiences and contextually shape these descriptions into cohesive stories to elucidate themes, causal connections, and situated meanings (Creswell, 2013). The process entails transcribing verbal descriptions, identifying the key elements of the participants' descriptions (e.g., settings, characters, events, conflicts, resolutions), and reorganizing the descriptions as stories around these elements (Creswell, 2013). In contrast to other narrative approaches, restorying emphasizes illuminating the participants' voice and perspective by including direct quotations to "add life to the narrative" and "convey [points] very expressively" (Cohen et al., 2011, p. 553).

To work toward a comprehensive understanding of the impact of the pandemic on teaching, we asked the following research questions:

- 1. How did a group of educators from countries outside the U.S. describe their teaching experiences during the pandemic?
- 2. What types of teaching-related difficulties did they encounter during the pandemic?
- 3. What types of teaching-related support did they seek during the pandemic?

Context

The participant sample was drawn from the Fall 2021 cohort members of an international teacher exchange program hosted by two different universities in the U.S. To support meaningful and sustained changes in professional practices related to teaching and learning, the cohort members took part in seminars, workshops, field experiences, faculty mentorships, cultural activities, and a technology course. The technology course met weekly to experiment with learning technologies, design technology-integrated materials, and become familiarized with technology integration theories, frameworks, and models.

To participate in the teacher exchange program, cohort members were required to have a bachelor's degree and at least five years of teaching experience. They also needed to demonstrate their commitment to teaching and set themselves apart as outstanding educational representatives of their home country in a series of written and oral interviews. The Fall 2021 cohort consisted of 18 participants (9 females, 9 males) from Bangladesh, Botswana, Brazil, Finland, Greece, India, Indonesia, Israel, Morocco, Philippines, Uganda, and the United Kingdom. Their age ranged from 30 to 56 years (with an average of 39.6 years), and their teaching experience ranged from 6 to 29 years (with an average of 14 years).

Data Collection

From the cohort of 18, we selected a purposeful sample of eight participants with varied geographic locations and teaching experiences (e.g., content area, age group). To begin, in the technology course, we asked all 18 cohort members to upload a video response describing their teaching experiences to Flipgrid, an online video discussion platform. Their short, informal video responses were guided by the following questions: What were your teaching experiences like during the pandemic? How did you teach your students (e.g., types of technology used)? What difficulties did you experience while teaching during the pandemic? What was the hardest part for you? What resources or support did you receive for teaching during the pandemic? What additional resources or support for teaching do you wish you had received? Were there any benefits to your teaching as a result of this experience?

We reviewed the video responses in order to assist us in selecting a purposeful sample of participants with varied geographic locations and teaching experiences who mentioned unique themes and provided a high level of detail in their response. We sent a recruitment email to 10 potential participants, and eight participants were available and willing to be interviewed (Table 1). Four participants were interviewed remotely using Zoom, a video-conferencing platform, and four were interviewed in person at the host university.

A semi-structured interview protocol was developed with questions designed to elicit participants' experiences, behaviors, opinions, values, and feelings to address the research questions (Patton, 2015) (Appendix A). Each interview lasted approximately 45-60 minutes. After receiving verbal consent from participants, we began audio-recording the interview and asked participants to describe their pre-pandemic teaching experiences and environment. Although the interview protocol included 14 questions, we focused on asking "specific, tailored follow-up questions" and co-constructing a "unique and customized conversational path" with each participant (Ravitch & Carl, 2021, p. 134). The recordings of the interviews were uploaded to a secure folder and transcribed verbatim by an online transcription service, then we edited the transcripts for clarity and accuracy while simultaneously reading through the transcripts and listening to the recordings.

Pseudonym	Home country	Age	Gender	Years taught	Age group	Content area	School location
Omar	Morocco	57	М	21	Secondary	English	Urban
Baruti	Botswana	42	М	15	Secondary	Math	Urban
Ahmed	India	47	М	14	Secondary	Science	Rural
Rosa	Philippines	47	F	14	Primary	Science	Rural
Yosef	Israel	39	М	6	Secondary	Math	Rural
Charlotte	United Kingdom	30	F	7	Secondary	Social Studies	Urban
Mila	Finland	46	F	19	Primary	English	Suburban
Juliana	Brazil	33	F	8	Secondary	English	Suburban

Table 1 Profile of Interview Participants

Data Analysis

For the data analysis, we integrated aspects of the sociocultural theoretical perspective and restorying framework. Before coding the interview data, we engaged in pre-coding by circling, highlighting, and underlining segments that seemed significant, relevant, and interesting. We also identified segments that contained keywords from the research questions, described key narrative elements, and referred to components of the sociocultural perspective (e.g., mediating factors, contexts, activities, interactions).

To identify themes and subsumed codes within the data, we conducted multiple rounds of open coding, integrating aspects of initial, holistic, narrative, and in vivo coding (Saldaña, 2016). In alignment with the restorying framework, we (a) divided the data into broad themes through holistic coding, (b) identified literary elements within each theme through narrative coding, and (c) collated subsumed codes for each theme using the words of the participants through in vivo coding. The coding results with the themes and subsumed codes are presented in Table 2.

In addition to providing thick descriptions and perspectival triangulation, we continued to make efforts to ensure trustworthiness of the data through consistent member checks and dialogic engagement with peers and mentors throughout the data analysis processes (Ravitch & Carl, 2021).

Table 2 Codebook of Themes and Subsumed Codes

Themes	Subsumed Codes
Transitions to remote teaching	school closures, returning home, unexpected vacation, happened overnight, feeling pressured/surprised, teaching difficulties, remote teaching, learning technologies, planning lessons, modules, worksheets, differentiated activities, providing feedback, communicating with students, working with parents, flipped classroom, individualized learning
Relationships with students and colleagues	stronger/different/good relationships, going through war together, energy boost, paying it forward, demonstrating care and understanding, continuous check-ins, sweets from principal/counselor
Personal and professional realizations	being courageous, trying new things, preparing backup plans, being enough, taking a step back, not overcompensating, not having to do it all
Concerns about student well-being	learning inequality/gaps, insufficient learning support, lack of parental support, lack of learning progress, lack of communication, forgetting learned content, disengaged students, students with special needs, unemployed parents, food insecurity, increased household responsibilities, loss of family members
Intensity of teaching conditions	working too much, constantly working, working in the evenings/during weekends, more responsibilities, constant changes, postponements, survival, burnout, exhaustion, struggling, teacher shortage, late exam notifications, insufficient preparation time, scoring conflicts, pressure to cover exam content, decreased instructional time, slower learning pace, managing student anxiety, concerns about students' future, educational inequality
Pandemic-related situational factors	fear of contracting COVID-19, long-term health consequences, returning to in-person teaching, pressure to return to in-person teaching, needing to quarantine, limited vaccine availability, lack of adherence to COVID-19 protocols
Physical resources	laptops/desktops/computers, smartphones, printers, wifi-extenders, electronic devices, chairs/desks, activity packages, contacting/reaching out to external sources, seeking donations, donations from teachers/alumni/organizations/ government
Technological access and training	internet access, mobile data, learning technologies, opportunities to apply technologies, using technological resources effectively, learning together, collaborating with students/teachers, figuring out what works, addressing failures

RESULTS

We discuss our findings based on participants' descriptions of (1) their teaching experiences during the COVID-19 pandemic, (2) the teaching-related difficulties they experienced during the pandemic, and (3) the teaching-related support they sought during the pandemic. For each of these categories, we constructed relevant themes and presented excerpts from stories of lived experiences illustrating related subsumed codes.

Descriptions of Teaching Experiences during the Pandemic

As participants described their teaching experiences, they focused on sudden transitions to remote teaching, stronger relationships with students and colleagues, and personal and professional realizations. Each theme is decribed further in the following sections.

Sudden Transitions to Emergency Remote Teaching

In early 2020, participants felt the transition to remote teaching "happened overnight" and immediately felt pressure to prepare remote lessons. While Mila from Finland was equipped with the technological access and skills to collaboratively plan and implement lessons with her colleagues, Juliana from Brazil stayed home for "15 days and then a month, two months" before receiving "some instructions about [needing] to teach online." As she recalled:

In the second week of March, we were told, now you must go home because we are facing some health problems. The principal said it's just going to take like 15 days and told us that we need to go on vacation in order to figure out what we are going to do. So, we stayed at home... and then, at the end of April, the school sent us a lot of emails and links for Google Classroom.

Throughout the transition, participants experimented with various activities, technologies, and strategies to engage their students and teach them effectively. For instance, Mila utilized Google Meet to conduct flipped and collaborative learning activities on a daily basis. Omar from Morocco had his students watch the TV lessons broadcasted by the Ministry of Education and provided supplementary learning materials and feedback through WhatsApp, Facebook, and Microsoft Teams. Rosa from the Philippines printed out modules and worksheets for her students, which parents were asked to pick up weekly. Through continuous application and innovation in an unanticipated ERT situation, participants indicated that they were able to increase their remote teaching skills and confidence.

Stronger Relationships with Students and Colleagues

After teaching remotely for several months, participants noted that their relationships with their students and colleagues became stronger. For example, Charlotte from the United Kingdom explained that "there's just something different" in her relationship with her students because it was as if they have "been through war together." She recounted:

The pandemic was really horrible, but I think we've come out stronger on the other side now. I've had some fantastic classes before the pandemic, but there's just something different about my relationship with this class because we've been through war together. So, I still speak to them, which is really nice. We developed a quite good kind of bond. They're now at university and they still message me to check in and see how I am.

Yosef from Israel stated that the encouragement he received from his colleagues helped him to endure pandemic-related stress. As he recalled:

Our school had a weekly Zoom meeting and my principal and one of the counselors could see that I was feeling really low. The next morning, even though it was lockdown, the two of them knocked on my door and brought me sweets and stuff like that. They came all the way even though it was lockdown. It was a 30-minute drive for them.

The unexpected visit and sweets from his colleagues also inspired Yosef to reach out to other teachers at his school. He elaborated:

It gave me a boost of energy, so I paid it forward and I did the same thing for other homeroom teachers in my grade. Me and my wife, we made small cakes, and I spent a full day just going around to their houses. The feeling that I know someone is looking at me and cares about me and knows that I'm having a difficult time that was the most important thing.

Although teaching remotely during the pandemic was described as "terrible" and "tough," participants were able to deepen their relationships with their students and colleagues through genuine interactions. In addition to providing and receiving emotional support from their colleagues, they made efforts to connect with their students through online meetings, emails, phone calls, text messages, and home visits.

Personal and Professional Realizations

Toward the end of the interviews, participants shared personal and professional realizations they had after teaching during the pandemic. For example, the sudden transition to remote teaching reminded Mila to "be courageous and try new things" because teachers "won't break anything [by] try[ing] to do something online." Omar learned about the importance of "building plans" as teachers may have to "deal with [situations] really suddenly." Lastly, Charlotte realized that there is no need to "overcompensate" in both her professional and personal life. She explained: It was awful looking back, and I was miserable. I was a horrible person to be around because I was dealing with a lot. I think the thing that I've learned is that I can't do it all. And that's quite good because I'm learning to take a step back now and do what I can. It made me think, I'm enough. I don't need to overcompensate and things like that.

There were noticeable similarities and differences in the teaching experiences of the participants during the pandemic. In terms of similarities, although participants described their experiences as "exhausting," "terrible," and "frustrating," several of them were able to further bond with their students/colleagues and build resilience through valuable professional/personal realizations. Additionally, there were clear differences in the implementation of remote teaching, especially when considering the gross national income per capita of their countries of origin. For example, while participants from higher-income countries such as Finland, Israel, and the United Kingdom regularly video-conferenced with their students, those from lowerincome countries such as Botswana and Brazil felt unequipped to continue teaching their students remotely (World Bank, 2021).

Descriptions of Teaching-Related Difficulties during the Pandemic

In their descriptions of their teaching-related difficulties, participants discussed the following themes in detail: concerns about student well-being, intensified teaching conditions, and pandemic-related situational factors.

Concerns about Student Well-being

Throughout the pandemic, participants dealt with a range of concerns related to their students' well-being. As an example, Baruti from Botswana was concerned about the academic progress of his students because they had to take the national exams even though they "did nothing" for two months. Moreover, after returning to in-person teaching, his students were expected to "find their own ways of catching up" if they needed to quarantine. As he recalled:

It's like nobody cares. Those people who were supposed to be taking care of the students, making sure that the syllabus is completed, they don't have any plan in place. My main worry is about what the students are missing. Even the students in the classes that are behind need to take the same type of examination as those who completed the syllabus. And when they come back [from quarantine], the students have to find their own ways of catching up, which never happened. This is where learning inequality comes in. Participants were also concerned about students who had difficulty focusing because of food insecurity, increased household responsibilities, and loss of family members. When Ahmed from India found out his students were struggling with food insecurity, he created a work program for their unemployed parents, which he hoped would encourage his students to continue coming to school and learning. In Rosa's case, she tried to contact parents through letters and home visitations if they did not pick up their children's printed modules and worksheets. She recounted a "heartbreaking" home visit:

I had one student whose mom died and is living with his brother and the father. The father was working and wasn't able to get the modules for like a month. When I went to their home, I realized the reason why he's not able to answer the modules is because, at home, no one's facilitating him and taking care of him that much. It's a very difficult situation. It's so heartbreaking.

Concerns about their students' well-being exacerbated their teaching-related difficulties due to increased feelings of frustration and helplessness, and they felt a moral obligation to allocate their limited time and energy toward addressing these concerns.

Difficulties related to Intensified Teaching Conditions

Participants also described how their intense teaching conditions amplified their teaching-related difficulties. In addition to teaching remotely, they had more responsibilities and felt pressured to constantly work late into the evenings and weekends. For instance, Yosef felt "completely different levels of exhaustion" after taking on additional responsibilities as a homeroom teacher and supervisor. In both his professional and personal life, he struggled to "survive" through "constant changes" and severe complications. Similarly, Charlotte tried her best to "survive" but eventually felt "exhausted" from a lack of work-life balance. She elaborated:

I just had to survive the day. I had to do a lot of work before and after school. A lot on the weekends, so my life turned into just work and no social life. I couldn't go out; I couldn't do anything. It was just constantly working, which was awful. It took me too long, but I started setting boundaries because I was working too much and burning out.

Additionally, some participants received delayed notifications about national exam modifications, which would significantly impact their students' future. For example, Omar struggled to prepare his "anxious" and "stressed" students for the national and local exams as he awaited information about the content coverage and administration dates. For several participants, the changes to the exams greatly hindered academic progress as they had to allocate substantial instructional time toward reducing student anxiety, blindly preparing students for exams, creating/scoring exams, and addressing scoring conflicts.

Pandemic-related Situational Difficulties

Following several months of remote teaching, participants were required to return to in-person teaching leading to difficulties caused by pandemicrelated situational factors. They were especially fearful of contracting the COVID-19 virus as safety protocols were not strictly enforced. For instance, Baruti "felt fear when teaching," and the "fear became too great" as many students and teachers at his school tested positive. After teaching online for two and a half months, Yosef also had to return to in-person teaching because of "big pressure from the parents." Since schools were fully reopened without mask mandates, Yosef had to "fight a lot around the mask issue" with his students. As he recounted:

At the end of May, [our school] reopened with full classes of 35 students in each classroom sitting next to each other. We were angry because it really was the feeling that the only goal of the teachers is to babysit the students, and no one cared about our health, because we were in classrooms where a lot of our students didn't even understand the importance of wearing a mask.

Furthermore, Charlotte also perceived her teaching environment as unsafe because the students did not need to wear masks and "teachers were going sick." She elaborated:

We literally were in our classrooms with the only safety measure being having windows and doors open. We didn't need to wear masks because [the government] believed schools are safe. And then teachers were going sick. There was a member of the staff who caught long-term Covid, and she missed practically a year. I don't know if she's better, but she got Covid after being double vaccinated.

In their stories, it is evident that difficulties related to concerns about student well-being, intensified teaching conditions, and pandemic-related situational factors amassed into an impossible situation. At the beginning of the pandemic, participants quickly used up their limited time and energy trying to adjust to constant changes and ensure the well-being of their students. As the pandemic continued, they eventually felt "completely different levels of exhaustion" because they tried to push past their limitations in situations where they felt overlooked and unprotected from the COVID-19 virus. Although all participants struggled with intensified teaching conditions, only participants from India and the Philippines mentioned concerns about student food insecurity. In lower-income countries, including India, Morocco, and the Philippines (World Bank, 2021), the impact of essential resource disparities on education needs to be further investigated.

Descriptions of Teaching-Related Support Sought during the Pandemic

For teaching-related support, participants especially sought out support related to the following themes: physical resources, technological access, and technological training.

Physical Resources Sought during the Pandemic

Participants sought out a range of physical resources, including chairs, desks, printers, computers, smartphones, and other electronic devices. Since Ahmed's students did not have computers at home, they gathered to share a computer for their classes at a community center. To improve their remote learning experience, Ahmed actively reached out to members of his community for computer and smartphone donations.

Rosa sought out printing resources because she printed out modules and worksheets for her students. However, as her school had limited resources, she could not print modules and worksheets for all her students. This limitation prompted her to reach out to external organizations for donations and to utilize her personal funds. She explained:

There's not a printer for everyone and not all the modules are printed. So, for me and my co-teachers, we print at home at night and then we bring the papers back to school the following day to sort out, but many times it's not enough. We sent letters to alumni and non-government organizations for paper, ink, and some printers. When it's not possible, we purchased paper and printers. I don't want my students to feel that they are left behind. Even if we are in a remote place, I want them to at least feel that I can provide them with the quality education that they deserve.

Technological Access and Training Sought during the Pandemic

Finally, in relation to computers and smartphones, Juliana, Omar, Rosa, and Ahmed identified a lack of technological access as a hindrance to remote learning. For example, Juliana could not send instructional videos and conduct virtual meetings with her students because they did not have "enough internet." Juliana noted that the government in Brazil has been making efforts to increase technological access by distributing tablets and sim cards. Along with increased access, Juliana believes that educators need training to practice "applying" technologies and figure out what is "not working." Building on this idea, Baruti believes that educators in Botswana need technological training to learn how to "effectively" utilize their technological resources to increase "collaboration between teachers and students" and address learning inequalities. As he detailed:

Of course, we don't have enough resources, but we do have computers, projectors, and internet connectivity that we are not using. We do not know how to use it effectively. And there is inequity in learning during the COVID-19 crisis. Other countries shifted to online teaching or used digital technology to make sure teaching continued. This is needed to ensure that when students miss lessons, they do not miss out completely. The use of technology would be the answer to all our problems.

Participants actively sought out physical resources to improve their temporary home-based teaching environment and to enhance their students' learning experiences. To effectively teach remotely, they emphasized a need for internet access and hands-on technological training.

DISCUSSION

Through the examination of the teaching experiences of international educators during the pandemic, we were able to gain insights from their lived experiences. The insights align with the sociocultural models and frameworks developed to illustrate the influence of mediating factors on different aspects of teaching (e.g., teaching motivation, satisfaction, burnout) (see Grossman, et al., 1999; Kelchtermans, 2005; Lasky, 2005; Skaalvik & Skaalvik, 2010; Talbert & McLaughlin, 1992; Thoonen et al., 2011). There were clear differences in mediating factors related to the availability of electronic devices, internet access, and technological training, which significantly influenced the teaching practices and experiences of international educators. Their stories shed light on their unique experiences and internalization processes and serve to better prepare for a post-pandemic world and potential future ERT situations.

Based on their experiences, there are a number of needs among educators especially when considering the impact of the pandemic and the use of ERT when needed.In particular, there is an urgent need to increase collaboration among educational stakeholders, design professional development programs focused on the innovative and effective application of technology, consider ways to address educational resource disparities, and provide greater emotional and mental health support.

Foremost, to support students as part of their personal and course communities, educational stakeholders, including educators, administrators, and parents, need to work together to collaboratively maintain student engagement and equip students with essential 21st century skills (Borup et al., 2020; Tan & Chua, 2022). The experiences of international educators highlighted the essential role that parents, caregivers, and other personal community members play in education (IBRD, 2021). Educators are a central component of students' course community and work together with their personal communities to ensure student well-being, academic success, and student engagement. For example, as a result of their preparation for the possibility of ERT from their experiences with H1N1 flu outbreaks, educators in Singapore were able to maintain student engagement during the pandemic by enhancing their national online learning portal to increase "customizability, individual learning, and engaging exchanges between students and teachers" (Tan & Chua, 2022, p. 270). In addition, they are planning to shift to facilitative pedagogical methods to equip their students with "overarching [21st century] skills like problem solving, critical thinking, and innovation" (Tan & Chua, 2022, p. 275).

To develop skills in online and remote teaching, the experiences of educators need to be considered including the "challenges they faced, the strategies they developed and employed, the solutions they tried that worked and those that did not work, their emotions regarding ERT" (Aladsani, 2021, p. 15). Pre- and in-service educators need professional development opportunities to apply and innovatively experiment with remote teaching knowledge, skills, strategies, and tools (Archambault et al., 2016; Reister & Rook, 2021). In lower-income countries, educators may require more comprehensive programs that ensure "access to devices, software, a digital architecture, reliable connectivity, and [fundamental] digital skills are in place" (IBRD, 2021, p. 37). Educators need to be encouraged to try new and innovative approaches, particularly when shifting to ERT.

Furthermore, educators can be introduced to recently developed ERT frameworks to design learning experiences that are well-supported by their available resources and consider ways to address resource limitations (Whittle et al., 2020). For instance, to address the needs of students who do not have access to electronic devices and the internet in their households (Dorn et al., 2020; IBRD, 2021; UNESCO, 2020), the emergency remote teaching environments (ERTE) framework can be used to guide educators through the process of (a) conducting an inquiry of available resources, (b) identifying constant "factors shared by all students and teachers within an

ERTE" and variable "factors shared by only some" (Whittle et al., 2020, p. 314), and (c) designing plans using the constant factors as a "foundation for each aspect of the pedagogy" (Whittle et al., 2020, p. 314) (Figure 3).

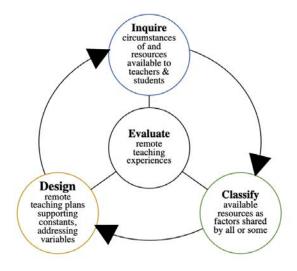


Figure 3. Emergency Remote Teaching Environments Framework.

Note. Adapted from "Emergency remote teaching environment: A conceptual framework for responsive online teaching in crises," by C. Whittle, S. Tiwari, S. Yan, and J. Williams, 2020, p. 315 (https://doi.org/10.1108/ILS-04-2020-0099). Copyright 2020 by Emerald Publishing Limited.

Along with additional preparation when it comes to online and remote teaching, educators from across the world need to be encouraged to express their emotions and seek appropriate support services in environments that prioritize safety, transparency, choice, collaboration, and empowerment (Roman, 2020). This became readily apparent as pandemic-related stress and trauma exacerbated emotional and mental health issues and highlighted the need for additional flexibility and support, not only for students, but for teachers as well (Horesh & Brown, 2020; Roman, 2020; Steiner & Woo, 2021).

Given the need for more support, the educational community must come together to address disparities in school reopening and access to remote learning, which may lead to generational consequences impacting health, incarceration rates, political participation, economic productivity, and innovation (Dorn et al., 2021; IBRD, 2021). As digital inequalities have persisted for decades and the effects have become increasingly relevant in ERT situations, educational stakeholders need to "spearhead a change of approach," consider the "inequalities in wider social structures" and "complex socio-cultural aspects of technology," and strive to "actively design technologies that facilitate more equitable futures" (Selwyn et al., 2020, p. 2). As the world continues to navigate through the uncertainties of the COVID-19 pandemic, it is crucial to prepare all educators for unanticipated ERT situations.

Conclusion

Through using the restorying framework as an approach to narrative inquiry, we were able to gain a more comprehensive and in-depth understanding of the impact of the COVID-19 pandemic on teaching for a group of educators from countries outside the U.S. Instead of collapsing and categorizing their interview responses into broad themes, we aimed to conduct a three-dimensional narrative inquiry by conducting interviews with co-constructed "unique and customized conversational paths" (Ravitch & Carl, 2021, p. 134) and including stories of lived experiences illustrating themes with direct quotations and narrative details. This inquiry seeks to deepen our understanding of how the pandemic impacted teaching and post-pandemic education by drawing connections between and among international educators' stories and personal experiences (Mulholland & Wallace, 2003).

In the ERT situations caused by the COVID-19 pandemic, at least 63 million educators worldwide struggled to cope with stress and anxiety in their personal and professional lives (Crompton et al., 2021; Epps et al., 2021; Galindo-Dominguez & Bezanilla, 2021). While educators in the U.S. encountered difficulties related to the effective implementation of remote teaching (Trust & Whalen, 2020), educators in lower-income countries encountered additional difficulties related to technological access and food insecurity (UNESCO, 2020; 2021a; 2021b). Thus, to better prepare for future ERT situations as a global society, there is a pressing need to address the lack of international perspectives in research on the impact of the pandemic on teaching (Chan et al., 2021; Gerber & Leong, 2021; Oleksiyenko et al., 2021; Sahin & Shelley, 2020).

Although the sample size limits the generalizability of the study, we aimed to present the lived experiences of educators from eight different countries as deeply personal and powerful stories to enrich the understanding of the impact of the pandemic on teaching. We hope members of the larger educational community will continue to compile and connect stories on the teaching experiences of diverse educators during the pandemic and utilize the insight gained to develop innovative plans and solutions. Through these stories, valuable insight can be attained to mitigate learning inequalities and build on the strengthened relationships between educators, administrators, and students in a post-pandemic world and future ERT situations.

DECLARATIONS

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APPENDIX A INTERVIEW QUESTIONS

- 1. What grade level and content area do you teach?
- Could you describe your teaching environment? (e.g., classroom layout, available resources, organizational culture, professional development opportunities)
- 3. Could you describe how you taught your classes before the pandemic?
- 4. What types of activities, tasks, or assignments did you often use?
- 5. Could you describe what types of technology you used in your classes before the pandemic? How did you use technology as part of your teaching?
- 6. How comfortable did you feel using technology in your classes before the pandemic?
- 7. Could you describe how your school responded to the COVID-19 pandemic? How did you feel about the responses and changes?
- 8. Could you describe how you taught your classes during the pandemic? What technologies did you use? What tools did you have to learn?
- 9. How did the pandemic affect your teaching with respect to your content, the technology you used, and your pedagogy (teaching strategies/ methods)?
- 10. What challenges, difficulties, or concerns about teaching did you have during the pandemic?
- 11. What types of support did you receive for teaching during the pandemic? Were you satisfied with the support that you received?
- 12. What types of support for teaching did you wish you received during the pandemic?
- 13. What did you learn from your teaching experiences during the pandemic?
- 14. How can educators prepare for similar situations (like the pandemic) in the future?
- 15. Do you have any additional thoughts or opinions?