

Teachers' Experiences with Emergency Remote Teaching During the COVID-19 Pandemic

Jennifer Lipton,
Wilkes University

Jin Mao,
Wilkes University
Corresponding Author (jennifer.lipton@wilkes.edu)

The COVID-19 pandemic quickly and drastically changed the field of education in 2020. Teachers faced challenges when confined to their homes and had to begin emergency remote teaching with their students. It is important to recognize what these teachers experienced and find ways to prepare for a crisis-prompted teaching situation in the future. The purpose of this phenomenological study was to explore the lived experiences of Pennsylvania elementary classroom teachers who engaged in emergency remote teaching during the COVID-19 pandemic. Semi-structured Zoom interviews of eight elementary teachers who participated in emergency remote teaching provided data for qualitative phenomenological analysis. Findings revealed five themes: Emotional stress with the transition to emergency remote teaching, technological and instructional barriers, changes in content, pedagogy and technology use, increased workload and self-reliance, and positive relationships with students and colleagues. Mishra and Koehler's (2006) technological, pedagogical, and content knowledge (TPACK) framework was used to guide the data collection and discussion of the findings in this study. The practical implications of this study include training and policies related to pandemic or emergency teaching planning.

Keywords: COVID-19, Emergency Remote Teaching, Teachers

INTRODUCTION

In December 2019, a novel coronavirus was identified in a virus outbreak in Wuhan, China (Centers for Disease Control and Prevention [CDC], 2020a; CDC, 2020b). Schools across the nation closed in order to prevent the spread of this novel coronavirus. As early as late February 2020, superintendents and governors closed schools across the United States, first temporarily and then extending to the rest of the academic year, affecting at least 50.8 million public school students (Decker et al., 2020). On March 13, 2020, Pennsylvania Governor Tom Wolf ordered the closure of all schools in Pennsylvania for two weeks, a measure aimed at slowing the spread of the COVID-19 ("Governor Tom Wolf," 2020). School teachers in Pennsylvania had to find an alternate means of providing education to their students, turning to emergency remote instruction for the remainder of the spring of 2020. Many teachers found themselves unprepared for the challenges they faced (Hodges et al., 2020).

About COVID-19

Coronaviruses are a large family of viruses that may cause illness in animals or humans (WHO, 2020). In humans, coronaviruses cause respiratory diseases as simple as the common cold or as complex as severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) (Centers for Disease Control and Prevention [CDC], 2020a; WHO, 2020). COVID-19 can be spread from person to person via small droplets in the nose or mouth when a person coughs or exhales (CDC, 2020a; WHO, 2020). On February 11, 2020, the World Health Organization (WHO) announced the new coronavirus's official name, using their best practice to name new human infectious diseases (CDC, 2020a). The CO stands for corona, the VI for the virus, the D for disease, and -19 for the year when the outbreak began, 2019 (CDC, 2020a). On March 11, 2020, the WHO declared the novel coronavirus outbreak a global pandemic (Cucinotta & Vanelli, 2020). The potential for spread led to social distancing and mask use across the country.

COVID-19 and Emergency Remote Teaching

Remote teaching, which is different from online teaching, allows educators to teach with technology to ensure students' continuity of learning at a distance (Trust & Whalen, 2020). Remote teaching occurs "during emergencies when teachers and students are not accustomed to using online platforms or technology to deliver instruction" (Russell, 2020). Since March 2020, emergency remote teaching has become the terminology used to refer to this teaching type during the pandemic (Craig, 2020; Hodges et al., 2020).

As a result of emergency remote teaching, teachers experienced an unprecedented and unplanned disruption to education that changed the work of many teachers suddenly and in many aspects (Kaden, 2020). Teachers around the world "frantically and emergently switched to remote teaching" (Schlesselman, 2020). Teachers were given anywhere from a few hours to a few weeks to prepare to move all instruction to a remote format (Gacs et al., 2020) and expected to become online teachers overnight (Gudmundsdottir & Hathaway, 2020). Teachers were suddenly confined to working from home, removed from students, and challenged to learn new technologies (Kaden, 2020).

When teachers begin instructing in an online environment, they generally have time to meet their needs before beginning (Gacs et al., 2020; Moore-Adams et al., 2016). Many teachers who experienced emergency remote teaching did not have time to prepare or receive the professional development necessary to begin such a massive undertaking (Paesani, 2020). With this sudden transition to emergency remote teaching, educators faced an abnormal environment where they had to get ready quickly, without the help commonly available and access to quality resources, all while confined to their homes (Huang et al., 2020; Wake et al., 2020). Teachers had to use whatever resources they had access to at the time without any clearly defined standards or understanding of online teaching (Schlesselman, 2020). This move to emergency remote teaching resulted in an increased workload for teachers, challenging them to provide meaningful educational experiences to their students, despite what was happening around them (Kaden, 2020).

The change to emergency remote teaching happened so fast that it is essential to pause and reflect on those experiences (Pacheco, 2020). The emergency remote teaching situation experienced by educators in the spring of 2020 offered many "lessons on preparedness that can

and should be addressed in anticipation of another crisis teaching situation" (Pacheco, 2020). The COVID-19 pandemic completely disrupted the education system and forced a wake-up call to strengthen public education (Kaden, 2020). Teachers need to be prepared to teach entirely online and immediately shift to emergency remote teaching (Major, 2020). Teachers will need tools and guidance should the need for emergency remote teaching arise in the future (Gacs et al., 2020).

METHODOLOGY

This study employed a qualitative design using a phenomenological approach.

Participants

Interview data were collected from eight teachers at various public schools in Pennsylvania. The participants were recruited from different schools and elementary grade levels (kindergarten through sixth) to get stories from multiple contexts, richer data, and avoid homogenizing their experiences. A purposeful sampling strategy was used and the criteria for selection of the participants included: (i) being elementary classroom teachers in Pennsylvania who transitioned to emergency remote instruction due to the COVID-19 pandemic, (ii) having no prior experience with online teaching or emergency remote teaching, (iii) being self-contained elementary classroom teachers. Eight participants were purposefully selected to participate in the study using these criteria.

Instrumentation

The interview protocol consisted of 14 semi-structured questions. The interview protocol was created based on Brinkmann and Kvale's (2015) method of preparing for the interview by setting the stage and working off a script, yet moving through the interview like a conversation between "two partners about a theme of mutual interest" (p. 149). The interview protocol was designed using topics and questions related to the focus of the study. The interview protocol contained questions aimed at gathering a detailed description of the participants' experiences with the phenomenon. This approach is supported by Merriam and Tisdell's (2016) findings that interviewing is the primary method of data collection to arrive at the essence of a lived phenomenon. The questions asked in the interview protocol were based on the work of Brinkmann and Kvale (2015), who emphasize the importance of attempting to understand the world from the participants' point of view.

Data Collection and Analysis

Interviews were conducted via Zoom due to ongoing safety concerns related to social distancing and the COVID-19 pandemic. The Zoom interviews were recorded using the application; the Zoom application allows users to record audio and save it right to the computer in an M4A format. M4A is an extension that signifies an audio recording. Each interview lasted between 30 and 50 minutes. They were transcribed using the website Otter, a service that turns voice conversations into transcribed notes. The transcripts were reread for precision twice and then sent individually to each participant to check them for accuracy and report any discrepancies. Having the participants review the transcripts was done to increase the reliability

and validity of the data. The transcripts were then coded using Dedoose. The data were analyzed based on code frequency, key terms, and themes across all interviews. Pseudonyms were used for confidentiality.

RESULTS

The analysis of the interviews revealed five themes resulting from the categorization of codes: emotional stress with the transition to emergency remote teaching, technological and instructional barriers with emergency remote teaching, changes in content, pedagogy and technology due to emergency remote teaching, increased workload and self-reliance with emergency remote teaching, and positive relationships during emergency remote teaching.

Emotional Stress

The study revealed that no one expected a worldwide pandemic and did not predict the resulting shift in education. Teachers had difficulty grasping the notion of what was happening in the world. They experienced stress when setting up their new virtual classrooms and working from home.

Fay: I cried. Like cried. I cried because, you know... And then, I don't know if we had a week to prepare or try to figure it all out. But no, I think I just went through a realm of emotions, you know. First of all, we're scared. We don't know what's going on.

Anne: Like just teacher burnout, we worked all day and then all night. We were always willing to do it, but it led to extremely long, long, long days. I have children I need to take care of, so it was hard balancing my family and being a teacher and supporting all of their families at the same time.

Technological and Instructional Barriers

This study revealed that all teachers experienced difficulty with device access and connectivity. The teachers in this study were without their materials and had issues with students attending online classes and completing their work.

Anne: We are a country school. Some of our children's homes don't have cable TV running to their properties. So, to get a hotspot to work in a wooded area or where a mountain is blocking you, sometimes they were very spotty. So, we had a lot of messages that they were behind because it was difficult for them to complete the assignments with the lagging.

Jane: It's obviously not where I wanted it to be. Because it wasn't direct, I wasn't in person with my students. I did the best I could with what I had to work with. Knowing I didn't have access to any of my materials at school, so I was able to just take my thoughts and put them into writing and pass that along to the parents and hope that, you know, they had things at home that they

could utilize to practice those skills. After they left on March 13th, I had no interaction or contact with my students at all.

Changes in Content, Pedagogy, and Technology

The teachers in this study all experienced changes and adaptations to content in some way. The teachers either changed the content they were used to teaching or taught the same content but with a different effort. The teachers all reported learning how to use new technology and then altering their content and practices to work with the new technology use.

Anne: A colleague of mine mentioned Loom, so I started recording myself teaching the lessons. The students would have direct links to me teaching them on a recording. 90% of it was asynchronous. I would hold a Zoom every day. They had to sit and listen from their dining room tables instead of the classroom.

Lila: I saw a lot of creativity come out of kids that I don't know if I would have seen had we not gone remote. I really did see some kids do some projects that I felt like, wow, they put forth a lot of time and effort into this. I got to see a different side of the kids in that manner.

Increased Workload and Self Reliance

All participants found themselves with a new, more intense workload in addition to needing to rely on their ability to provide instruction to students remotely since the time and resources for professional development were not perfect for this situation.

Sue: They kept on throwing things at us. Like, you have to do this. You have to document that. And there was not much guidance; it was just a list of to-dos without how to do them. And it worked out wonderfully, but there were really high demands on us. I truly felt like I was flying the plane as I was building it. Each day I would learn something new, or something would go wrong. And I would have to learn on the fly how to fix it. I did not have my materials. I was learning not only how to do Zoom and teach material online, but I was home as well.

Nancy: On a Monday and a Friday, I had two different meetings because of working schedules and stuff like that. During the day, we were required to be there for almost like office hours. We needed to respond to a parent. I spent a lot of time creating different content for the kiddos.

Positive Relationships

Each of the eight participants noted positive relationships with either colleagues, students, or both. Some even found positive relationships with administration or students' parents during the pandemic. The participants found that the circumstances allowed them to get to know their students on a level that may not have been possible without the pandemic. The reliance on their coworkers to get through this unprecedented time also strengthened their relationships with each other.

Fay: The students really just wanted to talk to us. And I think we were told that's pretty much okay. Especially for eight-year-olds, you know, it was just to check in. They most wanted us like making sure the kids were okay. Not like their safety but you know like, mentally okay. I would do one on one meetings with them. And that didn't really work. Because, again, they just want to show you, their cat. And I'm like, okay, let's talk about your math.

Pam: We have like a very close group with our special ed teachers. So, we're constantly in group chats together; we opened like Google Classrooms to communicate, share ideas, like if we wanted to use the same thing in our classroom. So just the ongoing communication and collaboration, we always share ideas with each other, which is helpful.

DISCUSSION AND CONCLUSION

Discussion

This study's findings provided an understanding of the lived experiences of elementary teachers who participated in emergency remote teaching during the COVID-19 pandemic. The analysis of the interviews uncovered five themes related to these experiences. Each participant described the changes they experienced in their teaching as a result of emergency remote teaching.

All participants noted emotional stress with the transition to emergency remote teaching; they felt fear, frustration, and uncertainty. The teachers were not prepared to become emergency remote teachers. Even the teachers with advanced technological skills reported they never expected a worldwide pandemic to change how they provided education to their students. Teachers were given little to no notice that everyone would be sent home to learn, at first for two weeks and then for the remainder of the 2019-2020 school year. The teachers did not have time to prepare and gather all the materials they would need to instruct from home and found this time very stressful. Teachers reported they did not get clear directions from their administrators, who were also trying to figure out what was going on and what to do.

Each of the participants noted numerous issues with technological and instructional barriers when conducting emergency remote teaching. Teachers faced technological barriers right away because not all students had a device at home. Many districts worked to get devices to students, but this took time. Some teachers were surprised, but students lacked access at home, so districts had to provide things like hot spots to connect to the Internet. The schools in rural areas had consistent connectivity problems, with students reporting glitchy connections or lack of connection in bad weather. The teachers had to figure out how to use these platforms and apps and then teach the students, who were also unfamiliar. As emergency remote teaching continued, teachers encountered consistent technology problems and solved them as they came up.

They also faced changes that had to be made to their content, pedagogy, and use of technology with their students. They had to learn to use technology as the main part of their teaching instead of an add-on. They had to learn how to make technology work with their existing content and pedagogy. They had to change some content and pedagogy to adapt to using technology with their students. The teachers had to learn how to use Zoom or Google Meet to communicate with their students and adjust to not being face-to-face. They had to record themselves teaching. Many teachers who never used platforms like Google Classroom reported that they still use it because they now like it. Teachers used the Internet and different websites to

find activities and content instead of their teacher manuals and traditional curriculum. The teachers in this study noted they had to change how they were teaching because they could not hold small groups, do science experiments, or use other hands-on methods to teach.

Most participants noted a substantial increase in workload and the need for self-reliance when developing ways to reach students during the school shutdowns in the spring of 2020. The teachers in this study reported not having many directions from their administrators because they were unsure of what to do. While many teachers received some guidance, the participants had to figure out what to do independently. The participants had to take on many new tasks such as contacting the parents and students, setting up their virtual classrooms, and learning the new platforms and apps. These tasks were not only unfamiliar but also time-consuming. Teachers spent many hours reaching out to parents, trying to find devices and connectivity for students. The teachers had to figure out how to use things like Zoom and Google Classroom. They had to spend the time to look for resources, websites, and materials that could be used online with their students. Many teachers delivered devices or materials themselves directly to the students' homes. Many of the teachers in this study said they felt like they were on their own. Some said they had things being thrown at them without being told exactly how to do it.

All participants expressed having experienced positive relationships with either colleagues or students during emergency remote teaching. The teachers in this study stated that the students looked forward to the Zooms or online meetings, even when the discussion was not academic. They felt it gave the students something to look forward to and created a sense of normalcy at a very uncertain time. It was not always academic, and sometimes the students and teachers would talk about what was going on in the world or show their pets. Some of the participants thought this made the students feel safe, and they enjoyed being able to check on the students, both physically and mentally. Many teachers felt that emergency remote teaching allowed them to get to know their students better, bond with them, and see certain qualities they may not have seen in a traditional format. All eight participants in this study noted positive relationships with their coworkers due to emergency remote teaching. The teachers worked together, sharing materials and ideas. They were texting and calling each other constantly. They found ways to get through this difficult time together, and they split up tasks to share the workload. Some teachers felt that emergency remote teaching brought them closer to their colleagues because they depended on each other.

Implications for Future Practice

School districts in the post-COVID-19 world must be ready for the possibility of a crisis-prompted teaching situation in the future. Changes can be made to education to prepare administrators, teachers, parents, and students to face something like a worldwide pandemic. The emergency remote teaching situation experienced by educators in the spring of 2020 offered many "lessons on preparedness that can and should be addressed in anticipation of another crisis teaching situation" (Pacheco, 2020). The research done in this study suggests school districts need to look at the measures they have in place for teaching during an emergency, such as a pandemic.

First, the results of this study demonstrate the need for school districts to have a 1:1 device program in place, where each student has a mobile device that they use in school and at home. Based on this study's findings, educators felt unprepared to enter emergency remote teaching because their students did not have the devices necessary to connect with the teachers.

Second, school districts might also want to examine the professional development offered for technology use in the classroom and align it with teachers' needs and daily use. School districts should consider ongoing professional development in the practical use of technology. The professional development has to be relevant and applicable to their classrooms. Third, teachers might want to increase their daily technology integration in their classrooms. A suggestion would be to get students and teachers familiar with the devices and use those devices in conjunction with a specific platform, such as Google Classroom, to communicate with students from a distance. Fourth, school districts should have a pandemic plan in place. A clear plan will help teachers face an emergency remote teaching situation with more confidence and less of a sudden increase in workload. The support and guidance on what is expected will save teachers time and make them feel less unprepared for an emergency.

Recommendations for Future Studies

There is value in studying teachers' experiences with emergency remote teaching to evaluate what did and did not work and what we can learn to improve current and future practice (Hartshorne et al., 2020). The COVID-19 pandemic completely disrupted the education system and forced a wake-up call to strengthen public education (Kaden, 2020). This study was conducted to elementary classroom teachers' experiences with emergency remote teaching during the COVID-19 pandemic. The data analyzed from this study suggests the need for further research on the phenomenon of emergency remote teaching.

All school districts in the United States could benefit from additional research about teaching during the COVID-19 pandemic. It is recommended that this research study be replicated with teachers from various grade levels and subject areas. Future studies on emergency remote teaching should include teachers from middle school and high school. Studying middle school and high school teachers' experiences and comparing them to that of an elementary school teacher would provide a basis for comparison to determine whether the themes for emergency remote teaching are seen at all grade levels. This comparative study would also highlight the potential differentiated needs of teachers transitioning to emergency remote teaching.

A future study on emergency remote teaching could include the experiences of individuals other than the teachers. Studies could be done with administrators, parents, or students. The unique perspective of these groups of people could be compared and contrasted to teachers. The input from administrators, parents, and teachers could provide valuable information for educators regarding the best methods of conducting emergency remote teaching.

Another recommendation for future studies is to conduct an identical study and include teachers from other states. Because every participant in this study had experience as a Pennsylvania teacher, it would be interesting to contrast the teachers' experiences in other states. States experienced shutdowns due to COVID-19 at different rates and with different guidelines for emergency remote teaching.

An additional recommendation for a future study is a study on existing pandemic plans. There is a need for future research studies to determine if school districts have adopted a pandemic plan or updated one previously in place. The details of these pandemic plans could provide valuable insight to school districts that lack one. School districts can use a study like this to provide support and specific guidance outlining what should be done for emergency remote teaching in their pandemic plan.

A study could be conducted comparing the experiences of male to female teachers. Since all of the participants in this study happened to be female, the experiences of male elementary teachers were not represented.

Finally, a research study could compare schools with 1:1 device programs and educational platforms in place to schools that were not using technology daily with their students before the pandemic. The study could analyze the difficulty of the transition for these two groups.

Conclusion

The COVID-19 pandemic found educators across the world in a situation they never expected. The demands placed on teachers to suddenly switch to emergency remote teaching revealed that many school districts were unprepared to teach virtually due to a pandemic. This study aimed to examine the experiences of elementary classroom teachers who participated in emergency remote teaching. This study was necessary because it is important to step back and look at what teachers experienced during a worldwide pandemic and learn from those experiences. There was a dearth of research on online learning but minimal research on emergency remote teaching due to its timely nature. This study's findings indicate that the experiences of elementary classroom teachers with emergency remote teaching were complex and characterized by emotional stress with the transition, technological and instructional barriers, changes in content, pedagogy, and technology, increased workload, and positive relationships. Future studies on emergency remote teaching should help to further the conversation about how to be best prepared for a crisis-prompted teaching situation in the future.

REFERENCES

- Brinkmann, S., & Kvale, S. (2015). *InterViews: Learning the craft of qualitative research interviewing*. Sage Publications.
- Centers for Disease Control and Prevention [CDC]. (2020, April 17-a). *Frequently Asked Questions*.
<https://www.cdc.gov/coronavirus/2019-ncov/faq.html>
- Centers for Disease Control and Prevention [CDC]. (2020, September 1-b). *About COVID-19*.
<https://www.cdc.gov/coronavirus/2019-ncov/cdcresponse/about-COVID-19.html>
- Craig, R. (2020, April 2). *What students are doing is remote learning, not online learning. There's a difference*. EdSurge News.
<https://www.edsurge.com/news/2020-04-02-what-students-are-doing-is-remote-learning-not-online-learning-there-s-a-difference>
- Cucinotta, D. & Vanelli, M., (2020). WHO Declares COVID-19 a pandemic. *Acta Biomed.* 91(1), 157-160.
<https://doi.org/10.23750/abm.v91i1.9397>
- Decker, S., Peele, H., & Riser-Kositsky, M. (2020, October 7). The coronavirus spring: The historic closing of U.S. schools. *Education Week*.
<https://www.edweek.org/ew/section/multimedia/the-coronavirus-spring-the-historic-closing-of.html>

- Gacs, A., Goertler, S., & Spasova, S. (2020). Planned online language education versus crisis-prompted online language teaching: Lessons for the future. *Foreign Language Annals*, 53(2), 380-392.
<http://doi.org/10.1111/flan.12460>
- Governor Tom Wolf (March 13, 2020). *Governor Wolf announces closure of Pennsylvania Schools*. An Official Pennsylvania Government Website.
<https://www.governor.pa.gov/newsroom/governor-wolf-announces-closure-of-pennsylvania-schools/>
- Gudmundsdottir, G. B., & Hathaway, D. M. (2020). "We always make it work": Teachers' agency in the time of crisis. *Journal of Technology and Teacher Education*, 28(2), 239.
<https://www.learntechlib.org/primary/p/216242/>
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). *The Difference Between Emergency Remote Teaching and Online Learning*. EDUCAUSE Review.
<https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>.
- Huang, R., Tlili, A., Chang, T., Zhang, X., Nascimbeni, F. & Burgos, D. (2020). Disrupted classes, undisrupted learning during COVID-19 outbreak in china: Application of open educational practices and resources. *Smart Learning Environments*, 7(1), 19.
<http://doi.org/10.1186/s40561-020-00125-8fer>
- Kaden, U. (2020). COVID-19 school closure-related changes to the professional life of a K–12 teacher. *Education Sciences*, 10(6), 165.
<https://doi.org/10.3390/educsci10060165>
- Major, C. (2020). Innovations in teaching and learning during a time of crisis. *Innovative Higher Education*, 45(4), 265-266.
https://www.researchgate.net/publication/270019372_Innovation_in_teaching_in_times_of_crisis
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Moore-Adams, B., Jones, W. M., & Cohen, J. (2016). Learning to teach online: A systematic review of the literature on K-12 teacher preparation for teaching online. *Distance Education*, 37(3), 333-348.
<https://doi.org/10.1080/01587919.2016.1232158>
- Pacheco, E., (2020, April 22). *Digital learning pulse survey: 90% of U.S. higher education institutions used emergency distance education to complete spring 2020 term*. CISION.
https://www.prweb.com/releases/digital_learning_pulse_survey_90_of_u_s_higher_ed_institutions_used_emergency_distance_education_to_complete_spring_2020_term/prweb17068175.htm
- Paesani, K. (2020). Teacher professional development and online instruction: Cultivating coherence and sustainability. *Foreign Language Annals*, 53(2), 292-297.
<https://doi.org/10.1111/flan.12468>
- Russell, V. (2020). Language anxiety and the online learner. *Foreign Language Annals*, 53(2), 338-352. <http://doi.org/10.1111/flan.12461>
- Schlesselman, L. S. (2020). Perspective from a teaching and learning center during emergency remote teaching. *American Journal of Pharmaceutical Education*, 84(8), 1042-1044.
<https://doi.org/10.5688/ajpe8142>

- Trust, T., & Whalen, J. (2020). Should teachers be trained in emergency remote teaching? Lessons learned from the COVID-19 pandemic. *Journal of Technology and Teacher Education*, 28(2), 189. <https://learntechlib.org/primary/p/215995/>
- Wake, A., Fox, K., & Strong, C. (2020). Pandemic podcasting: From classroom to bedroom. *Teaching Journalism & Mass Communication*, 10(1), 29-33. https://www.researchgate.net/publication/342876991_Pandemic_Podcasting_From_Classroom_to_Bedroom
- World Health Organization [WHO]. (2020, April 8). *Q&A on coronaviruses (COVID-19)*. <https://www.who.int/news-room/q-a-detail/q-a-coronaviruses>