Navigating through Turbulent Times: U.S. Secondary Teachers Share Their Experiences as Online Learners during the COVID-19 Pandemic and the Implications for Their Teaching Practice

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Abstract:

This participatory action research was a collaborative endeavor designed to identify the challenges secondary in-service teachers confront as learners in a virtual context and the implications their participation in graduate synchronous remote coursework had for them as middle and secondary classroom teachers teaching online. This article highlights the obstacles schools have been facing amid the coronavirus pandemic, presents the fears consuming teachers, parents, and students, describes the frustration with remote learning, and summarizes the pre- and post-coronavirus teacher stress, burnout, and attrition occurrences. This article also outlines preventative measures to make schools safe and secure, and discuss how supporting teacher self-care, promotes student wellbeing. We share lessons learned from identifying teacher stresses in the online virtual learning context and redesigning our graduate courses for our participants by modeling best practices for coping with technostress, incorporating technology tools, modifying pedagogical procedures, and integrating various resources to enhance virtual instruction. Using thematic analysis, we identified the following themes which impact the e-teaching-learning experience: a) juggling multiple demands in the home environment while learning online is distracting; (b) balancing work-life responsibilities is challenging; (c) teaching and learning in a virtual context is isolating; (d) dealing with technostress is overwhelming, and (e) practicing self-care allows teachers to support student wellbeing. We summarize the findings from this project where the teachers reflect on their personal experiences while enrolled in online graduate courses and describe how the teachers' experiences as learners informed their teaching practice.

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INTRODUCTION

The worldwide spread of the SARS-CoV-2, the virus that causes COVID-19, has affected our lives in dramatic and profound ways. Not only has a healthcare crisis linked with a crippled economy ensued, but it has exacerbated our anxiety and caused us to rethink our relationships, the way we work, how we socialize, our spiritual search for meaning and purpose, as well as other aspects of our wellbeing. The COVID-19 global pandemic has dramatically and irreversibly changed every element of our lives, including how teaching and learning occur. During the spring 2020 semester, schools around the globe closed in response to the pandemic health threat. On March 16th, K-12 and university classes across the United States transitioned to remote online learning (Education Week, 2021).

Amidst the pandemic, teachers around the world united by profession. As dedicated, selfless professionals, many educators would agree that returning to in-person instruction would benefit the academic progress, socio-emotional development, and healthy wellbeing of their students. After all, our schools play a crucial role in supporting the whole child, not just their academic achievement (Centers for Disease Control and Prevention [CDC], 2020). "America's teachers are sending an SOS because we know that if we don't return to face-to-face learning, a generation of students will be added to the coronavirus casualty list," American Federation of Teachers (AFT) President Randi Weingarten predicted (Camera, 2020, para.14).

However, like healthcare frontline and other essential workers, teachers were particularly vulnerable to the threat of transmissibility and pandemic-related emotional distress. Therefore, even though educators have been concerned about the potential dramatic, negative scarring effect on a generation of students whose learning, grades, social interaction, motivation, and stress levels have been altered by remote learning, they remained apprehensive that the re-opening of schools during the 2020-2021 academic year could jeopardize the health and safety of all the stakeholders involved (Couzin-Frankel, et al., 2020).

In this article, we highlight the challenges schools have been confronting amid the coronavirus pandemic, present the fears surrounding the re-opening of schools, describe the frustration with remote learning, and summarize the pre- and post-coronavirus teacher stress, burnout, and attrition realities. We also outline preventative measures taken to make schools safe and secure, and discuss how teachers can support students' wellbeing when they practice self-care. We share concerns voiced by secondary teachers participating in virtual graduate coursework in a professional development grant project and highlight how their experiences as learners impacted their teaching practice with the transition to online instruction.

Literature Review

Fall 2020 and Spring 2021 School Re-Opening, Anything but Typical

To address the financial concerns of a volatile economy and get the country back on track, there has been a lot of pressure to reopen businesses and schools. Back-to-school for the fall 2020 and spring 2021 semesters was shockingly different from previous years and is expected to be different in fall 2021. With the health and safety of educators, students, and parents at the forefront, "The scenes hardly resemble typical school: Preschool children instructed to spend recess playing alone inside a chalk square. Eight-year-olds told not to speak to their friends. Middle schoolers reminded to steer clear of classmates when entering or leaving the building," (Couzin-Frankel, et al., 2020, para. 17).

Many teachers, parents, and students alike have suffered from heightened anxiety due to the pressing remote online learning challenges. Since parents needed to return to work, getting our children safely back to school has been a top priority. Teacher unions continued sounding alarms, sharing that many teachers felt highly uncomfortable about returning to face-to-face classroom instruction and have threatened to or have taken steps to strike, walk out, or retire. They have been concerned that reopening schools without the proper equipment, precautions, regular testing for teachers and students, and safety procedures in place could put everyone at risk.

Teacher Health Concerns

According to a report from the Kaiser Family Foundation (KFF), one in four teachers, approximately 1.5 million individuals, were at increased risk of contracting the coronavirus and suffering from serious illness because of their age or the fact that they suffer from underlying chronic medical conditions (Claxton, et al., 2020; Nania, 2020). Approximately 24% of the K-12 teaching corps in the United States consists of teachers over 55. Since the risk of contraction and hospitalization, and the death toll from COVID-19 increase with age, teachers feared that hastily or haphazardly reopening schools could result in dire consequences (Nania, 2020). Even with the vaccination rollout, because we have not met herd immunity in most communities and children under 12 are not yet eligible to be vaccinated, some teachers question the lifting of the mask mandates and social distancing requirements (Khullar, 2021).

Although many Americans would agree that teachers are the backbone of the education system, they were not classified as essential frontline workers by government officials until the Trump administration labeled them as such on August 18, 2020 (Westwood, 2020; Strauss, 2020). Since teachers were not legally considered essential workers at the start of the pandemic like other essential workers needed to maintain public health and safety, or individuals who work in healthcare, construction, food distribution, etc., teachers could not be ordered back to work in person. When the fall 2020 back-to-school frenzy occurred, as well as the new labeling of teachers as critical infrastructure workers,

some school districts required asymptomatic teachers back into classrooms after they had been exposed to the virus (Strauss, 2020).

During the 2020-2021 academic year, schools planned to implement various protective health measures to cease the transmission of COVID-19. As role models, teachers are expected to practice responsible behavior and take the necessary precautions that students may emulate. Wearing face coverings, rigorously maintaining social distancing in classrooms, constantly washing hands, and sanitizing surfaces have been small acts that helped many people succeed in mitigating contact with and transmission of COVID-19 (CDC, 2020). Contact tracing has also helped curb the spread of the virus by collecting confidential data on people who have been diagnosed with COVID-19 and alerting individuals with whom they have been in contact so they could monitor their health and self-quarantine to avoid 'spider-web transmission'(Claxton, et al., 2020).

COVID-19 Expenditures to Reopen Schools

The impact of the COVID-19 recession has created tremendous uncertainty in education funding and increased demands on existing insufficient resources. The AFT conducted a comprehensive analysis of what was needed to safely reopen schools for the fall 2020 semester and the associated costs. Their calculations were more than four times the previous estimates because they included the projected costs to hire additional staff, provide distance learning training for teachers, offer before and after school childcare, arrange transportation, purchase the necessary personal protective equipment (PPE) and cleaning supplies, as well as offer support services to promote students' social and emotional health (Camera, 2020). The AFT projected that the new cost to reopen schools safely with the necessary coronavirus academic and safety precautions resulted in a new estimated total of $116.5 billion (Camera, 2020).

Dozens of other national education groups, including teacher unions, civil rights groups, and organizations that represent state education officials, along with superintendents and principals, requested an additional $175 billion in federal funding. They asked for this funding not only to help pay for things like cleaning supplies and protective gear but also to prevent an estimated 200,000 to 300,000 teacher layoffs expected as a result of budget cuts and to provide internet access for the millions of children who still lack a connection at home (Camera, 2020).

"Scared for My Life"

This past year teachers have been wrestling with the decision to remain in the teaching profession and return to their classrooms. They have been fearful that returning to their classrooms too soon could put themselves or their students in harm's way. They have been conducting risk analyses and weighing their health and the health of their families against their economic security and professional obligations (Noonoo, 2020). This has been a serious issue which is exemplified by the fact that many teachers wrote wills before returning to their classrooms and others protested holding signs that read, "I can't teach from a coffin",

"RIP Grandma caught COVID helping grandkids with homework," and "Here lies a third-grade student from Green Bay who caught COVID at school," (O'brien & Whitcomb, 2020, para. 3). The back-to-school seasons of the past have not presented educators with similar life-and-death dilemmas (Kennedy, 2020; McKinnon & Aspegren, 2020).

Many teachers may have felt economically compelled to return to teach face-to-face when their schools reopened full-time, even if they did not believe they could do so safely. Two-thirds of educators who responded to *Education Week's* poll in July 2020 supported keeping schools closed so as not to advance unnecessary transmission of the virus (Noonoo, 2020).

Remote Learning Aftermath

In addition to providing critical health services, "Schools are an important part of the infrastructure of communities, as they provide safe, supportive learning environments for students, employ teachers and other staff, and enable parents, guardians, and caregivers to work" (CDC, 2020, para 8). Parents who have been at the helm helping their children navigate their schoolwork at home amid the school closures while juggling their work responsibilities, familial duties, and financial burdens, have been frustrated and exasperated. "There is widespread agreement on most points of the political spectrum that a functioning American economy requires working schools, and that the abrupt, unplanned shift to remote learning was disastrous for many children who desperately need in-person instruction" (Shapiro, 2020, para. 12). Coming off more than a year of ineffective remote online learning, several students have fallen behind, and overburdened teachers are anticipating having to design catch-up lessons, in addition to prepping for fall 2021 coursework. There are also concerns about the ever-widening digital divide, which was heightened during this pandemic demonstrating how access alone does not characterize the alarming research on education technology and omnipresent educational inequities (CDC, 2020; Guthrie, et al., 2020; Zielezinski, 2017).

Fall 2021: Return to Face-to-Face Instruction

How best to address the various aspects of teaching and learning have been on many individuals' minds throughout the pandemic. Because of the mixed federal guidance, state and local officials debated many issues to decide if school closures were doing more harm than good and if reopening was to take place, deciding when and how to do it. Due to decreasing coronavirus cases in several locations across the United States, many schools have decided to abandon the blended model and retry face-to-face instruction exclusively since their communities are experiencing a drop in coronavirus cases (CDC, 2020; Guthrie et al., 2020).

Teacher Attrition and Stress

With no playbook and numerous technological challenges, teachers have been giving so much of themselves to create online communities of learners and keep their students

focused, engaged and motivated, despite the stress and uncertainty they have been feeling since the abrupt transition to virtual learning the spring of 2020. Even though "teachers are attuned to the social-emotional wellbeing of our students and trained to monitor for signs such as trauma, anxiety, bullying, or micro-aggressions," the mental health and wellbeing of teachers are often overlooked (Seton, 2019, p. 77). Nonetheless, "Teachers who remain exposed to trauma-related symptoms among students with no support or training become vulnerable to developing a myriad of adverse consequences themselves, including the experience of vicarious traumatization" (Eyal, et al., 2019, p. 209). Teacher stress is 'prominent and pervasive' and all too often, teachers, while caring for their students, end up emotionally bankrupt, suffering from physical, emotional, and cognitive exhaustion (Devaki, et al., 2019; Eyal, et al., 2019; Stiglbauer & Zuber, 2018).

The reality is, even during the best of times, teaching is a taxing occupation that has been ranked as one of the most stressful career choices (Stiglbauer & Zuber, 2018; Welch Brasfield, et al., 2019). The rate of teacher attrition in K-12 schools is high and some feel is disconcerting. Approximately half of the teaching corps leave the field within the first five years of their teaching careers (Seton, 2019). This high turnover rate has been attributed to chronic stress and low job satisfaction. Consequently, more than 60 percent of teachers described 'always' or 'often' experiencing chronic occupational stress during their teaching assignments in an AFT survey conducted of more than 5,000 teachers (AFT, 2017).

According to the AFT pre-COVID-19 survey, the highlighted findings included this negative consequence, "… schools still struggle to provide educators and, by extension, students with healthy and productive environments" (AFT, 2017, p. i). This situation has become magnified during the current pandemic. Schools are considered safe havens for many students. Since education is a cornerstone of American life and schools play an important role in preparing students academically and supporting their wellbeing, school closings may have caused vulnerable students to be at even greater risk than before (CDC, 2020). Students that are in neglectful or abusive homes may have their maltreatment go undetected. Others in need of supplemental nutrition may have ended up hungry, malnourished, or food insecure because they could not take advantage of in-school meal programs. Some students without the necessary technology tools or a household with limited internet connectivity may not have participated in online remote classes. Even if they did have Wi-Fi access, these students may have been unmotivated or disengaged and never logged on; others did not check in regularly. Students with overstressed parents who were unavailable, unwilling, or unable to support homeschooling activities have fallen behind. Additionally, many children and adolescents who relied on counseling services or disability supports have not received the skill development and nurturance they needed (CDC, 2020). There is no doubt that some students have fallen through the cracks.

Back-to-School 2021: Redefining Teachers' Roles

After the 2020-2021 academic year hiatus, getting back into school mode has proven challenging for many students and teachers alike. During the fall 2021 semester, many teachers, students, staff, and parents have already expressed a multitude of ongoing concerns surrounding their respective school districts' ability to guarantee their safety and security, and they have worried that remote online learning has made it difficult for students to catch up, stay on track or leap ahead. Unfortunately, heading back to school this fall continues to be cloaked in limited predictability as teachers have been expected to revamp their curricula once again to address the results from a variety of delivery modes in addition to managing the common obstacles they deal with, including unrealistic demands, student misbehavior, poor working conditions, role ambiguity, limited resources, inadequate professional development, disgruntled parents, among other things (Guthrie, et al., 2020).

There is no doubt that the COVID-19 global pandemic is reshaping how we think about education. Although many K-12 students have struggled with the transition to remote learning, and their parents and teachers have been concerned about the COVID Slide, i.e., academic erosion or learning loss, since students have not been participating in face-to-face instruction, some students have enjoyed remote online learning, and others have even thrived in the virtual context (Kuhfeld & Tarasawa, 2020). Even though many schools were unable to find a perfect model for remote learning, several teachers and schools handled the transition successfully. Their students have enjoyed learning in their own spaces at their own pace. They appreciate the omission of everyday distractions, the flexibility in their schedules, the ability to pursue their interests, and the opportunities to communicate with others in distant locales. Students who have excelled in the virtual environment even report taking their education more seriously and claim they are more productive learning from home. Teachers are sharing, "… that a handful of their students—shy kids, hyperactive kids, highly creative kids—are suddenly doing better with remote learning than they were doing in the physical classroom" (Fleming, 2020, para 3).

Purpose of the research

The TELLS Grant Project

In 2016 the Multicultural Center at a land grant institution in the western United States was awarded an Office of English Language Acquisition (OELA) grant to recruit and educate 60-90 middle and high school teachers from schools across the state with significant proportions of American Indian and other English Language Learners (ELLs), in hopes of raising the academic achievement of these students. Consequently, the Teachers of English Language Learners (TELLs) grant project was conceived to provide ongoing, job-embedded professional development and mentoring to the participants in each of two programs. One program included professional development coursework designed for in-service teachers, which consisted of 12 credits of graduate study towards a Culturally and Linguistically

Diverse Education (CLDE) certificate offered over two summers with one-on-one coaching during the academic year.

During the summer of 2020, 34 secondary teachers in our third cohort were scheduled to come to Boxville to finish the last two courses in their certificate program. Because the pandemic inhibited us from inviting them to campus to complete their program, we spent time discussing and designing synchronous online course sessions that were innovative, interactive, and engaging. It was our desire to mitigate the stress our teachers were experiencing since the spring 2020 transition to online instruction and model pedagogical strategies so they could, in turn, take their experiences as learners in a virtual context and modify their online teaching practices to reach and support their secondary students during the 2020-2021 academic year.

Once it became evident that in-person instruction was out of the question, we created an instructional team and planned for the last two summer school CLDE graduate courses. We already had the instructors lined up to teach the courses, but we had to make several changes to transition to the online learning model. We needed to reschedule the meeting times, review our D2L/Brightspace and Zoom platform suite of products and services, reflect on distance education best practices, redesign course activities, rethink assignments, retrain instructors, revise the learner expectations, in addition to purchasing new equipment, researching connectivity options, practicing delivery techniques, and hiring support staff to guarantee a smooth transition to online instruction. We combined our educational experiences and expertise to integrate technology tools to enhance our innovative virtual teacher professional development coursework. Having had our teachers share how stressed they had been since the abrupt spring 2020 transition to remote teaching took place, we felt compelled to redesign and model best online instructional practices while practicing self-care. We did this so we could be there for our students (the teachers) so they could, in turn, pay it forward and apply the instructional strategies we used with them with their students in the future.

The secondary teachers participating in this professional development grant project were able to be in their students' shoes as online learners and reflect upon how the challenges of engaging in virtual coursework from home and focusing on remote online course demands impacted their experiences as both learners and teachers. Since the participants in this grant project were members of an established cohort who knew each other through intensive face-to-face courses during the previous summer and work with their Instructional Coaches during the academic year, we already had the lines of communication in place. Once the transition to online teaching and learning occurred in March 2020, it became apparent through conversations with the participants, that modeling best practices to keep students engaged was of utmost importance. This pre-established relatationship facilitated the design of this collaborative research project.

METHOD

Research Model

We engaged in Participatory Action Research (PAR) to examine our virtual educative processes as a problem-based investigation. The philosophy and methodology of action research are found throughout the social sciences. MIT professor Kurt Lewin coined the term action research back in the 1940s, and shortly after that, Columbia University teacher-educator Stephen Corey was one of the first to use this unique approach where educators were actively involved in both the research as well as in the application of the findings (McFarland & Stansell, 1993). Over the past eight decades, the interactive inquiry process, which defines action research, has resulted in various methods. Today, Paulo Freire's Participatory Action Research, which is based on critical pedagogy, is implemented by numerous university programs to help teachers solve everyday problems in the classroom by implementing a 'how to' approach (Gay, et al., 2009; Mertler, 2014).

Action research provides a way to gain knowledge to enhance learning and teaching (Mills, 2006). This PAR project was a collaborative activity between the Principal Investigator for the TELLs grant project who served as the instructor for EDU 514 Culturally Responsive Pedagogy in Practice, the Technology Coach for the grant project, and the teacher-participants enrolled in our courses. We used collaborative PAR in our quest for answers to the question: What is the best way to deliver and model online instruction for secondary in-service teachers enrolled in graduate summer coursework while supporting their wellbeing? Since all teachers, even seasoned professionals, had become new teachers during this unprecedented pandemic transition to remote learning, we determined that this research endeavor was a valuable pursuit for us as teacher-educators and the teachers who were participants in the TELLs grant project.

Participatory Action Research is socially responsive and takes place in context (MacDonald, 2012). Since COVID-19 precluded us from having the intensive three-week in-person seminars held on campus like the cohort members had participated in during the previous summer, we had to figure out how to take our face-to-face graduate courses and reconfigure them into an online format. The results of this process were thought to be a short-term, temporary adjustment, but with surging COVID-19 cases and the imposed restrictions, online instruction has turned into the 'new normal' for students and teachers. We wanted to provide a model for our teachers to adapt for their students in the future, so we spent time repurposing our in-course activities.

Our approach to disciplined inquiry allowed us to reflect on our teaching and have the research inform the redesign of our instructional practices while expanding our participants' pedagogical repertoire and self-care skill set. This PAR project prepared all participants to deal with technostress and other work stresses by recognizing and actively addressing them. Participatory Action Research contributes to evidence-based advocacy; the goal of PAR is to build a community's or group's capacity to analyze issues and solve

problems by making sense of theory and applying the knowledge gained. We were fortunate to engage participants within the PAR design across every stage of our research process. The teachers were invited to participate in the research by sharing their ideas and thoughts on pedagogical practices during numerous dialogues and conversations and providing written feedback when appropriate.

Since the participants in the study were all secondary teachers and had just experienced the transition from face-to-face to online teaching, they were asked what they perceived to be their most significant challenges. We found that some had no experience teaching online, some were concerned with internet connection issues, and others had worries about adapting student-centered instructional strategies for this new context.

We explored the D2L learning platform limitations and options available to us through our university and determined how best to transition our summer courses to online instruction. We focused on connection before content. We looked at ways to engage our teachers before covering the course material. We invited our graduate research assistant and an Instructional Coach from the TELLs grant project to participate in our course sessions so that the course instructor and Technology Coach had assistance when teachers were put in breakout rooms. We decided on a later daily start time and pushed back our meeting schedule by an hour. We prepared two introductory sessions to introduce the D2L platform features and navigate course content. Teachers shared with us that they wanted opportunities to network, and we built-in 'check-in' chats at the beginning of each class session and set up daily office hours. Our grant administrative assistant was available if teachers needed help interfacing with the university system. We shared that the University Information Technology department and D2L nationwide hotline offered technology support at all times. All course materials were distributed ahead of time. Recursive discussions took place to ensure the success of all teachers. İt became apparent that the teachers wanted and expected us, as teacher educators, to model how best to engage students via remote online learning.

Utilizing PAR allowed us to examine, reflect on, and assess our standard delivery and investigate various instructional strategies and techniques to address the concerns we uncovered around delivering online instruction in a culturally responsive manner to support teachers' retooling effectively. We also investigated and modeled how to best support teachers' self-care as a catalyst to support student wellbeing.

Ethical Considerations

This OLEA grant project was reviewed by the University's IRB committee and was given approval. All secondary teachers in the TELLs grant project signed consent forms to participate in the professional development opportunities offered. Once we made the transition to vitual online teaching, participants in Cohort 3's summer courses agreed to have all Zoom sessions recorded including instructional times, informational sessions, office hours, and other informal chats. The particpants had access to review all files through the

content management system. The participants also had access to provide feedback on the University's course evalution. In addition they were asked to provide feedback on a Qualtrics Survey addressing the value of the professional development of this grant project.

Participants

We focused on inviting core curriculum (English/Language Arts, Math, Science, and Social Studies/History) secondary teachers from schools in our consortium partner school districts on or near reservations with high percentages of American Indian and other ELLs to participate in the TELLs grant project cohorts. Approximately 65% of the 34 teachers in Cohort 3 held a bachelor's degree, and the remaining teachers had completed their master's. The teachers had a vast array of teaching experience, ranging from 3 to 22 years, with an average teaching experience of 8 years. Twenty-two participants were K-8 certified teachers who taught various subjects at the middle school level. Twelve of the teachers were high school teachers: English/ Language Arts (6), Social Studies/History (2), and Math (1). The other 3 participants were Indigenous Language and Culture Teachers. Many of the teachers held additional endorsements in Reading, Special Education, Health Enhancement, Art, Music, German, Socio-cultural Anthropology, Library, Native American Studies, and Medicine Wheel Traditions.

Data Collection

We selected numerous vehicles to collect and triangulate our data, including logs of our instructional team planning meetings, our daily field notes, quick surveys/polls in introductory Zoom and D2L/Brightspace sessions, notes from informal conversations before and after the online course meetings, discussions recorded during Zoom office hours, email correspondence, discussions during synchronous class breakout room sessions, messages posted in the chat, Zoom session recordings, as well as formal course evaluations and feedback surveys. Data from these sources were collected and analyzed for common themes about the teachers' experiences with the online environment compared to their face-to-face instruction in the TELLs grant project coursework the previous summer.

The data gathered through the open-ended questions to which teachers responded on the course feedback survey were pertinent to identifying the five themes the teachers enumerated. They were supported by the other data listed above, which were collected, reviewed, and coded. We added the two additional questions listed here to the end of the semester Qualtrics course feedback survey, which was distributed electronically to enable the teachers to reflect on their experiences as learners in our online courses.

1.	Since we had to transfer the TELLs Culturally and Linguistically Diverse Education certificate coursework to online instruction due to the COVID-19 restrictions, what challenges and concerns about being in a synchronous online course format for EDU 514 and EDU 513 this summer did you have?

2.   As an educator, what has been the most challenging aspect of juggling your teaching responsibilities, family/personal commitments, and participation in the TELLs grant project?

Data Analysis

Using thematic analysis allowed us to review our data set consisting of various formats, and sort and interpret the data into broad themes (Braun & Clarke, 2006; Lorelli, et al., 2017). The framework for our thematic analysis was done by following this six-step process: 1) familiarizing ourselves with the data, 2) making notations next to essential data to help us develop very general issues and then coding the data, 3) generating themes, 4) reviewing those themes, 5) defining and then naming our themes, and 6) compiling a report on our findings (Lorelli, et al., 2017).

We read our data numerous times to become immersed in the data and identify meanings and patterns. Once we completed a thorough review of all of the data we had collected, we highlighted and color-coded terms and phrases that appeared frequently. We used a deductive approach to tease out themes we anticipated such as the ideas that technostress created anxiety and the work-life balance in a virtual context is challenging. The analysis was expanded to include other themes that appeared. Next, we combined several codes, identifying patterns, and generated themes.

The trustworthiness of the research was enhanced through member checking by all participants through the course recordings, participant survey responses, and personal communications among course faculty, Instructional Coaches, and the Technology Coach. Access to recordings of all introductory Zoom and D2L/Brightspace sessions, class meetings, course activities, and office hour discussions was posted on the content management platform. Participants were provided ample opportunities to review the recordings and comment on their authenticity and accuracy.

RESULTS

We were able to identify the following five themes to describe the teachers' experiences taking remote coursework and participating in multi-hour, daily synchronous online sessions: (a) juggling multiple demands in the home environment while learning online is distracting; (b) balancing work-life responsibilities is challenging; (c) teaching and learning in a virtual context is isolating; (d) dealing with technostress is overwhelming and (e) practicing self-care allows teachers to support student wellbeing.

Table 1

Tabulation of Themes

Analytical Themes	Descriptive Terms	Needs that Emerged
Juggling multiple demands in the home environment while learning online is distracting.	Distractions, Zoom fatigue, Change fatigue, Blurred boundaries, Numerous responsibilities	• Realistic Expectations • Modified assignments • Time • Making sure children are safe and secure • Understanding participants' responsibilities • Modifying schedules • Learning platforms, and apps
Balancing work-life responsibilities is challenging.	Balance, Family-work demands, Personal time, Multi-tasking, Workaholic culture, Trouble focusing, Blurred boundaries, never having enough time	• Focus attention • Set aside time for family and friends • Ask for help • Learning how to prioritize tasks
Teaching and learning in a virtual context is isolating.	Isolation, Missing shared mealtimes, Informal discussions	• Provide longer breakouts • Checking in with everyone • Opportunities to socialize • Building online communities
Dealing with technostress is overwhelming.	Techno-overload, Invasion, Complexity, Insecurity, Uncertainty	• Training • Support • Office hours • Reducing anxiety
Practicing self-care allows teachers to support student wellbeing.	Burnout, stress, anxiety	• Address emotional, physical, and mental needs • Recharge

Even though we identified these five distinct themes, there is overlap among them. Here we share the teachers' feedback, our interpretations, and the relevant research on each of these themes. All the participants' quotes that were selected for inclusion and interwoven throughout represent what the teachers shared. To ensure the confidentiality and anonymity of our participants, we chose to remove the contributors' names.

Juggling Multiple Demands in The Home Environment While Learning Online is Distracting

Several teachers talked about the difficulty of putting work-home boundaries in place and adhering to them while they were addressing the expectations of their online courses and dealing with family matters. The teachers shared that trying to participate in our daily synchronous sessions while at home was very distracting. One teacher described missing the protection that being on campus the summer before for the face-to-face sessions had afforded her, "... life, in general, was challenging because I wasn't able to be on a campus where I could have had total devotion to the classes. Being home presented other life factors that hindered my concentration and time."

Several of the teachers are parents, and they highlighted the juggling they had to go through to make sure their children's needs were met. At the same time, they tried to focus on their coursework. They emphasized how torn they felt and how challenging it was to stay focused, as demonstrated here: "Childcare and making sure my kids were safe while trying to fully engage in what was happening on the screen was so difficult." It was evident that the teachers were juggling numerous responsibilities while trying to participate in the courses. Another teacher had this to share: "Too many distractions from home. When I was in Boxville, on campus, I was in Boxville, and I didn't have to worry about cooking, cleaning, answering phones, etc. I picked up take-out, worked with no distractions at the hotel room, and took walks or explored the city, or shopped when I needed breaks. I do not take breaks at home or have as much time to work."

Another teacher voiced how in addition to attending the synchronous online sessions, preparing for presentations/discussions and carving out time to complete readings and other homework was very challenging, "It was hard to get all of the schoolwork done because of life happening around me. I had animals to care for - I had to cook and clean - I had interruptions and distractions. When you're in class at home, you don't have the time to do everything else."

Some teachers recognized early on how distracting online learning was for them while they were trying to take care of their families and participate in the online course sessions. Therefore, they called for backup as demonstrated by this teacher's explanation, "Making sure my kids are safe while trying to engage in online learning was so challenging. I ended up having my mom stay with us from California for three weeks. It was a huge sacrifice for her, but it helped me to be able to focus. It was also difficult for my kids to understand that

I still had a ton of reading/writing/thinking to do when I wasn't 'in class,' and there were a lot of tears about mom not being available while I was home."

To address the distracting elements that teachers identified, we revamped our coursework for the online format. One thing we changed was we reduced the number of assignments, selected key resources to share instead of sharing all our materials, and built-in time to spend on inevitable technology challenges, in addition to making many otherchanges to our curriculum. Even though we made these revisions, we had to adjust our expectations once we saw that the teachers in our summer courses fell behind and became very stressed over the daily course requirements. Since our teachers reported that being asked to complete daily assignments resulted in considerable anxiety, we modified the course demands by adjusting the grading scale. Even though we still expected homework to be turned in every day, we opted to provide copious, practical feedback to the teachers. We changed the standard letter grade A-F scale to two simple ratings, "Revise and Resubmit" or "Good to Go". That way, teachers could work at their own pace without pressure. When they finally received the second comment listed above, they knew they had completed that course component.

Having experienced how distracting remote learning can be and how pressured they felt by the intense pace of online learning, many of the teachers shared that they could understand the plethora of demands on their students' time in and outside of school. The teachers believe students could be distracted by family members (parents, grandparents, and siblings), pets, and things going on in their homes as they were. They discussed how they would be more flexible with due dates and more understanding of the time required to produce quality work. They planned on limiting the assignments they would give their students and modifying the time students are expected to be online.

Another element we addressed was how to modify a virtual learning schedule and why it is necessary to adopt a traditional school schedule since the pacing is so different in the two environments. It was decided that the teachers needed to adopt a realistic virtual learning schedule for their secondary students and respect students' time commitments and hectic schedules. After experiencing more than 5 hours of daily synchronous class time during the summer, the teachers decided that expecting their students to be online for a 6-8-hour school day was not realistic. Instead, they agreed that the recommendations by the National Board of Professional Teaching Standards (NBPTS) on appropriate time students could be expected to be learning online would be sustainable (Hudson, 2020). NBPTS suggests middle school students should only be expected to spend 2-3 hours in online classrooms per day, and the expectation for high school students can be increased to 3-4 hours daily. It was also important to consider what portion of the time should be dedicated to synchronous teacher-directed lectures and discussions and what time students need to devote to asynchronous work on projects, activities, and homework.

We had numerous discussions on using analogous synchronous meeting apps like Zoom, Adobe Connect, WebEx, Google Meets, MicrosoftTeams, and other technology tools and how they can foster a sense of connection. Still, they do not replace the face-to-face physical interactions we have with students in the traditional classroom. We talked about the negative impact of 'Zoom Fatigue', the slang term which captures how taxing online interactions using the apps mentioned above can be on our brains and how simple stretching, walking, and snacking breaks every hour could reduce muscle tension, irritability, and eye strain (Chiappetta, 2017; Umayam, 2020).

The teachers agreed that they needed to feel comfortable accessing the features video communication platforms such as Zoom and other apps offer and have confidence navigating learning management systems like D2L/Brightspace, Blackboard, and Canvas. Teachers agreed that experiencing online learning as students was a valuable experience and provided them with a lot of empathy for what their students are and would be going through, and clarity on the rewards and challenges of remote teaching (Roy & Boboc, 2016).

Balancing Work-Life Responsibilities is Challenging

As is the case in the healthcare field, a paradigm shift in the education system is needed since many educators are immersed in a workaholic culture which has only gotten more burdensome since the coronavirus pandemic (Wan, 2020). Work-life balance requires teachers to manage the many roles for which they are responsible efficiently. Since transitioning to what some of the teachers in our grant project affectionately referred to as 'Zoom school', the balancing act has become more complex. Teachers need to learn how to set boundaries to protect their mental health so they can be there to support their students' success and nurture their familial relationships, but many struggled with finding a healthy work-life balance (Hansen & Gray, 2018). Several teachers acknowledged being out of balance and admitted that the prospect of regaining stability eluded them, "I never had a good work/life balance, to begin with, and this pandemic just added to that." Teachers, like everyone else, deserve to be able to divide and spend their time among work time, family time, personal time, and time for other things like self-care, guilt-free. With numerous demands, as one teacher shared, "Focusing has been the hardest part. I'm a single parent, so I'm always trying to take care of my daughter, and then focus on the classes, and homework whenever she is sleeping."

Learning how to prioritize tasks, implement efficiency tools to work smarter, minimize time spent on administrative details and operationalize efficient time management were goals the teachers wanted to explore. In our many discussions, some teachers focused on separating their work and life roles, while others were interested in how best to blend them. Teachers described their core values and the importance they placed on family, their commitment to their students, their community involvement, nurturing relationships with extended families and friends, their spiritual practice, and continuing

their professional development. Infrequently self-care was mentioned in our initial meetings, as if it were a taboo not seen as a priority at all, until mid-way through the summer courses when we started focusing our pre-and post- synchronous class session chats and virtual office hours on strategies for avoiding technostress, building online communities, and maintaining teacher wellbeing.

Teachers shared how they often split their time between work and caretaking, which left no time for themselves, as evident here, "The weeks we had class online, I literally could not do anything else. I told my husband he was on his own. I worked all day and night to stay on top of the workload. Nothing was cooked, cleaned, or laundered during those two 5-day stints. In the 'off' weeks, I had to pace myself and stick to a strict schedule to make sure everything at home got completed."

The teachers were eager to inquire about available tools, strategies, and resources their peers used to manage the constant inventory of tasks they were required to address for work. Everyone agreed their lives had become more complicated (some used the term impossible) to meet professional obligations and juggle their familial commitments since the beginning of this unprecedented pandemic. The teachers communicated that the ever-shifting changes brought on by the coronavirus put them in a constant state of uncertainty. One teacher described it this way: "I feel like we are being asked to put out continual and ever-changing fires." The teachers agreed that dealing with this type of recurring work overload has made goal setting, identifying priorities, time management, and creating a balanced scorecard unrealistic. We talked about how this pressure could easily lead to low job satisfaction, unmanageable stress, and eventually, burnout. Teachers also highlighted how torn they felt, trying to satisfy everyone's demands, "Juggling was a challenge. When I am home, I am pulled in many directions, such as being a teacher and answering to our district, my home business, my husband's business, being a mom, and all that goes with that. I am usually up late at night trying to write and get assignments in and am exhausted the next day. I feel like I was always playing catch-up and never catching the rope."

Since the online classroom has no real boundaries, separating, balancing work, and other roles left many teachers feeling like there was never enough time in the day. To prioritize and conquer the never-ending to-do list, teachers discussed applying the late businessman and author Stephen Covey's four-quadrant time management matrix, where Covey suggests plotting all tasks focused on two dimensions, importance, and urgency, to help set priorities and work efficiently (Covey, 1989).

The teachers also pointed out that although students may enjoy the flexibility associated with online asynchronous learning, which allows them to decide when to focus on their schoolwork, as teachers, they were overwhelmed by remote delivery since there are no natural boundaries. They ended up feeling like they were expected always to be 'on' (Hansen & Gray, 2020). When they were the instructors, the teachers said that they felt compelled to respond to posts and check their email and other accounts all day long, every

day. According to Hansen and Gray (2018), improving time management and boundary-setting skills is essential to job satisfaction when teaching online.

The popular phrase in education circles, "Maslow before Bloom", emphasizes the necessity to take care of students' basic needs before focusing on academics. The same philosophy can and should be applied to meeting teachers' needs. Managing the aspects of your professional life adds to job satisfaction. Still, with the relentless changes that inundate us in a virtual environment, this can add significant stress. Teaching concurrent courses, or teaching courses with high student counts, can be very time-consuming. Suggestions for working efficiently by managing remote learning include:

- Provide students with clear communication of the best way to contact and interact with you.
- Note your availability.
- Set clear boundaries and realistic expectations.
- Share instructional videos about the technical processes and procedures for the class.
- Have students ask for help from technical support when needed.

It was felt that these suggestions would make teaching online a less time-consuming activity allowing for more balanced work-life conditions.

Teaching and Learning Online Is Isolating

Teaching can be an isolating profession. After all, teachers are often the only adult in a classroom surrounded by children or adolescents. Even though teachers may be in a crowd, they are not among their peers. Now that we have transitioned to remote instruction, teachers do not even have the occasional encounters with their colleagues in the school hallways, the cafeteria, the teacher's lounge, etc. Consequently, many teachers voiced missing social contact with their coworkers, and with their peers in the grant project. One teacher summed up how different this summer was compared to the face-to-face instruction we provided last summer, "It just felt less like the community learning that being in a classroom afforded us last summer."

Another teacher said she could empathize with her students, "This was very difficult for me, and I think it gave me a taste of what my students felt. I really missed the informal discussions and the opportunity to ask questions when the question was on my mind." Teachers also missed shared mealtimes and reminisced about the breakfasts, lunches, and dinners they had shared the previous summer when they lived in the dorms on campus. One teacher said, "I loved making coffee and chatting with everyone before class. I loved the Famous Dave's barbeque dinner and all the working lunches where we talked about our assignments."

Providing the teachers with the opportunity to chat with their peers about what was going on in their lives, in addition to letting them commiserate, was very important. Even though we had sorted the teachers into breakout sessions regularly during the synchronous class sessions to participate in course activities, teachers asked for. Opportunities were provided for them to share what was going on in their lives. One teacher described this common sentiment: "I feel frazzled. I just need to vent."

We had near-perfect attendance for the synchronous sessions. Several teachers requested to be admitted into the Zoom sessions way before the start time. Many stayed after the sessions ended to hang out and chat and still others attended the virtual office hours regularly. Sometimes they had a question on the assignments; sometimes they wanted to discuss the course content; from time to time, someone had a professional dilemma they wanted advice on, but often teachers just longed for adult companionship and felt like hanging out with us. "I don't have a question. I just like being here with everyone," was a typical comment. Another teacher shared how impersonal communicating through computers seemed, "I missed interacting and being with my peers to brainstorm and support one another on projects. I cried several times due to frustration, things out of my control, connectivity, and the lack of human interactions. Zoom just isn't the same."

Another popular discussion was how teachers could battle the feeling of isolation and emotional and mental strain that comes from teaching remotely. In addition, finding opportunities to connect socially and perhaps team-teach were suggestions teachers made to address their loneliness and the following feeling, "The challenge I had, was not having my colleagues to collaborate with in person."

We modeled how a collaborative partnership focusing on engaging activities helps maximize interaction and gives everyone involved a chance to connect in the online context. One of the most popular activities we revamped for the online environment was a team-building exercise focusing on nonverbal communication, which involved correctly ordering images from István Bányai's book, *Zoom*. In preparation, we scanned and edited the images and selected Google Drawing to randomly distribute the images. Then the teachers joined through the Google link, and collaborated in real-time. Participants were asked to put the images in order without speaking. Having the teachers work in silence was an easy task; we just had to mute everyone's microphone in the video chat system. The discussion afterward focused on ways they could overcome remote barriers and connect in a productive, rewarding manner. One teacher had this to say about this powerful lesson: "I loved interacting with my cohort! I also especially loved the chance to 'talk' to my fellow teachers! I'm thankful to have been a part of it!"

Dealing with Technostress Is Overwhelming

In the 1980s, Brod, a pioneer in the field, described technostress 'as a disease' caused by an inability to adapt to computer technologies (Brod, as cited in Efilti & Coklar, 2019, p.

413). Nowadays, technostress is defined as anxiety or incompetence individuals feel while adapting to ever-changing technologies (Efilti & Coklar, 2019). Tarafdar, Tu, and Ragu-Nathan (2011) identified five conditions that are common causes of technostress: overload, invasion, complexity, insecurity, and uncertainty. The teachers concurred that they had been impacted by these aspects of technostress in their roles as both teachers and learners.

Techno-overload describes the ubiquitous nature of technology and highlights the pressure teachers feel about working more efficiently and faster when using it. Teachers expressed this overload stress from their administrators, who all too often assumed that since they were doing online learning, teachers could take on more classes or add additional students to an existing course. Teachers admitted that they were guilty of inadvertently causing technostress for their students by posting more assignments and/or projects than usual just because everything is online.

Techno-invasion is the reality that we can be reached anytime and anywhere (Tarafdar, et al., 2011). As addressed earlier, this assumption has resulted in blurred work-life boundaries. Teachers already spend extra time outside of their contractual expectations helping students, but now students can contact their teachers any time, and they anticipate immediate responses. Techno-invasion makes it hard for teachers to set aside time for themselves and, therefore, creates added stress.

Techno-complexity is the inordinate amount of time and effort teachers need to invest to master and effectively implement and manage new technologies. The teachers agreed that this expectation was the primary cause of the technostress they experienced as both teachers and learners. Since the abrupt transition to remote instruction and learning online this past spring semester came with no warning, teachers felt and are still feeling like they had to 'hit the ground running.' Many of them shared that they had received minimal to no professional development to help them redesign their curricula for the online environment. One teacher shared, "I had never taught online. I had a two-day training on Canvas, and now I am supposed to be an expert."

Many teachers feel the pangs of techno-insecurity since they are afraid that an inability to adapt to an online environment could result in job dismissal. Lastly, the closely related techno-uncertainty is compounded by the ongoing changes to never-ending technology updates. The demand for online learning software, video conferencing tools, and content delivery platforms keeps adapting to the COVID-19 restrictions and the evolution of teaching and learning.

Technostress has several different effects. One effect is that with the use of technology, teachers' office hours are extended, and teachers feel overloaded because work interferes with their roles at home (Johnstone, 1989). Technostress can also cause job dissatisfaction because of the frustration of using technology (Tarafdar, et al., 2011). Teachers are often left feeling overwhelmed or intimidated by technology when there is a system crash and lost

time. One teacher stated, "Trying to do tasks using new technology I was not familiar with, was the most challenging, because I felt rushed trying to learn something new." Teachers might also suffer from physiological symptoms such as fatigue, irritability, insomnia, frustration because of the increased mental loads and time pressures (Brovio, et al., 2018; Chiappetta, 2017).

We explored ways to minimize the technostress the teachers in our course were experiencing so they could use our strategies with their students. In the face-to-face classroom, an interactive timeline project in EDU 514 allows students to complete a jigsaw activity where they summarize key dates and events from the course readings that highlight the evolution of the Indian Education for All (IEFA) act. Usually, a whiteboard with instructor selected timeline dates and sticky notes where students collaboratively record and display the events were used to create a cohesive, graphic timeline. We wanted to include this powerful activity in the virtual environment, so this was one activity that needed to be redesigned to be used in an online setting. There are many options for virtual whiteboards, but several of them would require students to learn another application to use them effectively. Since our students were already using Google apps in our courses, it seemed reasonable to explore the capabilities of that application for the timeline activity. Google Slides fit perfectly for the conversion. The blank timeline was created with all the dates and information bubbles, and students, working in breakout rooms, were assigned specific dates to review. To share their findings, the students typed their contributions into the textboxes. Students were given the link to the Google slide in the Zoom chat, and working in groups, they filled out the timeline as seen in Figure 1. Variations of this interactive activity are something that teachers could use with their students.
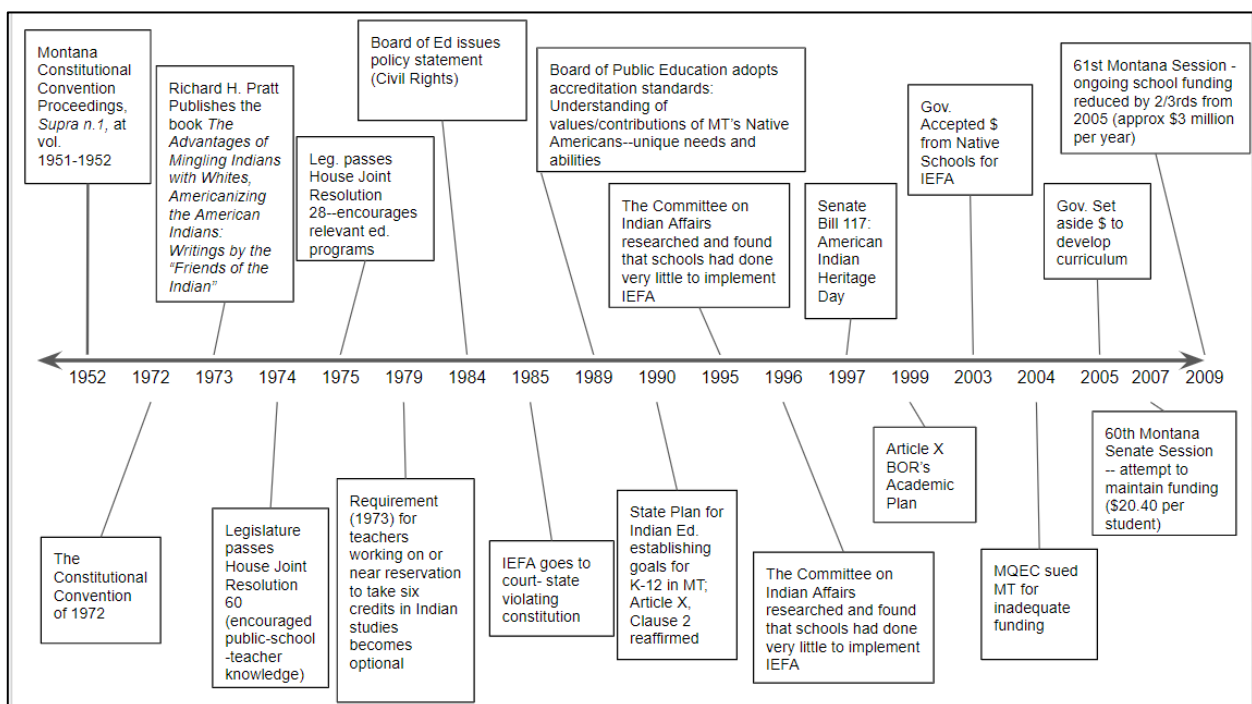

Figure 1. The EDU 514 IEFA timeline activity.

Another way to support teachers is to provide ongoing training and support materials to reference (Tarafdar, et al., 2011). For example, we offered two information sessions before our summer courses started. In the first session, we covered the D2l/Brightspace and Zoom basics like obtaining log-in information, connecting to the synchronous sessions, and accessing the course materials. When we polled the teachers in the first training session, we found that more than a quarter of the teachers had no online teaching experience before the spring 2020 migration to remote online learning. Novices who were unfamiliar with D2L/Brightspace voiced their concerns. One teacher shared his impressions: "It was very challenging to use new technology. I had a hard time staying organized and understanding what was going on." We recorded all sessions, so the teachers could refer to them when needed. Students valued the information sessions evidenced by this student's quote, "A shout out to our Technology Coach whose tech guidance made the process a lot smoother than it might otherwise have been."
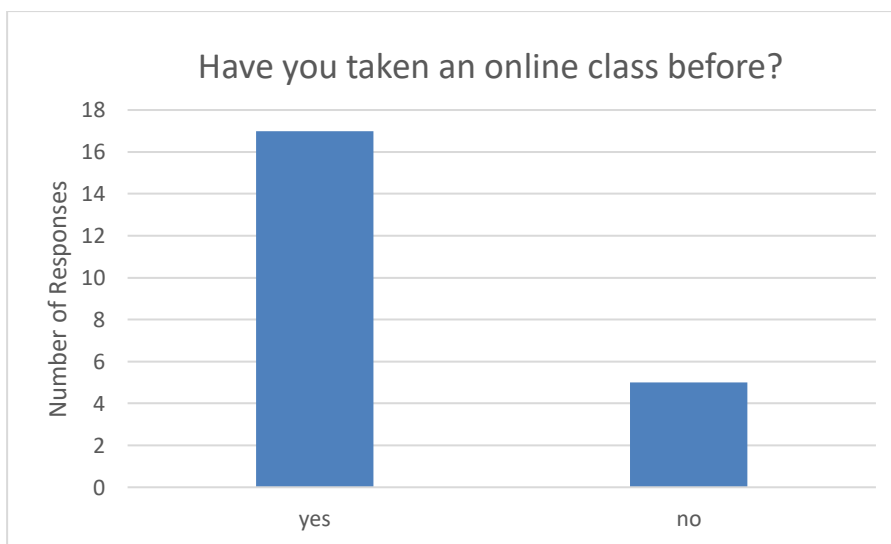

Figure 2. Responses from participants attending the information session before EDU 514 started.

Another way to minimize technostress was to engage in metacognitive practices by informing the participants why we decided to use the technology tools we selected and how they were supposed to enhance the teaching-learning process. Sharing the reasoning for our technology choices and involving the teachers in their effective use resulted in a more substantial buy-in from the teachers. This process also helped alleviate the participants' feelings of uncertainty. We also let them know that we would be available for help when things inevitably did not work like they were designed to work.

Another way to minimize technostress is to provide live tech support since there will always be issues when moving classes online. Being available to support students during office hours and providing contact information for IT support helps with technostress, but learners often need immediate assistance when issues occur during class time. It helps to have someone serve as your technology support person during the synchronous sessions of the course. Having to oversee the technology snafus that occur and monitor the instruction

detracts from sound pedagogy. Having someone take care of the technical issues that arise by helping students to connect, to play videos for the session, to sort students into the breakout rooms, to monitor the Chat, etc. allows the instructor to focus on the content delivery. When there is limited synchronous meeting time, every minute counts, and losing time fixing technical issues is frustrating for both the teacher and the students. Even if teachers do not have the advantage of a Technology Coach by their side, they could ask a knowledgeable student or arrange with another colleague to step into the role.

Our state has many rural dead zones with inefficient internet connectivity and very slow bandwidth. Several of the teachers voiced concern over their connection and equipment. One teacher shared, "Technology, in terms of my own hardware, and connectivity - which is lacking in my area, was really problematic, really stressful, and frustrating. There was an additional expense to me in that I had to get cell service for my iPad, and I had trouble accessing Word from the university even though I was told it was available and free but downloading was a pain. That could have been a connectivity issue." Connectivity and equipment issues often lead to aggravation when the technology prohibits you from participating, disrupts your ability to communicate successfully, or puts your credibility into question and results in mutual frustration. These issues are factors teachers said they would consider when instructing their students online.

Other teachers who had never taken an online course found locating the announcements, course content, and assignments difficult. Another teacher shared, "The only challenge I faced with the online model was locating materials at times. It took me longer to navigate D2L because there were so many resources to dig through."

Managing the aspects of your professional life adds to job satisfaction, but with the relentless technology changes that engulf us, this can add significant stress. As stated before teaching concurrent online courses, or teaching remote courses with high student counts, can be very time-consuming. Advice we shared for designing and managing remote learning included the following: spend time creating a virtual presence, provide students with clear communication of the best way to contact and interact with you, review Netiquette, i.e., the expected ways students are to interact with everyone in the class, note your instructor availability and protect your boundaries, lay out clear expectations, focus on trust-building and cooperative learning, and ask for help (Efilti & Coklar; 2019, Roy & Boboc, 2016; Welch Brasfield, et al., 2019).

Practicing Self-care Strategies Allows Teachers to Support Student Wellbeing

In our world today, stress is epidemic. In addition to the stress generated by the COVID-19 global health crisis and the current economic, social, and political crises in the United States, teachers are suffering from an overabundance of work-related stress since the transition to online instruction in the spring of 2020 and consequently their wellbeing is in jeopardy. According to the World Health Organization, wellbeing is described as "A state

of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity" (Devaki, et al., 2019, p. 34).

Providing support for teacher wellbeing is paramount since it may relieve the professional stress teachers are suffering from and deter them from leaving the profession (Welch Brasfield, et al., 2019). Addressing teacher attrition is key since "although the experience of stress or burnout is exceptionally damaging to the individual, the occurrence among educators has a deleterious impact on their student populations." (Welch Brasfield, et al., 2019, p. 167).

Interventions that support teacher resilience have been found to promote job satisfaction and retention (Devaki, et al., 2019; Eyal, et al., 2019, McClintock, 2020). Therefore, we need to foster workplace wellbeing and create, implement, and maintain wellness programs for teachers by creating supportive work environments, alleviating the stigma associated with taking care of oneself, and increasing teachers' coping skills to deal effectively with stress and anxiety. Thinking of teacher wellbeing, not as an expense but as an investment, not as self-indulgence, but as self-preservation, not focusing on 'me first' but on 'me too', will benefit teachers as well as everyone else (A. Khawaja & C. Broady, personal communication, August 10, 2020; L. Thum, personal communication, August 19, 2020).

Stress is a natural part of life; it is our body's response to harmful situations. Even so, there is a distinction between what Stiglbauer and Zuber (2018) referred to as challenge stress, as opposed to hindrance stress. Challenge stress can be positive and can push us to achieve goals, but hindrance stress or chronic debilitating stress, can cause significant mental strain and lead to serious health problems. Since chronic stress can interfere with one's ability to cope with daily responsibilities, and all the teachers in our courses shared that these have been very stressful times for them, they felt they had to commit to practicing self-care by learning techniques to handle their stress and manage negative emotions.

There are physical, emotional, and mental effects of stress on the body. Several teachers shared that they suffered from a combination of emotional, physical, cognitive, and behavioral symptoms, as described in a workshop offered by a licensed psychologist at the university (L. Thum, personal communication, August 19, 2020). We talked about the various symptoms associated with stress and brainstormed an expansive list highlighting the ways stress had manifested in our lives. During office hours, one teacher shared, "I can't think straight; I crave 'me' time."

Stress symptoms fall into the following categories: emotional, physical, cognitive, and behavioral (A. Khawaja & C. Broady, personal communication, August 10, 2020; L. Thum, personal communication, August 19, 2020). Emotional symptoms were at the top of the list the teachers shared and included these escalated characteristics: irritability, moodiness, frustration, feeling overwhelmed, not being able to relax, feeling depressed, and shutting down. The teachers shared that they suffered from the following physical symptoms: a lack

of energy, sleep disturbances, insomnia, digestive issues, headaches, frequent colds or flu, digestive problems, and a compromised immune system. Cognitive symptoms included: constant worrying, a racing mind, disorganization, lack of concentration, negativity, and an inability to focus. Behavioral symptoms the teachers shared were changes in appetite, a tendency to overindulge, procrastinating, and an increase in nervous behaviors, bad habits, and common vices.

We had several discussions around these stressors in the teachers' lives and what they could do to practice self-care. The teachers talked about numerous mainstream and alternative therapies they had tried to reduce their anxiety and stress. Some of their suggestions were as simple as focusing on breathing. "When I am super stressed, I remind myself to breathe. I focus on simple box breathing. I inhale, hold my breath, and exhale, all to a count of four. It immediately calms me." The teachers shared an assortment of breathing techniques they practiced. Others shared that deep belly breathing exercises could help them manage difficult situations under extreme duress. Other strategies the teachers had tried included: sipping calming teas, listening to soothing relaxation tapes, keeping a gratitude journal, chatting with a friend, going for a walk or a hike, or just spending time outdoors. "We are so fortunate to live in this state. Just getting outdoors in nature can instantly change my attitude." More time-consuming and complicated strategies the teachers tried included:

- Completing trauma training.
- Attending virtual retreats.
- Signing up for biofeedback therapy.
- Enrolling in self-care E-courses.

"I attended a Deepak Chopra three-day virtual retreat. It was so relaxing, so refreshing. It did me a lot of good."

At the top of everyone's list were exercising regularly and eating healthy, well-balanced meals, considered 'musts' in avoiding stress-related disorders. In addition, teachers shared seeing the most significant mental health benefits from adhering to the following practices: mindfulness-based stress reduction, a range of meditation techniques, tapping therapy, Tibetan singing bowl therapy, aromatherapy, acupuncture, reading self-help books, journaling, practicing gratitude, self-massage and other forms of massage, and mind-body activities like tai chi, jogging, and yoga were also popular.

The teachers believed that having a positive attitude was very important; "I am 'hooked on hope' and that is what has helped me keep a bright outlook during these crazy times." We discussed how important it is to validate and normalize how we feel when we are not feeling well. Since it is human nature to experience life's ups and downs, we agreed that it was helpful to acknowledge that there are times when we are feeling distressed, disappointed, and upset, and those feelings are normal. So, we want to eliminate judgment

and shame and accept that sometimes, as one teacher shared, "I remind myself; it is okay to not be okay."

The teachers also shared that they would be applying the ten minute-rule and not letting the technostress and frustration they experienced when they could not get the technology to cooperate raise their blood pressure. "After ten minutes of focusing on a technology issue, if I cannot solve it myself, I would apply the ten-minute rule and reach out to tech support." Belonging to a support group was also viewed as an essential practice. The teachers expressed how vital being part of this grant project cohort was for them. "The networking possibilities were endless and, commiserating with fellow educators helped me feel like the popular mantra of *we are in this together*, applied to us."

Above all, teachers felt that accepting things that they could control and letting go of something out of their control would help promote their positive wellbeing. Teachers need to forgo their past teaching approach and focus on normalizing their *new normal* by embracing innovative ways to connect online with students, parents, colleagues, etc. to make teaching online feel less isolating and less stressful. The teachers also committed to being realistic about managing their time effectively and a sensible work-life balance in this new virtual context.

In a music video by Jon Bon Jovi addressing the COVID-19 health crisis, the rock star shares this advice in the "Do What You Can" song refrain: "When you can't do what you do. You do what you can." We all decided this was a great approach to distinguishing between what we can and cannot control in our personal lives, at work, and when dealing with technostress.

DISCUSSION

The Oxygen Mask Metaphor

We have all flown and heard or disregarded the flight attendants' over-rehearsed airline announcement relaying some variation of the Oxygen Mask Rule. The advice to place your oxygen mask over your mouth and nose should the cabin lose pressure before assisting others emphasizes how self-care is not merely an indulgence but a necessity if one is to be of service to others.

This oxygen mask annoucement is a pivotal procedure for ensuring survival because if you run out of oxygen yourself, you cannot help anyone else with their oxygen mask. This is a crucial metaphor for those who spend the bulk of their time caring for others (parents, caregivers, doctors, nurses, and, yes, educators). Taking care of others can quickly deplete those that serve as caregivers. When caregivers do not take care of themselves, they can experience burnout, stress, fatigue, reduced mental effectiveness, health problems, anxiety, frustration, and an inability to sleep, and perhaps if ignored for too long, their imbalance

may even lead to death. To avoid experiencing these symptoms, teachers need to replenish their energy and reserves to continue to meet their students' needs.

Student and Teacher Wellbeing

If we want our teachers to create supportive, welcoming school environments, we need to empower, respect, and support them. Since student-teacher relationships play an important role in student success, neglecting the untold toll of teacher stress and burnout which may culminate in a lack of teacher continuity, may negatively impact the teaching staff, and harm students (Welch Brasfield, et al., 2019).

The chronic absenteeism, disruptive student behaviors, traumatic events, substance abuse, bullying, violence, and other adverse child and adolescent experiences that students confront pervasively impact student wellbeing and, through vicarious trauma, teacher wellbeing (Eyal, et al., 2019). Therefore, it is pertinent that we keep the health and security of teachers and students alike as a priority. Although most of us would agree that teacher wellbeing is a crucial factor in promoting and nurturing student wellbeing and academic success, teacher mental health is often neglected (Devaki, et al., 2019). If teachers are depleted, they have nothing to give to their students and may not support student wellbeing effectively. Ultimately, "Teacher wellness has been related not only to teachers' physical health but also to steadiness in schools and teaching effectiveness and student achievement" (Devaki, et al., 2019, p. 35).

A demanding workload, the feeling of having to be always on, the lack of resources, limited time to prepare and collaborate with colleagues, minimal opportunities for professional development, and even less technical support in addition to the burden of ever-changing expectations have taken a toll on educators (Welch Brasfield, et al., 2019). During this pandemic, work-life boundaries have been blurred for many teachers trying to instruct their students remotely from their homes while caretaking their families and working through the same financial and health stresses as everyone else. Since the overburdened, overwhelmed, exhaustion teachers have always felt has been exacerbated by COVID-19 related stress factors, we must support individual self-care strategies and group interventions in schools for teachers to protect their mental health.

Coronavirus Unknowns: The Airplane Metaphor

This unprecedented pandemic has made learning quite challenging because the target is constantly moving as we strive to reach a new normal. The expression "Building an airplane while you are flying it" and its numerous variations, such as "Building the airplane as it travels the runway," are beloved clichés out of Silicon Valley describing the iterative process in software development (Walker, 2016). The emphasis is on developing a product, shipping it immediately, and fixing problems as they arise, in contrast to the earlier approach of working out all of the kinks before shipping a new product. With the abrupt transition to remote learning in March of 2020, lamentably, this expression describes what

teachers were expected to do to teach their students remotely last spring and what they have needed to figure out for this fall.

Technology Challenges

Anxiety abounds for a mixture of issues as mentioned here, but the angst, apprehension, nervousness, and pressure teachers feel when dealing with technological challenges may surpass them all since most K-12 teachers had minimal training to address online instruction and they have not been afforded substantial technical support once classes commenced. For those who choose to remain in teaching, experiencing the stress and pressures of being novice online instructors can cloud their attitudes and erode their resilience. After all, all teachers were new teachers under these circumstances, even veteran teachers. Although many schools across the nation have embraced a combination of technological tools, they have not necessarily adopted a new way of teaching and learning.

In many ways, these circumstances have resulted in a rude awakening for teachers and society alike. Schools face barriers to modernizing and re-shaping how instruction takes place. With the increase in K-12 online learning, teachers need to address certain misconceptions, namely that 'good teaching is good teaching' regardless of the delivery model. The truth is, the pedagogical foundation, instructional strategies, tools, and learning theories differ from one teaching format to another (Hansen & Gray, 2018; Welch Brasfield, et al., 2019). The assumption that the skills needed for face-to-face instruction are identical and transfer easily to online instruction is not necessarily accurate. Education needs a technology strategy, such as a paradigm shift where we examine teachers' roles and the competencies and skills they need to develop to effectively deliver instruction online (Roy & Boboc, 2016). Additionally, "Educational research, reforms, policies, and expectations from all aspects of society have set high academic standards for students and teachers, especially in terms of 21st-century skills" (Roy & Boboc, 2016, p. 285). Even though there is a consensus that these high expectations should be met, the onus of responsibility in reaching these goals cannot be placed on the teachers alone.

Online Teaching

Although online education and the accompanying research are quite popular in higher education it was not the delivery option most frequently used in the K-12 sector prior to mid-way through the spring 2020 semester. As a result, little had been written about the best practices to use with elementary and secondary students in online virtual classrooms before the pandemic. Due to the importance of creating meaningful opportunities for interaction among students, with the teacher as well as with the content being taught, online instructors wear many hats, including "facilitator, instructional designer, process facilitator, advisor, catalyst, e-moderator, etc.," (Roy & Boboc, 2016, p. 297). Therefore, K-12 teachers need adequate professional development and technical support to design and nurture student-teacher interactions and create dynamic online learning communities. Teacher

education programs will have to model and promote virtual instructional methods to address the stigma that online or virtual education summons. In-service teachers also need retooling.

LIMITATIONS AND RECOMONDATIONS

This section analyzes the strengths and limitations of using the PAR methodology and shares recommendations for future research. One of the limitations of our study is the low number of participants. With only 34 participants, it is hard to generalize our findings beyond our cohort of teachers. It would have been beneficial to collect data from several more groups of participants to increase the sample size, but that leads to the following limitation. Since this group of participants was the last cohort for the TELLs grant project, with no continuation of this CLDE certificate program planned, it was not possible to include additional participants. Another limitation is that with the rollout of the COVID-19 vaccines and plans for schools to schedule fall 2021 face-to-face instruction in the coming year, the university faculty, as well as the grant participants, may move away from exclusive remote online teaching.

The findings from our study confirm extensive support for the use of PAR as a starting point for more substantial, more inclusive advocacy work due to the positive transformative effects the participants reported from partaking in this online synchronous learning experience. Participants provided feedback that supported our virtual course design and PAR methodology, which allowed them to work collaboratively with 'their peers and the insider' community-based researchers, i.e., the Principal Investigator (the course instructor) and Technology Coach of the TELLs grant project.

By empowering our participants to share their lived experiences, we have gleaned a deep understanding of the teachers' authentic experiences as learners in our online graduate coursework and the implications of their experiences as online learners for their teaching practices in a virtual or blended context. This realization has provided us with the knowledge to adjust and model best practices for connecting with students in an online teaching-learning environment. Having had the opportunity to have the teachers on campus in face-to-face coursework the previous summer semester and meeting, observing and communicating with them throughout the academic year, as well as providing hands-on support through Instructional Coaching before the second summer of coursework, we already knew our teachers and their students and had some perceptions of their unique challenges.

Now that the secondary teachers involved in the third cohort of the TELLs grant project have completed their CLDE certificate coursework and their work with the Instructional Coaches, as well as have taught their students using a myriad of instructional formats during the 2020-2021 academic year, a follow-up survey asking participants to share which of the challenges as delineated in the themes they identified with as learners in their

synchronous courses came into play during their teaching experiences. In addition, other instructors of virtual synchronous courses in higher education or at the K-12 level could benefit by using the PAR methodology to collect data on best practices to develop their courses further to meet the needs of their students. In our context, a team-teaching approach where instructors with content knowledge and technological skill complimented each other, students were able to express their needs to provide the ongoing necessary course redesign.

CONCLUSION

In addition to the stresses everyone has been experiencing during this global health crisis, school teachers have had to cope with additional work-related anxiety. The abrupt transition to remote learning during the spring 2020 semester left several educators scrambling to carry out their instruction in a virtual environment with little training, inadequate resources, and minimal support. As dedicated professionals, teachers have been working tirelessly to meet their students' needs and create engaging, motivating lessons while revamping their curricula for the new context despite the fact they have been suffering from change fatigue.

Using a Participatory Action Research approach, secondary teachers in a professional development grant project could share their reflections on their participation as learners in online graduate coursework. We were able to identify the following five themes to describe the teachers' experiences taking remote coursework and participating in multi-hour, daily synchronous online sessions: (a) juggling multiple demands in the home environment while learning online is distracting; (b) balancing work-life responsibilities is challenging; (c) teaching and learning in a virtual context is isolating; (d) dealing with technostress is overwhelming and (e) practicing self-care allows teachers to support student wellbeing.

This study provides insights into the teachers' challenges and the strategies we modeled to address the technology and other remote learning issues. We discussed the consequences of stress, burnout, and attrition in teaching and the necessity for teachers to practice self-care. We wanted to mitigate the stress our teachers have been experiencing since the spring 2020 transition to online instruction and prepare them to better support their students during the upcoming academic year.

Unfortunately, teachers often ignore their wellbeing while putting their students' health and safety before their own with detrimental consequences. Since students' wellbeing is tied so closely to teachers' wellbeing, we focused on identifying and addressing how teachers could minimize stress and anxiety through promoting self-care. We shared the teachers' reactions to their experience as online learners and the accompanying stress they experienced. The teachers also discussed their experiences as online instructors, disclosed the related symptoms they exhibited, and shared recommendations to cope with stress.

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