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Instructors' Perceptions of the Opportunities and Challenges of Integrating Technology in Crisis-Prompted Online Language Instruction in the Times of COVID-19

A DISSERTATION SUBMITTED TO THE FACULTY OF THE SCHOOL OF EDUCATION

OF THE UNIVERSITY OF ST. THOMAS

ST. PAUL, MINNESOTA

By

Shirley Nieto Kramer

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

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Dissertation Title: Instructors' Perceptions of the Opportunities and Challenges of Integrating Technology in Crisis-Prompted Online Language Instruction in The Times of COVID-19

We certify that we have read this dissertation and approved it as adequate in scope and quality. We have found that it is complete and satisfactory in all respects, and that any and all revisions required by the final examining committee have been made.

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ABSTRACT

This mixed-method study investigated higher education language instructors' experiences during the pivot from face-to-face teaching to online teaching during the stay-at-home order in the Spring of 2020. Eleven participants discussed their approach to teaching online for the first time. The present study provided a comprehensive view of language instructors' use of technology, their experiences, challenges, and lessons learned during this time of online teaching. The findings from this study revealed several themes. In regard to challenges, faculty were concerned about ways to adapt technology, enhance student-instructor interaction, allocate time, and enhance student participation. For the opportunities, participants discussed ways to create a sense of community in the synchronous online classroom and effective ways to communicate with their students despite the lack of physical proximity. Participants' final recommendations included evaluating their current instructional strategies and taking advantage of learning opportunities in their workplace.

An analysis conducted using the Community of Inquiry (CoI) and Substitution Augmentation Modification Redefinition (SAMR) frameworks provided insight on how language instructors pivoted to teaching online amid a global pandemic. Each of the CoI presences offered an overview of how language instructors used different approaches to teach online. Similarly, the present study revealed that most class activities used during this time remained at the substitution level in the SAMR framework. This study concluded with recommendations for future research and specific recommendations for online language instructors.

Keywords: COVID-19, higher education, online language instruction, Community of Inquiry, SAMR, social presence, cognitive presence, teaching presence, language instructors, language teaching, Zoom, challenges, opportunities, recommendations, student-instructor interaction, time, student participation, community, communication, instructional strategies, learning opportunities, effective online instruction, online language learning communities.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE: INTRODUCTION

On January 30th, 2020, the Center for Disease Control and Prevention reported the first case of COVID-19 in the United States. According to The Hill, there were over one hundred thousand cases of COVID-19 in the world, including over three thousand four hundred deaths. As of March 6th, 2020, the U.S. reported over two hundred and thirty-three cases and fourteen deaths. The same day, Minnesota reported its first case of COVID-19. Approximately a week later, on March 13th, Governor Walz issued executive-order 20-01 to declare a Peacetime Emergency to protect Minnesotans from COVID-19. Two days later, on March 15th, after the Minnesota Department of Health (MDH) reported additional COVID-19 cases, Governor Walz issued executive-order 20-02 authorizing the closure of K-12 schools temporarily to plan for a safe, educational environment.

This rapid transition to online instruction provided an entirely different experience than planned online instruction. Hodges et al. (2020) described it as "crisis-prompted remote teaching" rather than planned online teaching. The explanation behind it is that unlike a planned online environment, "crisis-prompted remote teaching" calls for a forced and quick adjustment and adaptation under short notice. Ultimately, the goal of pivoting to remote instruction under a pandemic has the sole short-term goal to ensure instruction continuity (Gacs et al., 2020).

The participants of the present study received notice to transition to "crisis-prompted remote learning" on March 12th. Given such a short time frame, instructors faced fast-paced changes and had to adapt quickly to a new way to deliver their classes effectively on March 17th. Suddenly, instructors found themselves using Zoom for synchronous class meetings and relying heavily on their institution's learning management systems (LMS), Canvas. Words like "Zoom," "meeting ID," "wait room," "breakout rooms," "share screen," quickly became part of

Academia's everyday language. As the situation with COVID-19 evolved, the University decided to remain fully online until the end of the Spring semester and then extended online learning into the Summer session of 2020.

Spring 2020 was unprecedented, one of a kind; undoubtedly, instructors' level of preparation and comfort with technology varied due to different factors, and unforeseen circumstances. The present study aimed to analyze how instructors navigated the transition from teaching face-to-face to teaching online as well as to learn how participants used technology in their classes amid a pandemic.

Statement of the Problem

This research intended to understand the implications of crisis-prompted remote language teaching. The purpose of the present study was to gain insight into the use of technology in language classes during a pandemic. In addition, I sought to expose issues that come from such modality. The Digital Learning Pulse Survey (2020) reported that 97% of higher education institutions relied on faculty members with no prior teaching experience to provide crisis-prompted remote teaching during this rapid transition. The survey also indicated that only 50% of higher education institutions had some faculty with online teaching experience. Gacs et al. (2020) described the forced and rapid transition as "an online triage course" (p. 381) because time limitations prevented a full needs analysis for any course, let alone an online course.

Research on planned online language instruction (Goertler, 2019; Hockly, 2015; White, 2014) and training and preparedness of language instructors to teach online exists (Kuure et al., 2016; Van Gorp et al., 2019). However, the challenge under COVID-19 circumstances not only derived from the disruptive nature of the pivot, but also highlighted the ramifications of switching from face-to-face instruction to "online instruction" in such a short time. Implications

in course design, student experience, and course accessibility are elements that form part of the complexity of instructor preparation to teach online under a pandemic (Gacs et al., 2020).

The unprecedented circumstances during COVID-19 and the immediate need to switch from face-to-face instruction to online instruction during Spring 2020 warranted research to fulfill the lack of knowledge base in the faculty development needed in online delivery and crisis-prompted remote delivery.

Purpose and Significance of the Study

The purpose of this research was to examine instructors' perceptions and experiences during the transition from face-to-face language instruction to online language instruction. This included how participants integrated technology during the COVID-19 stay-at-home order in the Spring of 2020. I conducted the present study to provide insight into the experiences of higher education language instructors during a unique and unprecedented situation.

The data gathered from this research could benefit other language instructors in the future. I planned to provide a repository of lessons learned from how technology-savvy and technology-novice instructors integrated technology in their language classes during these unprecedented COVID-19 times. In addition, I viewed my study and findings could include ideas for future faculty development training opportunities. This included the use of technology in the classroom and training for planned online instruction and crisis-prompted remote instruction.

Research Questions

The integration of technology in the language classroom is not new; however, the present study fills a gap in the literature. For that reason, this research aimed to gain insight into how instructors pivoted from face-to-face instruction to online instruction, including how participants used technology during the stay-at-home executive-order due to COVID-19. I adopted the following research questions to guide the present study:

1. What are the instructors' perceptions of the opportunities and challenges of integrating technology in online language instruction in the times of COVID-19?
2. How did instructors adapt to the challenges as well as take advantage of the opportunities associated with integrating technology in language instruction during the transition to and delivery of online language instruction due to COVID-19?
3. What recommendations about technology integration may be drawn from language instructors' perceptions and experiences?

Overview of the Chapters

The present study described the experience of higher education language instructors pivoting from face-to-face to online instruction during the COVID-19 stay-at-home order in the Spring of 2020. I interviewed 11 participants from a private university in the Midwest. In Chapter One, I introduced the research topic and established the research questions, significance of the problem, and definition of terms.

In Chapter Two, I outlined the findings into the following overarching themes (1) the 21st-century digital native; (2) uses of technology for language learning and teaching - 21st-century pedagogy; (3) immersive technologies; and (4) planned online language instruction.

These themes provided an overview regarding the current state in the field of language instruction in the 21st Century. I analyzed the content review themes through the lens of two frameworks: Community of Inquiry (CoI) and Substitution Augmentation Modification Redefinition (SAMR). The CoI framework contextualized the language classroom as a collaborative online learning environment. The SAMR model provided the lens to examine how language instructors integrated technology during the transition to crisis-prompted remote instruction.

In Chapter Three, I described the research methodology for the present study. I used a mixed-methods approach consisting of a quantitative survey and one-on-one semi-structured interviews with each participant. I described and discussed the process of data collection and analysis. The chapter concluded with a discussion of the present study's validity and reliability.

In Chapter Four, I provided a description of the findings from the quantitative survey and one-on-one semi-structured interviews. In Chapter Five, I applied CoI and SAMR as lenses to interpret and analyze the data. In Chapter Six, I summarized the present study and compared the findings with previous research. I discussed the study implications and made suggestions for future research.

Definition of Terms

COVID-19: A respiratory illness that spreads through close contact. It is highly contagious, and most states in the U.S. recommend wearing a mask, maintain social distancing, and not to go to densely populated public places.

Pandemic: A worldwide outbreak of a deadly virus that may result in death.

Social Distancing: The act of keeping distance between people (ideally 6 feet apart).

Stay-At-Home Order: A peacetime emergency executive order to prevent people from gathering in public places and traveling to stop the spread of COVID-19.

Face-to-Face Instruction: A modality of instruction that takes place in a physical environment where students and teachers interact with one another.

Planned Online Learning: A modality of instruction that requires planning and time to design activities for effective online instruction.

Crisis-Prompted Remote Language Teaching: An emergency modality of instruction to ensure teaching and learning continuity. During Spring 2020, professors faced crisis-prompted remote language teaching and rapidly adapted from face-to-face instruction.

Digital native: An individual born between 1981 and 1996; and those born between 1995-2015. For the purpose of the present study, both Generation Y and Z will be combined.

CHAPTER TWO: REVIEW OF LITERATURE

The present study examines instructors' perceptions of the opportunities and challenges of integrating technology in online language classes during the COVID-19 stay-at-home order in Spring 2020. This chapter begins with a literature review; I conducted several searches and used the following terms, singly or in combination: *generation z/gen z*; *digital natives*; *language learning/ second language learning/foreign language learning/Spanish learning; online language instruction; online language teaching; Computer Assisted Language Learning (CALL); Technology-Enhanced Language Learning (TELL); Mobile Assisted Language Learning (MALL); technology integration, higher education/higher ed*., *SAMR, Community of Inquiry, COVID-19.* Using these terms, I searched the following databases: Academic Search Premier, Eric, Jstor, ProQuest: Dissertations and Theses Global, and ScienceDirect.

I reviewed two hundred articles and identified the following overarching themes to organize my review findings: (1) the 21st century digital native; (2) uses of technology for language learning and teaching - 21st century pedagogy; (3) immersive technologies; and (4) planned online language instruction. These themes intended to provide a holistic view regarding the current state in the field of language instruction in the 21st Century. In the following section, I provide a detailed explanation of each theme and a brief discussion of the literature gaps. Finally, I conclude this chapter with an overview of the theoretical lens used to interpret the content review of the literature.

The 21st Century Student Profile: The Digital native

> Ask yourself this: if your earliest music experiences involved the option to curate your very own audio and video collection and you had access to it at any time and in any place, would you be as motivated to sit by the radio and listen to songs *someone else* had decided to play for you? (Pacansky-Brock, 2017, p. 8)

Today's undergraduate student population consists of two major generational groups: Y and Z. This section explored the similarities and differences between these groups to provide the background needed for the present study. I described differences between Generations Y and Z, illustrating Y and Z's learning styles, challenges, expectations for learning, and the implications and possible challenges of teaching languages to these two different generations.

First, "Y," or Generation Y, or better known as millennials, were born between 1982 and 2002 (U.S. Chamber of Commerce Foundation, 2012). This Generation has seen and had it all from the Internet to smartphones, text messaging, and online social media sites. They are proficient in technology, and constantly connected and communicating with their parents and peers. Z or Generation Z, "refers to those born from 1995 through 2010" (Seemiller & Grace, 2016, p. 6). Unlike Y, Z is a multitasking generation. In other words, they can do it all like watching television while texting or sharing something on social media- all from without leaving one place and with the aid of one device: their phones (Seemiller & Grace, 2016).

Digital natives learn differently than any other generation; Gen Z and Y prefer to participate in creating knowledge rather than serve as passive receptors of information (Black, 2010). Digital natives have an intuitive understanding of technology- they learn it quickly and use it in their everyday lives (Black, 2010). Digital natives do not remember and cannot imagine a world without digital technology, let alone the Internet (Frand, 2006). Because of their

advanced use of technology, they have higher expectations for using technology in the classroom (Levit, 2015).

Due to the ability for digital natives to access information instantaneously, they can lose interest just as fast due to how they consume information using and viewing Vine videos, Snapchat, and texts (Williams, 2015). Digital natives have shorter attention spans and want to learn something quickly to move on to the next topic (Zarra, 2017). Gagné (1985) and Gagné and Driscoll (1988) explained that learning happens when students are engaged in class. Likewise, digital natives thrive on instant gratification (Frand, 2006). Meaningful rewards serve as motivation as long as they are useful and can help them reach milestones that are steps toward their careers (Seemiller & Grace, 2016).

Digital natives are social creatures and seek to make connections with their peers (Earl, 2012). They are team-oriented and highly social individuals (McAlister, 2009). However, digital natives prefer to interact with their peers from a distance (Black, 2009). It is not uncommon for digital natives to prefer working on the same Google Document rather than meeting in-person or coordinating tasks via SMS or social media rather than speaking to each other in person (Seemiller & Grace, 2016). Digital natives have a more pragmatic view of traditional teaching approaches (Conefrey, 2016). They grasp realistic contexts, simulated environments, non-linear texts, and face-to-face teaching supplemented with material and activities online (Mill & Sharma, 2005).

This section provided an overview of the characteristics of the 21st-century student in the classroom. It gave a better understanding of their expectation of the use of technology in the classroom. To provide more context to this study, an overview of emerging technologies for teaching and learning languages follows.

Emerging Technologies for Teaching and Learning Languages

> "Teaching with emerging technologies is, by nature, experimental, and failure is an implicit step in an experiment" (Pacansky-Brock, 2017, p. 50).

In the Internet of Things (IoT) era, technology is a driving force in our society. People use it to interact with each other, pay bills, order groceries, perform bank transactions, check their health, play games, and work. Emerging technologies offer a plethora of tools to cater to everyone's needs, including learning a language. The American Council for the Teaching of Foreign Languages (ACTFL) adopted a policy statement about the use of technology for learning (2017), stating that technology provides opportunities for language instructors to provide students with unique and personalized learning experiences beyond the physical classroom space. Consequently, there are implicit expectations about using technology in the classroom to enhance and personalize student learning. This section provides a synopsis of the literature on Computer Assisted Language Learning (CALL) and Mobile Assisted Language learning (MALL).

Computer-Assisted Language Learning

Since the integration of technology and the World Wide Web (WWW), higher education institutions have adapted to technology's continual evolution. Instructors found creative ways to integrate technology into the language classroom. Computer-Assisted Language Learning (CALL) was created to meet the needs of language learners. Levy (1997) defined CALL as "the search for and study of applications of the computer in language teaching and learning" (p. 1). CALL research investigates the integration of technology and pedagogy of teaching languages with and through technology (Thomas et al., 2012). The literature on CALL focuses on the attitudes and effectiveness of various technology types for language learning (Thomas et al.,

2012). Walsh and Wyatt (2011) provided a list of CALL examples used in the past decade to teach Spanish to college-level students. Some of these earlier resources include websites, blogs, podcasts, online dictionaries, online lessons and courses, online social communities, and print resources and textbooks.

Technology provides instructors an opportunity to offer a more inclusive classroom by representing different cultures and voices within a culture (Chun et al., 2016). The use and implementation of different emerging tools in the language classroom provide opportunities to make learning a more meaningful experience. It offers ample possibilities to include real-life opportunities to ultimately motivate students to become better learners of the target language (Yanguas, 2018). The field of CALL provides a range of tools to assess and scaffold learning (Meskills & Anthony, 2015).

Language learning and technology has been a research field in the last 50 years (Lan, 2019). As mobile devices started to have high-functioning capabilities and became more popular and accessible to all, computers and CALL took a back seat to emerging technologies, such as mobile learning. Notably, it is essential to highlight that CALL set a foundation for using new language learning technologies. However, in recent years, researchers have used CALL and TELL (Technology-Enhanced Language learning) interchangeably because TELL offers a more comprehensive view of technology (Chang & Hung, 2019; Garrett, 2009; Hubbard, 2013; Walker & White, 2013).

Mobile-Assisted Language Learning (MALL)

As its names states, Mobile Assisted Language Learning (MALL) consists of the study of mobile devices in the language classroom. MALL offers innovative ways to revolutionize

language instruction as it provides a new, straightforward, and spontaneous way to learn (Miangah & Nezrat, 2012). Some of the advantages of mobile technology include its ease of use, convenience, and, most importantly, that it does not require any change of behavior from the user (Roberts & Rees, 2014). Mobile technologies in the classroom do not require much effort or modification from the student perspective. However, to effectively implement MALL, specifically implementing the use of an app, requires careful planning and flexibility from the instructor's side (Burston, 2016). This section provides an overview of the most recent literature on MALL.

Cho and Castañeda (2019) explored the correlation between students' motivational and active engagement in a second language (L2) after participating in game-like activities with a grammar-focused mobile application in Spanish courses. They administered a survey to evaluate engagement, course satisfaction, and the learning experience to eighty-two participants in six Spanish classes. This study conducted two tests: one before introducing mobile game-like activities to students; and another one post-participation to measure engagement and course satisfaction, and to evaluate game-like activities. Additionally, 11 students participated in semi-structured interviews at the time of the post-test. The results revealed that mobile applications that resemble "game-like activities" and infuse grammar make learning a language more meaningful and productive. Furthermore, participants also reported increased course satisfaction.

In a mixed-methods study, Gonulal (2019) explored English language learners' attitudes towards the use of Instagram as a MALL tool. A total of 97 students participated in the study. Results indicated that learners put more effort into staying in the target language when using Instagram as a learning tool. The app offered a more meaningful way for learners to learn

vocabulary in a real scenario. It provided a sense of community that allowed participants to interact with other peers. However, findings showed that the app is not ideal for practicing grammar because it does not correct that type of mistake. This study provided a practical look at MALL and demonstrates that participants have positive attitudes towards using Instagram. It suggested that student engagement increases when students have a sense of belonging in a community. Furthermore, this study indicated that apps like Instagram provide more meaningful opportunities to engage with the language in a real context.

Using a semi-structured approach, Licorish et al. (2018) interviewed 14 students (ten males, four females) about the use of Kahoot! (an internet-based game app) during a course and the tool's influence on classroom dynamics, engagement, motivation, and learning. The research outcomes showed that students have a positive experience with Kahoot! because students were motivated and engaged by it. In other words, students were fully engaged and less distracted because Kahoot! improved the quality of teaching and learning. This study confirmed the importance and advantages of using an engaging tool that incorporated interactive elements into course materials and makes the learning experiences appear fun and engaging.

Rosell-Aguilar (2016) investigated how language learners engaged with apps for language learning in their natural settings. Eighty-five students participated in a questionnaire, and seven volunteers participated in a follow-up interview. These participants were adult learners attending a weeklong residential school in Spain. This study looked at device preference and explored the apps that students downloaded to their phones and their use. The results indicated that most users download apps to practice vocabulary (82.26%), to translate (66.13%), and to practice grammar (58.06%). Research indicated that 41.94% of participants use apps for reading, while 38.7% used apps to practice listening. In addition, 11.29% of the participants used an app

to practice their speaking skills and interact with peers. Rosell-Aguilar revealed that learners prefer apps due to convenience. Students are more likely to interact more with an app not just at a given time, but also whenever and wherever they go.

Berns et al. (2016) used MALL to explore learner motivation through an app's use. This study used VocabTrainerA1, an app that combined individual and collaborative learning tasks to solve a murder mystery game. To measure learning outcomes, students took a pre-test and a post-test. The data indicated that the app motivated and helped learners improve their language skills. Learner feedback also suggested that the competition contributed to their intrinsic motivation. Additionally, the app allowed them to communicate (in writing) with their peers in the target language. This case-study reiterated that the advantage of using MALL encourages students to stay motivated. Furthermore, the additional dimension of collaborative and individual learning tasks kept the students accountable for their learning.

In sum, the use of technology in the language classroom has unveiled new teaching and learning opportunities. It provides the necessary tools to be creative and innovative and make learning Spanish "an experience." Furthermore, technology grants accessibility to diverse cultures and contexts in language learning (Kern, 2015). The following section provides an overview of language instruction delivery methods. As this review of the literature showed, most research focused on the experimental side of mobile language learning (Burston, 2014).

Immersive Technologies

> The advances of computer-mediated communication tools enable teachers and students located in different geographic and time zones to engage in interaction and communication with each other in a virtual world (Cheng, T., 2015, p.8).

Immersive technologies provide a range of tools and ways to create immersive learning experiences for language learners. Students who learn a language in a study abroad context show a higher L2 proficiency and a significantly reduced L1-L2 interference than those who do not study abroad (Linck et al., 2009). Due to that, while study abroad may not be an option for everyone, immersive technologies provide an alternative solution by enabling a learning environment where the "real world" and the digital world merge (Blyth, 2018).

VR provides unique opportunities for learners to participate and interact in real-life scenarios (Jerald, 2016). VR can make learning more exciting and fun by providing opportunities to explore places that would not be possible to examine otherwise (Piovesan et al., 2012). Likewise, VR activities can captivate learners to be more attentive, engaged, and motivated to learn. Some examples of current VR apps for language learning include: Mondly VR (pronunciation and conversation), ImmerseMe (speaking), VirtualSpeech (listening and speaking skills in a business context), Crystallize (vocabulary acquisition and non-verbal communication skills in Japanese), Dynamic Spanish (grammar, vocabulary, and listening), House of Languages Virtual (for vocabulary acquisition), etc.

Research involving VR ranges widely from earlier studies of the use of web-based tools such as Second Life (Cem, 2012) and Croquelandia (Sykes, 2008); VR applications (Melchor-Couto, 2016); to learners' perceptions and attitudes towards virtual environments for language learning (Castaneda et al., 2017; Henderson et al., 2012); to learners' outcomes in VR (Alfadil, 2017; Lan et al., 2019; Van & Lan, 2019). This section will provide an overview the most recent research of immersive technologies: Virtual Reality (VR) to better understand how language instructors employ it in the language classroom.

Immersive tools like Google Carboard and Google expeditions have also been studied and used in the language classroom. Xie et al. (2019) explored the benefits and challenges of using these tools to learn Chinese. Participants in this study included 12 students taking an advanced Chinese course during a regular semester. During this time, participants used Google Expeditions to create a guided tour of selected locations. Each group presented once during the semester. After each presentation, participants took a quiz to assess their learning. Data collection included class observations, student reflection papers, and twelve semi-structured individual interviews. Results showed that using VR tools shifted learning experiences from instructor-led to student-led. Moreover, participants showed more interest in learning Chinese and exploring more about the culture. This study recommended allocating time for scaffolding activities to better prepare students for grammar, pronunciation, and vocabulary. Similarly, it suggested surveying students about any issues that they may run into while preparing their presentations. Last but not least, researchers recommended allocating additional time to address unforeseeable problems with technology. In summary, this study demonstrated that VR tools contextualize learning experiences, provide realistic contexts, and offer authentic communication opportunities.

Creating an immersive feel into a culture proved invaluable. Zimotti (2018) investigated a custom-design VR that simulates natural settings in the Spanish culture. Twelve undergraduate students participated in the study. Six participants were in a control group (traditional training), and the other six were in an experimental group (VR training). Both groups participated in pre-departure training, either using a conventional approach or VR. This study utilized a mixed-methods approach and collected data through interviews, journal entries, questionnaires, and participants' recordings while using the VR platform. The results indicated that traditional

training was less memorable and less exciting than the experimental training. Furthermore, students in the experimental training adjusted more quickly than those in the control group. This study demonstrated how students may benefit from using VR experiences to engage with the target language differently. Similarly, it provided students a way to feel immersed in an authentic context.

Engaging in the target language and learning new vocabulary and expressions can be challenging; however, immersive technologies offer promise to address these challenges. Alfadil (2017) explored student learning outcomes and student achievement acquiring vocabulary using a virtual reality game, House of Languages. Sixty-four students in a range of ages 12-15 taking ESL classes in Saudi Arabia participated in the study. The researcher assigned participants to one of two groups: (1) a control group who only used traditional learning materials such as textbooks, worksheets, etc.; and (2) an experimental group who used *House of Language*s on two occasions. Students from both groups took identical pre and post vocabulary tests aligned with the vocabulary from a lesson to measure vocabulary acquisition. The results revealed that the experimental group scored significantly higher ($x = 81.46$, $sd = 18.68$) than the control group ($x = 71.16$, $sd = 13.09$). Furthermore, students in the experimental group had positive attitudes toward the VR game. Students were engaged and attentive while interacting with the VR game versus students in the control environment. This study demonstrated that providing students with a way to immerse themselves and have "hands-on" experience with the language enhanced their language learning and vocabulary acquisition.

Similarly, Gupta (2016) examined the use of Ogma, an immersive VR language learning environment, for vocabulary acquisition in Swedish. Thirty-six participants were part of the study; their ages ranged from 13-50 years old. Half of the participants in this study used

flashcards to learn vocabulary, while the other half used a VR system to learn the same vocabulary. Initially, participants took a test after memorizing or exploring the vocabulary using the approach assigned to them. A week later, they took a test to assess their learning and pronunciation of the words. Results indicated that participants from the VR group scored significantly higher in the vocabulary quiz than their counterparts. In addition, VR participants expressed positive attitudes toward the VR method. For example, a higher percentage of the VR group participants rated the experience "very enjoyable" and "very effective" than those in the traditional group. It is worth noting that the group using flashcards had a higher initial score than the VR group. However, the benefits of VR, such as higher memory retention, higher perceived enjoyability, and effectiveness, outweigh the initial higher scores. This study presented the potential opportunities for the use of VR in vocabulary acquisition.

Despite the benefits and potential of immersive technologies, Bonner and Reinders (2018) presented practical ideas and raised the challenges of the use of VR in the language classroom. These considerations included: (1) time investment, (2) socioeconomics, (3) student privacy, and (4) sustainability. First, Bonner and Reinders highlighted that before planning and using immersive technologies, instructors should consider how much time such technologies will take to design, develop, and facilitate their course-content. They recommended taking into consideration how much more time students might have to spend using such technologies. In addition, instructors need to allocate time for troubleshooting issues. Second, instructors need to be conscious about the impact of such technologies in their students' socio-economic situations, that being having the latest phone, and/or being able to pay for a monthly subscription to use VR. Third, the authors raised significant concerns about using immersive technologies applications on students' phones due to the possible accessibility of students' personal information and

location. Moreover, instructors need to consider other issues, such as student privacy and safety when using such technologies. Fourth, instructors should recognize possible issues with immersive technologies' sustainability as their prices tend to increase rapidly. In summary, Bonner and Reinders, highlighted the potential of using immersive technologies; however, the challenges they raised aimed to provide a better and safe student experience.

This body of literature informed this study about the use of VR technologies in language instruction. These studies evidenced the potential opportunities and challenges for the use of VR for learning a language.

Planned Online Language Instruction

First, in this section, I provided descriptions of planned online instruction to provide an overview of the subject. Then, I presented the literature on planned online language instruction to provide a clearer perspective on the topic.

Conventional and planned online modes of delivery are sometimes on opposite sides of the spectrum; however, both offer unique learning experiences. On the one hand, some argue that online instruction provides the promise of flexibility and convenience (Clark-Ibanez & Scott, 2008; Schulte, 2004). In contrast, others say that face-to-face delivery offers a more dynamic and tailored experience (Urtel, 2008). Other studies have demonstrated that there is no significant difference between face-to-face and online instruction (Cummings et al., 2013; Dalton, 2001; Siebert et al., 2006; Waschull, 2001; Wilke & Vinton, 2006). Planned online instruction entails a tacit understanding from all parties (instructors and students) from the beginning; in other words, instructors and students intentionally chose this format (Gacs et al., 2020).

The basis for a well-planned online course relies on keeping students' learning experiences relevant and communicative; that is to say that it should include all communication modes and skills (Gacs et al., 2020). The following section highlights the most recent literature about online language instruction.

To address the abrupt shift from face-to-face and blended learning to fully online instruction, Payne (2020) provided practical guidelines on online language instruction. These guidelines included suggestions on how to design an engaging and effective online language course. This article's premise was to use sequencing activities to improve student performance using scaffold activities to target different skills while providing ample time for students to process each of them. Similarly, the author proposed utilizing a microlearning approach to present information in smaller pieces, instead of recording, say, an hour of lectures. Another practical approach entailed letting students explain a grammar construct to their peers. This approach encouraged students to take ownership of their learning and helps them achieve learning outcomes set for the course. Payne acknowledged how challenging it is to try to replicate in-person classes in an online environment. However, the article highlighted that regardless of technological limitations, it is possible to design engaging opportunities that are enjoyable and meaningful for students.

Creating engaging online language learning opportunities for students takes careful planning. Diaz (2018) explored and identified the issues and needs that language instructors face when teaching online. Participants in this study were instructors teaching online and hybrid Spanish courses. Diaz conducted semi-structured interviews to inquire about instructors' experience teaching online. Qualitative responses revealed instructors need to be part of a community of inquiry to exchange ideas and to support each other. In addition, this study

identified attributes for effective online language instruction such as creativity, flexibility, adaptability. The results also highlighted the importance of effective communication between instructors and students; it indicates that teaching presence is vital for a successful learning experience. This study supports the validity of CoI and provides some insight into instructors' perspectives of teaching languages online.

Cheng (2015) investigated language instructors' online teaching experiences and their understanding and adoption of instructional design strategies. A total of forty-six world language instructors from different colleges and universities in the U.S. participated in the study. This mixed-methods study employed a questionnaire survey, individual interviews, and course materials to document the analysis. The results suggested that teaching languages online offers the promise of flexibility; however, online language instructors can spend between fifteen to forty hours a week teaching an online language course. The data also revealed that language instructors were less likely to interact with learners when courses were entirely or mostly asynchronous. This study identified the lack of appropriate technological support and training for online language instruction. Similarly, online language instructors expressed a need for collaboration opportunities for designing online language courses. For this reason, the findings suggested that online language instructors do not necessarily implement instructional design strategies as frequently as needed. Cheng provided further insight into the need for faculty development specifically for online language instruction. In addition, these findings align with Diaz' (2018) research and validates the importance of collaboration between peers when designing an online course.

Equitable to collaboration, instructional design plays a key role when planning an online course. Moneypenny and Aldrich (2016) offered insight into the intersectionality between

instructional design and language pedagogy. The authors claimed that students may achieve the same proficiency skill level in either a language face-to-face or online learning environment when instructors carefully follow the guidelines that instructional strategies offer. However, the language courses analyzed in this study applied Don's five fundamental considerations for Online Learning in Foreign Language Courses (hearing, variety of input, creation of speech, relevant feedback, significant context; Don, 2005), and Hauck's approach to instruction as the construction of knowledge in online learning environments (Hauck, 2006). Ninety undergraduate students taking online, and face-to-face language courses participated in this study. Upon completing a two-semester sequence of Introductory Spanish, students took The Versant test to assess their proficiency. The data revealed that students taking online language courses or online language courses can achieve the same proficiency level. However, it underscored the importance of utilizing instructional strategies to design and facilitate a language course in person and online.

Research regarding online language instruction primarily confirms an immediate instructional need for professional development. This research provides some background information about online instructors' needs and experiences teaching online.

Gaps in the Literature

The literature review shed light on the lack of research addressing first-year online language instruction during a pandemic. While the literature emphasized how some language instructors use different emerging tools in both face-to-face and online environments, a lack of studies existed regarding instructors' experiences during the transition from face-to-face instruction to crisis-prompted remote teaching. Similarly, there is a lack of studies that focused on instructional strategies to engage online language learners during a pandemic.

Correspondingly, most MALL research projects do not include theoretical frameworks. This is a gap that the present study aimed to address by looking into how instructors integrate technology and identify the pedagogy they use to deliver content and engage with students. This research could potentially expose implications for future faculty development training opportunities, including the use of technology in the classroom, as well as the training for planned online instruction and crisis-prompted remote instruction.

Theoretical Framework

> A good melody enhanced by good harmonies results in great music. This is an apt metaphor for effective teaching and learning with technology: Good teaching is the melody, and good technology integration adds the harmony, resulting in greater impact. The whole is greater than the sum of its parts. (Magaña, 2018, p. 9)

I analyzed the content review themes through the lens of two frameworks: Community of Inquiry (CoI) and Substitution Augmentation Modification Redefinition (SAMR). The CoI framework is a collaborative approach to provide a holistic learning experience through social, cognitive, and teaching presence. The CoI framework contextualizes the language classroom as a collaborative online learning environment. The SAMR model is a roadmap to integrating technology in the classroom as it provides the tools to analyze degrees of the use of technology in the classroom. The SAMR model provides the lens to examine how language instructors integrated technology during the transition to crisis-prompted remote instruction. The present study used both models due to their implications for designing effective learning environments online. A brief discussion follows each framework's explanation to provide further evidence on how both models align with the current research.

I chose these frameworks based on their practical, hands-on implications to the use and integration of technology in the online classroom in COVID-19 times. In this section, I describe each framework and outline the most current literature of each. In addition, I provide information about a third framework, Technological Pedagogical And Content Knowledge (TPACK), and discuss its importance in the field as it provides contextual knowledge in instructors' decisions to design and deliver their course content. A detailed discussion of each framework follows.

Technological Pedagogical And Content Knowledge (TPACK)

The TPACK framework is built on Schulman's (1986) Pedagogical Content Knowledge (PCK) model that focuses on the interactions between pedagogical and content knowledge (Koehler & Mishra, 2006). However, TPACK includes an additional dimension, technological knowledge, to Schulman's model. In other words, TPACK describes the complex interaction between knowledge of student thinking and learning, knowledge of the subject matter, and knowledge of technology that suggests effective integration of technology in course design (Harris et al., 2009). That is to say, the effective integration of technology requires instructors to think about pedagogical implications of the use of technology and to evaluate its role to facilitate knowledge. To put it differently, TPACK provides a framework to treat technology in a more holistic way rather than an "add-on" in their pedagogy (Koehler & Mishra, 2006).

The core of TPACK embodies three dimensions of knowledge: (1) Content Knowledge (CK), (2) Pedagogical knowledge (PK), (3) Technological Knowledge (TK) (Koehler & Mishra, 2009). Content Knowledge (CK) comprises a deeper understanding of the subject matter, including theories, frameworks, facts (Harris et al., 2009). In other words, content knowledge is the instructor's area of expertise. For example, in world languages, content knowledge would translate into understanding the language, theories, grammatical structure, historical context,

language variation, cultures, etc. Pedagogical knowledge (PK) consists of instructors' knowledge and understanding of methodology, including the philosophy of teaching, teaching, learning, assessment, etc. For example, world language instruction, instructors may choose between a communicative approach or a task-based approach or adopting a content-based approach rather than just focusing on a specific skill, like grammar. Technological Knowledge (TK) is a dimension that is continuously evolving, just like technology does. This dimension describes the instructors' ability to understand the technology and how to use it, such as Canvas, Blackboard, D2L, Google Classroom, etc.

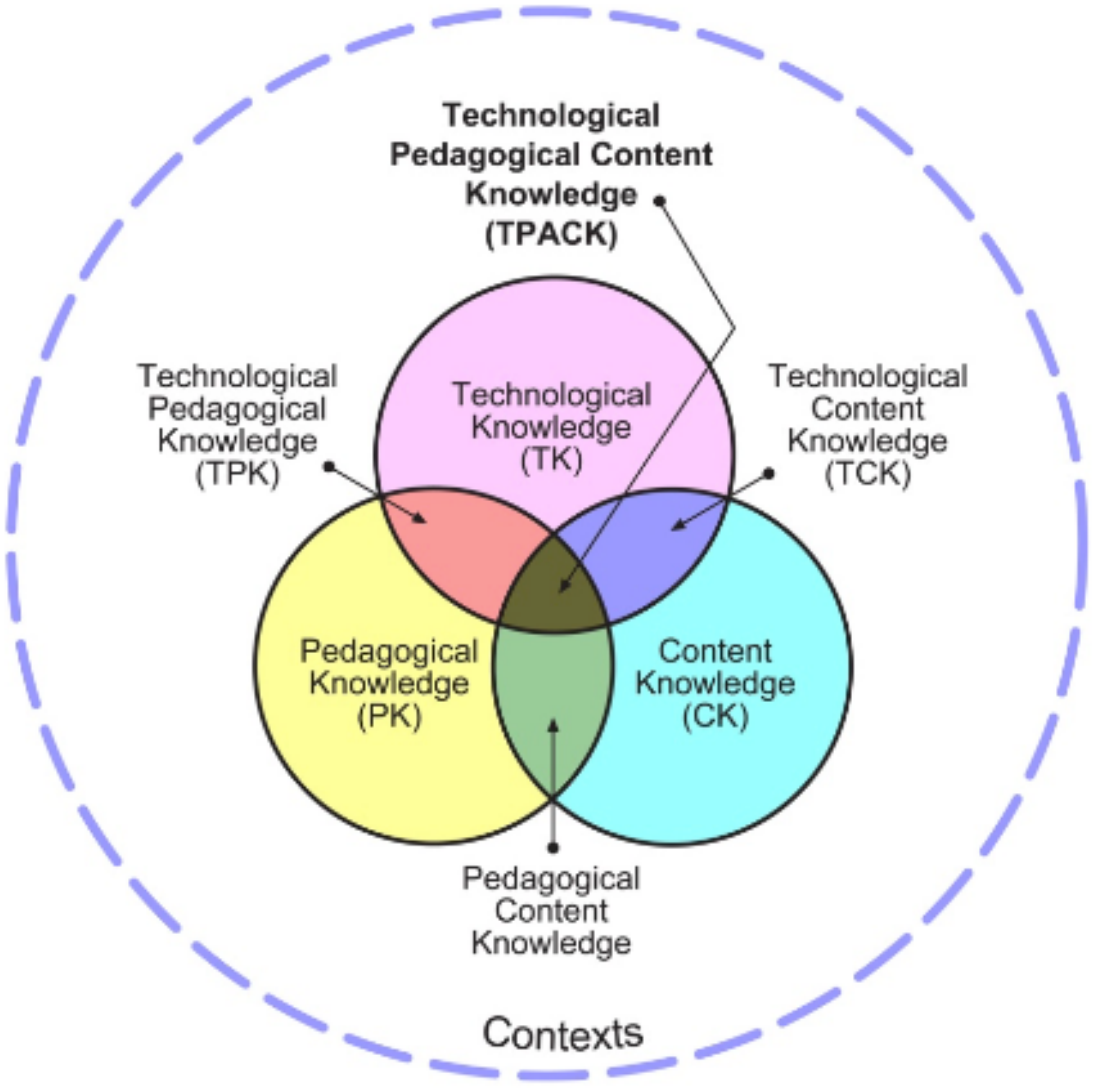
TPACK's three dimensions are not isolated constructs. Instead, each dimension interacts with each other and contributes to an overall body of knowledge: (1) Technological Content Knowledge (TCK); (2) Technological Pedagogical knowledge (TPK); and (3) Pedagogical Content Knowledge (PCK)(Koehler & Mishra, 2009). Technological Content Knowledge (TPK) entails how instructors understand the interaction between technology and content and how to use technology to facilitate content, benefits, and limitations. In other words, TPK is about instructors' ability to choose specific technology to teach specific content and vice versa. For example, when teaching a language, an instructor could use VoiceThread to reinforce pronunciation and content to assess all students' progress versus not using technology to evaluate a handful of students.

Technological Pedagogical Knowledge (TCK) refers to how technology can transform teaching and learning. Since not all technology is created solely for education, educators reform, redesign, and customize their pedagogical purposes (Harris et al., 2009). Therefore, TPACK delves into understanding the affordances and constraints of such technology. For example, one application of TPACK is to use Zoom for teaching languages, specifically, re-designing "break-

out rooms" for collaborative language activities. Last, Pedagogical Content Knowledge (PCK) refers to the knowledge that instructors acquire about teaching and learning through time and experience (Cavanagh & Koehler, 2013). For example, in Spanish, learning better ways to explain a specific grammatical point, culture, or pronunciation.

Figure 2.1

The TPACK Framework



Note. Image reproduced with permission of the publisher, © 2012 by tpack.org from http://tpack.org.

Recent literature from Mishra (2019) proposes a slight change to the diagram to the outer dotted circle to rename it from “Contexts” to ConteXtual Knowledge (XK) to provide and describe a comprehensive look at the instructors’ role in an institution. This change would entail taking into account a more holistic view of the system and looking at the correlation of power dynamics and evolution. Consequently, the author proposed “X” in XK, to highlight ConteXtual Knowledge as a variable that depends on different constraints that instructors have to work within their institution and situation.

TPACK provides an overview of the contextual knowledge that affects instructors' decisions to design and deliver their content. It provides a framework to contextualize the many roles that instructors play when integrating technology to develop and facilitate their courses.

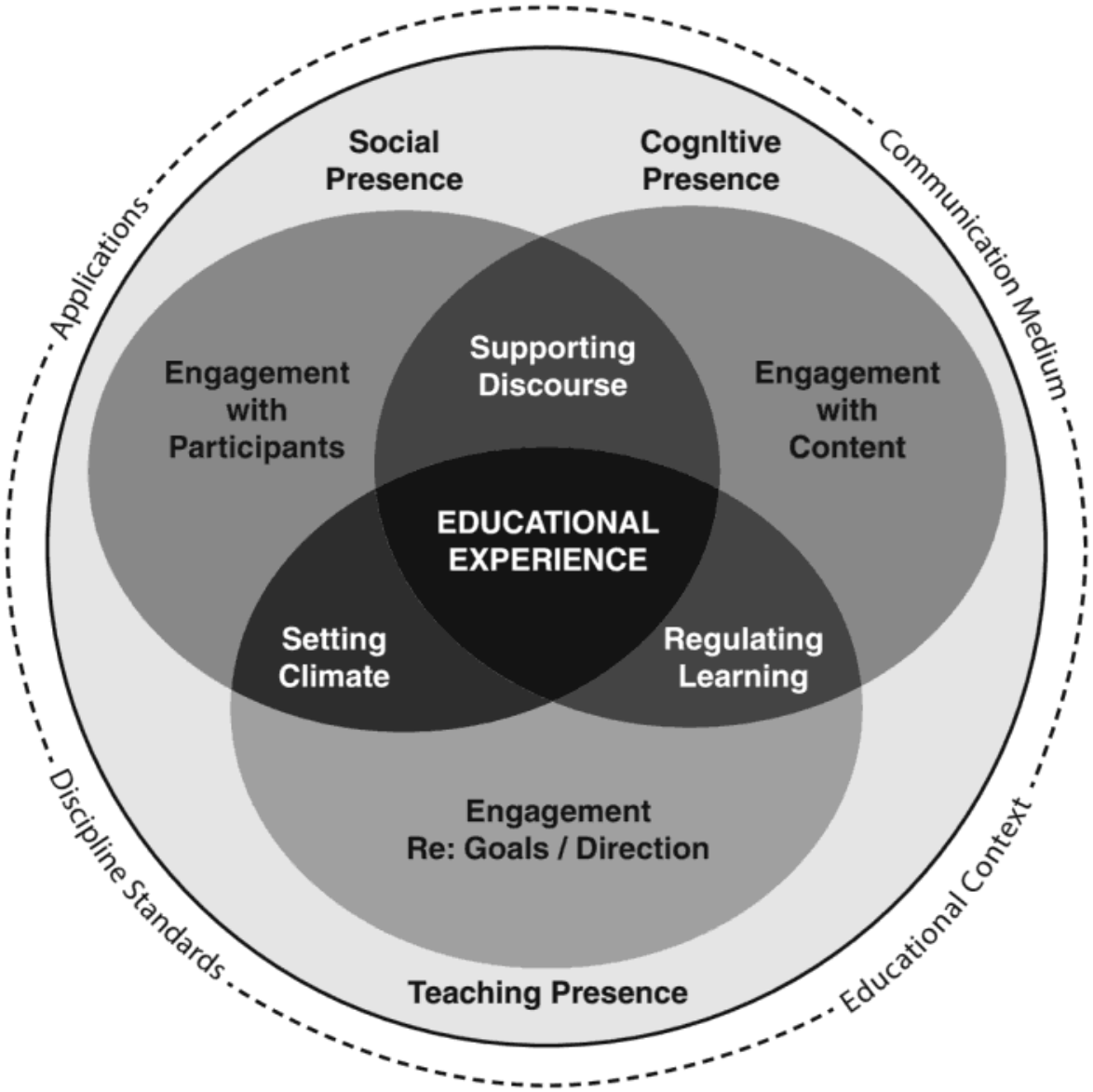
Community of Inquiry (CoI) Framework

The Community of Inquiry (CoI) framework uses John Dewey’s pragmatic view of education as its foundation (Swan et al., 2009). Dewey believed in a hands-on approach where learning occurs from observation and experience, both individually and interacting with peers (Dewey, 1938). CoI aligns with constructivist theory due to its collaborative and interaction components between learners. The CoI framework is a constructivist-collaborative approach to online learning (Arbaugh et al., 2008). Tellingly, both constructs study learning theory and the nature of knowledge (Harasim, 2012). Learning takes place under the assumption that people construct their understanding and education based on their experiences. The CoI framework provides the basis to create an active online environment where students can successfully participate online.

In the Community of Inquiry (CoI) framework, learners construct learning by engaging in critical and reflective discussions and working collaboratively in a community of inquiry (Garrison, 2011). In other words, CoI is based on a community of learners who are supportive of each other's learning and understanding. This dynamic construct allows participants to deepen their learning and understanding even more when part-taking the role of teacher and student (Garrison, 2016). Similarly, a community of inquiry provides learners with an opportunity to be more engaged with the material and further their learning outcomes (Lipman, 2003). Garrison's CoI framework presents three interdependent dimensions or presences: social presence, cognitive presence, and teaching presence. A discussion of each presence follows. Even though I go over each presence individually, it is worth stressing that they intertwine and overlap.

Figure 2.2

Community of Inquiry (CoI) Framework



Note. Garrison produced this figure, summarizing the three dimensions/presences of the Community of Inquiry framework. From "Thinking collaboratively: Learning in a community of inquiry*,"* p. 25. Copyright 2017 by Taylor and Francis.

Social Presence

Social presence connects and places learners in a community of learning that allows them to develop trusting relationships with their peers and project their true selves (Garrison, 2009, 2016). Social presence promotes and fosters relationships between participants. Learning is no longer instructor-centered but rather student-centered, and the instructor becomes a learning facilitator. Social presence has three categories: (1) emotional (affective) expression, (2) open communication, and (3) group cohesion. Social presence is about creating a learning community with a defined purpose/objective (Garrison, 2017). In social presence, open communication is essential to establish a sense of belonging for a learning community to be effective (Garrison, 2017).

Previous research (Hollis, 2014; Kazanidits et al., 2018) explored social media's use and its impact on learning experiences. These studies concluded that social media platforms, such as Facebook, resulted in a higher social presence. Palmer (2020) provided other ways to engage students successfully and encourage social presence in an online environment. Palmer recommended "students [should] post profiles or introductory videos of themselves and their interests; use short videos to introduce the course, explore different topics, and access tech "how-to" videos; use real-time communication channels such as text, chat, or shared whiteboard space; have team-based; etc." (para. 6).

Cognitive Presence

Cognitive presence is the extent to which participants in a community of inquiry can construct and confirm meaning from critical thinking and discourse (Garrison (2017). According to Garrison (2017), cognitive presence facilitates a dynamic environment where learners can work together, to understand a problem by inquiry, exploration, and application. CoI's cognitive

presence uses Dewey's Practical Inquiry model as its foundation, which asserts that learning should happen organically and using life experiences. Dewey's practical inquiry model (1938) "includes four phases (trigger, exploration, integration, and resolution) that describe cognitive presence in a community of inquiry" (p. 56). First, triggering entails initiating the inquiry process by presenting the material so that students can relate to it. Second, exploration is understanding the problem and looking for relevant information and ideas to tackle the problem. Third, integration is a highly reflective phase where learners work together and construct a solution. Fourth, resolution is where learners conclude the issue.

Palmer (2020) provided concrete examples on how to apply cognitive presence in an online environment. Instructors should:

> provide a variety of different types of content and assignments: video, writing, audio, reflection, team-based work, readings, games, etc.; encourage reflection.; design discussion prompts and dives deep into engaged discussions; provide opportunities for group brainstorming, such as designing concept maps together; have students create or find relevant materials and post them to the class as resources (para. 8).

Teaching Presence

Teaching presence is an essential component of the CoI framework as it provides the guidelines for effective instruction online (Garrison, 2017). Learning is a dynamic experience where learners share teaching presence responsibilities in teaching presence (Zehra & Garrison, 2013). Teaching presence promotes a collaborative environment where learners take responsibility for their learning and support each other's learning through inquiry.

Teaching presence consists of design and organization, facilitation, and direct instruction (Anderson et al., 2001). First, design and organization deal with the course structure, from

setting up learning objectives to creating collaborative assignments. Second, facilitation is about managing and monitoring student progress and providing a positive learning environment. Third, direct instruction is about instructor leadership and expertise. Teaching presence is the relationship between instructor and learners and between learner and learner. Teaching presence provides an environment where instructors facilitate learning by providing clear instructions, scholarly knowledge, and timely feedback.

Palmer (2020) provided concrete examples on how to apply teaching presence in an online environment, some of these include: "create an introductory video of yourself; check-in with students regularly; be present in discussion forums; include early activities to encourage, acknowledge, and reinforce student contributions" (para. 4). The following section provides information on current research using the CoI framework.

Current Research using CoI

The CoI framework provides a holistic approach to learning in today's connected society; it provides an environment where participants take ownership of their learning and learn from each other. The literature reveals a wide range of research done using CoI. CoI is the most referenced framework for online and blended learning (Garrison, 2016). Moreover, CoI can serve as a blueprint for creating active online learning experiences (Castellanos-Reyes, 2020). The following section summarizes the recent body of literature about CoI.

The CoI framework provides a roadmap for technology integration in online environments. Stewart (2017) explored and explained the role of the CoI framework in the development of "interactive activities" in online composition classes. The study documented the experience of a first-year composition student using three activities based on the CoI framework. Findings indicated that the CoI framework creates opportunities for learners to interact with one

another while providing design and facilitating online course strategies. In the study's conclusions, Stewart recommends the CoI framework as a heuristic tool for designing and assessing activities in composition courses. Likewise, Fiok (2020) interweaved the CoI framework and Sorensen and Baylen's (2009) seven principles of good practice. This study provided a collection of practical strategies and guidelines to facilitate the design and facilitation of online courses. Furthermore, Lawa et al. (2019) investigated CoI's social presence and student enrollment, motivation, and performance in blended environments. Their study showed that enrollment is directly related to student social and cognitive presence, while interactivity and collaboration are the keys to social presence.

One study described a strong relationship between CoI and student engagement in a fully online geoscience course (D'Alessio et al., 2019). Their findings described a strong relationship between social and cognitive presence and student achievement: In other words, student performance was higher when instructors build a supportive community. Data revealed that student performance dropped when students thought the instructor did not know their name. This study highlighted that when instructors communicated less and provided less feedback, students' grades were lower than those in a class with frequent interaction.

In their meta-analysis of 30 studies Richardson et al., (2020) explored the relationship between student satisfaction and teaching presence and its three sub-dimensions (i.e., design and organization, facilitation, and direct instruction). These results indicated a strong relationship between each dimension of teaching presence individually and student outcomes. This analysis had implications for teacher presence. It recommended course designers and course instructors actively participate in their courses, facilitate lively discussions, and provide feedback. In the same fashion, Richardson et al. suggested that course designers consider transparency,

consistency, and clarity when developing an online course. This study supported previous research (Han et al., 2018; Kilis et al., 2019; Kucuk et al., 2019; Nasir et al., 2018; Nazar et al., 2018) that indicated the importance of teacher presence and its implications for designing and facilitating online courses.

In like manner, Rubio et al. (2018) investigated the relationship between teaching presence and student participation in Spanish blended courses and the differences between teaching presence in blended and F2F courses. Seventy-eight students taking a second semester blended Spanish course, and 12 students taking the same class in a F2F format participated in the study. Rubio and Thomas used CoI indicators of participation as data collection instruments. Student participation was measured by page views, "participation" [the number of times a student took action on Canvas], posting, on-time submissions, and active days (Rubio & Thomas, 2018). The results suggested that there is a strong relation between levels of participation, participation behavior, and final grades. In other words, participation was a strong predictor of students' final grades. Rubio and Thomas measured teaching presence using the teaching presence indicators from CoI (Anderson et al., 2001).

Rubio and Thomas performed two class observations for each teaching format. The results showed that "the majority of the time spent on meaning-focused activities in the blended courses (78%), while a focus on the form was more prevalent in the F2F section (88%)" (p. 240). Although this study focused on the relationship between teaching presence and student participation in blended and F2F courses, this study has implications for learning analytics to assess student progress and participation and lead to a deeper understanding of teaching presence.

Taylor (2016) explored student perceptions of online course quality. One hundred and thirteen undergraduate students and ten instructors agreed to participate in the study. Both students and instructors had to complete a survey using the Quality Online Learning and Teaching (QOLT) instrument to understand both student and instructor perceptions of online courses' quality. Findings suggested that students perceived that teaching presence impacted the quality of the course. Furthermore, this study confirmed the relation between the quality of the course and the importance of CoI. Moreover, this study corroborates that the three elements of CoI have a positive effect on the perceptions of quality in online courses. This research provides evidence to support the importance of the CoI framework and the potential influence it may have on instructional quality and student satisfaction.

Substitution Augmentation Modification Redefinition (SAMR) Model

Dr. Ruben Puentedura developed the SAMR model (Magaña, 2018); according to Hilton (2016), this model provides a framework to integrate technology into instruction. Cummings (2014) explained that the SAMR model facilitates the integration of emerging technology to promote 21st-century skills. This model approached the integration of technology in four stages: Substitution, Augmentation, Modification, and Redefinition (Puentedura, 2009, n.p.)

Substitution is the task of replacing other tools for technology to complete a task that did not require the use of technology in the first place (Hilton, 2016). To put it differently, "substitution" entails identifying a technological tool to use in the classroom to replace another one; for example, using Google Docs instead of paper, and using PowerPoint instead of poster boards.

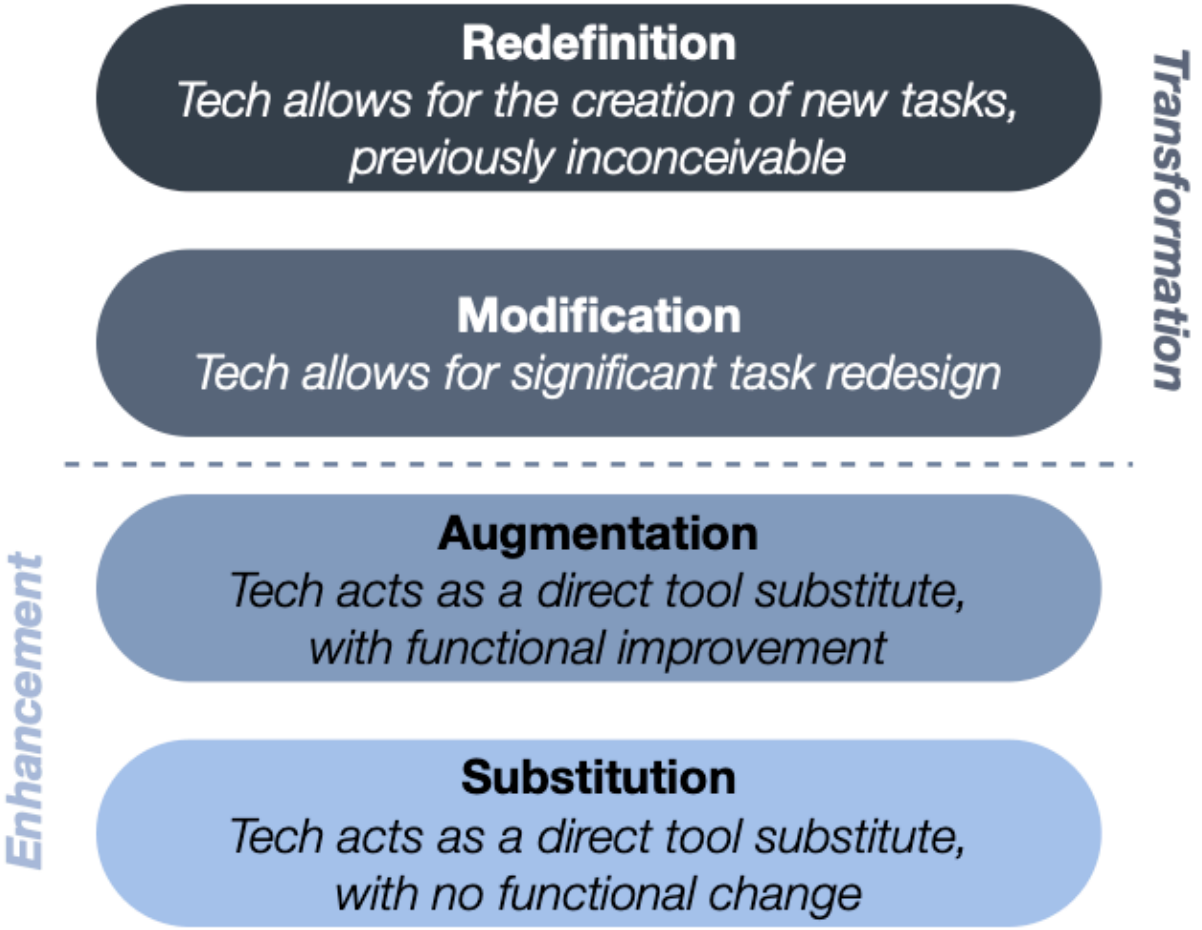
Augmentation amplifies substitution because it uses technology to improve a task (Hilton, 2016). In other words, augmentation adds functionality to the use of technology to enhance a task. A few tools come to mind for this task, including Kahoot! which enhances informal assessment through a computer or mobile phone; “Jamboard” which enables users to create a digital interactive board in real-time; “Pear Deck,” which enhances PowerPoint presentations to make them more interactive from the learners’ perspective; “Zoom” which allows presenters and attendees to collaborate with each other. Both stages, substitution and augmentation, fall in the “enhancement category” because, as the category states, these stages enhance regular/traditional tasks with the use of technology.

Modification entails modifying a pre-existing task by integrating technology (Magaña, 2018). For example, the use of Google Cultural Institute to take a virtual tour, the use of Google maps and VoiceThread to pin different locations, give directions from and to each other, the use of Canva to create an inviting poster/brochure/brochure social media post.

Last, redefinition entails recreating a task that would not be possible without technology (Magaña, 2018). For example, the use of video to recreate student’s daily routines; the use of Zoom to interview a “guest speaker;” the use of YouTube to watch a commercial from another country; the use of the web to find the top 5 news from a country and create a video where students are anchors and report their findings. Modification and redefinition fall in the “transformation category” because both stages use technology to modify or redesign a task (Magaña, 2018).

Figure 2.3

Substitution Augmentation Modification Redefinition (SAMR) Model



Note. Puentedura produced this figure, and it guides the four stages of SAMR. From "As We May Teach: Educational Technology, From Theory into Practice*"* [Podcast]

SAMR's four stages resemble a progression as each stage provides a guideline to determine the depth and complexity of technology integration (Kirkland, 2014). Puentedura (2020) offered a set of questions as a guideline to each of the four stages:

Substitution:

- What is gained by replacing the older technology with the new technology?

Augmentation to Modification:

- How is the original task being modified?
1. Does this modification fundamentally depend upon the new technology? How does this modification contribute to the design?

Modification to Redefinition:

- What is the new task?
- Is any portion of the original task retained?
- How is the new task uniquely made possible by the new technology? How does it contribute to the design? [PowerPoint Slide]

The SAMR model provides a framework for integrating technology in the classroom to create new opportunities to enhance teaching and learning effectively. It classifies the integration of technology in four stages: substitution, augmentation, modification, and redefinition. Each stage provides a degree of technology integration to enhance a task that did not require technology, to begin with. In sum, the SAMR model offers a way to differentiate between the stages/levels of technology integration and evaluate the effectiveness of the lesson design. The following section provides information on current research using the SAMR model.

Current Research using SAMR

In a systematic review of studies that involved mobile devices in PK-12 from 2014 to 2019, Crompton and Burke (2020) used the SAMR model to analyze how instructors integrated technology in their classrooms. The results identified that studies related to mobile learning activities in PRE-K-12 utilized all four stages/levels of the SAMR model, and only 8% of those

studies used the substitution level. In addition, this study also revealed that researchers focused on the augmentation level at the Pre-K and elementary grades. At the secondary level, however, mobile devices' use was at the modification and redefinition level. This study also showed that 46% of the time, instructors integrated technology to replicate activities that did not require technology in the first place. This study provided a deep understanding of how teachers integrate technology at the Pre-K-12 levels. Most importantly, it concluded that sometimes teachers do not integrate technology at its full potential or transformative stage in the SAMR model.

Likewise, Wahyuni et al. (2020) explored how teachers integrated technology to facilitate learning for English instruction. This qualitative study used a case study design to identify what technologies teachers used and how teachers integrated technology into their classes. Two English teachers and their 54 high school students in Indonesia participated in the study. This research employed the SAMR model as a framework to evaluate technology integration through observation, interviews, questionnaires. This study mapped tools used in the classroom and classified them using the four stages of the SAMR model and further discussed each stage explaining how teachers utilized each tool. This study's results indicated that the integration of technology might widen students' learning experience and skills. Although this study did not look into teachers' effective teaching, it provides a framework for evaluating technology integration.

In a study of student perceptions of using mobile technologies in math, participants worked collaboratively for six weeks; one group used tablets while another completed the same activities using paper-based worksheets. The results indicated that the devices were conducive to constructivist learning activities (Fabian and Topping, 2019). This study used the SAMR model as a framework to categorize and outline how each activity fits each stage/level of the SAMR

model in both groups. The study then mapped the activities used with tablets and paper-based worksheets and concluded that students who used the tablets had more in-depth experiences when learning; however, achievement scores were not statistically significant. Last, student perceptions and evaluations of the activities using the tablet were positive. The present study points to the direction for the current research on comparing and contrasting the integration of technology pre-stay-at-home order and post-stay-at-home order; it also provides a view of the shift in the teacher's role and responsibilities when integrating technology using the SAMR model.

Pfaffe (2017) investigated and evaluated mLearning tools and applications applying the SAMR model. In addition, Pfaffe's work identified teachers' perceptions and challenges toward mLearning. This study was an explanatory mixed-methods study; the researcher conducted online surveys and one-on-one interviews with secondary school teachers who had integrated mLearning into their teacher. Participants of this study included 103 teachers from 23 states and one from Mexico. While all participants completed an online survey, Pfaffe interviewed six of the respondents. This study evaluated mLearning activities against the SAMR model to identify the level of technology integration and identify the challenges and obstacles of creating transformative mLearning activities. This study showed that most school districts promote technology integration (Google classroom, iPad initiatives, etc.). Still, some are not able to do it due to budget cuts. However, the results also indicated the focus should shift from promoting technology integration in the classroom to supporting teacher training and development in designing mLearning activities. This shift goes in line with some of the challenges that teachers face when integrating technology: lack of training on technology integration, lack of teacher development, and lack of time to develop materials. However, most teachers have a positive

attitude towards the integration of mLearning in their classrooms. This study contextualizes the challenges that instructors face when integrating technology into the classroom. It also sheds some light on teacher training and development in the integration of technology in the classroom. The present study supports the current research to better understand the challenges and opportunities instructors face when integrating technology during COVID-19.

Lobo and Jiménez (2017) evaluated technology integration in six different projects through the SAMR lens. The participants of this study were students taking basic grammar courses at a public university in Costa Rica. Lobo and Jiménez used the four stages of the SAMR model to evaluate the level of technology integration in each activity. Additionally, they also studied students' perceptions of the integration of technology in those projects. It is worth noting that none of the projects used fell under the "substitution" stage, but rather under the "augmentation, modification, and redefinition" stages. The student survey results indicate that not all students were familiar with the applications used to complete each project. The researchers found out that when planning for an activity, they also need to consider the time it can take for students to get comfortable and familiar with the technology involved. The researchers recommend assessing student's progress throughout the semester. Overall, the data unveils that students' perceptions about integrating technology in their classes were positive. Lobo and Jiménez provide support for the SAMR model. This data holds the potential for preparation and assessment of the integration of technology in the language classroom.

The use of iPads in the classroom has been a research topic in the last decade. Hilton (2016) documented a yearlong integration of iPad carts in two social studies classrooms and examined integrating such technology through the SAMR and TPACK lenses. This study took place in the 2014-2015 school year in a medium-sized urban school district in southwestern PA.

Two experienced social studies teachers participated in the study. The study followed a structured case study process and used multiple sources of data. Results indicate that the SAMR model followed a student-centered approach and provided opportunities to integrate technology to facilitate independent learning. The data revealed that instructors used more activities at the Substitution level. The study highlighted that the SAMR model focuses on the students, and the TPACK model focuses on the teacher. In their conclusion, the teachers agreed that the SAMR model was easier to follow and apply. The TPACK model, according to the teachers, provided them with essential insights on how to teach effectively with technology; however, it was a more complex model to follow and less practical than the SAMR model. The present study supports Chou and Block's (2019) research that indicates that most instructional activities using iPads in the K-12 classroom fell in the Substitution category (40%) and at the Augmentation level (32%). These studies contribute to the validity of the SAMR model, underscoring the importance of its practicality.

Recent literature on the SAMR model demonstrates this model's flexibility as it can adapt to any subject matter. It provides a practical conceptual framework to map activities based on the level of technology integration.

Summary

This section provides a discussion on why the current research will analyze the data through the lens of CoI and SAMR. The theoretical lens proposed for the present study considers two key factors: instructors' use and integration of technology, and the nature of teaching in the times of COVID-19. The focus of the present study was to analyze the use and integration of technology during unprecedented times. For that reason, I found that this aligned best with the SAMR model and the CoI framework. As the literature reveals, TPACK is a robust framework;

however, it emphasized strongly on the conceptual application of technology integration in the design of teacher's professional development (Breen, 2019; Brinkley-Etzkorn, 2018; Koh, 2018; Nazari et al., 2019). In other words, TPACK focuses on conceptual development, while CoI and SAMR emphasize skill development for technology integration.

The continual evolution of the educational settings in the second half of the Spring semester 2020 poses significant opportunities and challenges for integrating technology. Therefore, the present study explored the way instructors integrated technology to provide more opportunities for students to learn and interact in an online environment.

This chapter reviewed the literature relevant to language instruction and the use of technology. This review's overarching themes included: (1) the 21st century student profile: the digital native, (2) emerging technologies for teaching and learning Languages, and (3) online language Instruction. I provided an overview of three frameworks: CoI, SAMR, and TPACK, and I explained the practical reasons I chose to use CoI and SAMR for the present study.

This literature review identifies two gaps in the research: (1) the lack of research addressing first-year online language instruction during a pandemic, and (2) the lack of research on the opportunities and challenges of integrating technology during the pivoting from face-to-face instruction to online instruction during the stay-at-home order in the Spring semester of 2020. The present study intended to address these gaps. Next, I discuss the methodology used for the present study.

CHAPTER THREE: METHODOLOGY

This research aimed to understand language instructors' experiences during the pivot from face-to-face teaching to teaching online during the stay-at-home order. I used a mixed-method approach to provide a comprehensive view of instructors' use of technology during this time, their experiences, their challenges, and their lessons. In this chapter, I describe the present study's design, methodology, recruitment process, data analysis, validity, and reliability. This section provides an overview of my research design.

Research Design

The research method employed for the present study was a mixed-method approach to provide a comprehensive understanding of how language instructors, in a private university in the Midwest, integrated technology during the COVID-19 stay-at-home executive order in the Spring of 2020. According to Tasahkkori et al. (2015),

> Research questions that call for mixed methods research are often multifaceted, having implicit or explicit interrelated components that might fit traditional qualitative or quantitative orientations separately. These combination questions often include both 'what and how' or 'what and why' of events, cognitions, and/or behaviors (p. 620).

I used quantitative and qualitative methodologies to provide a voice and interpretation of the data collected. A mixed-method approach ensured the reliability of the responses and let the research explore and analyze them to provide a comprehensive understanding of the issue.

I employed a case study methodology for the present research. According to Berg and Lune (2012), "case studies can provide a kind of deep understanding of a phenomenon, events, people, or organizations" (p. 328). I opted for this methodology because it aligns with the design to address a contemporary phenomenon, such as the instructional approaches in language

learning during the COVID-19 pandemic (Yin, 2019). Due to the nature of this investigation, I chose to use a single case study. The rationale behind this is that the present research deviates from everyday occurrences and offers a unique opportunity to document and analyze the experiences of language instructors pivoting from a face-to-face instruction mode to a crisis-prompted remote mode during the stay-at-home order in the Spring of 2020 (Yin, 2019). Finally, this research study used a guiding framework (CoI and SAMR) to examine the issue and address the research questions from the perspective of the theoretical framework (Yin, 2012).

Institutional Review Board

I initiated and obtained approval from the Institutional Review Board (IRB) at the University of St Thomas, MN after the dissertation committee approved the proposal. The purpose of the IRB is to protect the participants' integrity and safety in the research project. This research involved human subjects; however, they were not from vulnerable populations. I took all the necessary precautions to ensure participants' data would remain confidential. I stored all documents in a secure location. Participants signed an informed consent form that outlined the risks and the survey and interview procedures. All participants electronically signed the consent forms prior to taking the survey and scheduling one-on-one semi-structured interviews. The present study received expedited approval.

Researcher Experience and Bias

As a language educator, technology enthusiast, and computer scientist for over fifteen years, I have worked with multiple generations of faculty and students. Over the years, I have strived to be innovative, creative, open minded, and flexible when integrating technology in the courses I teach. My philosophy has always been to create, utilize, and provide the best learning

opportunities for my students, and to share innovative and effective pedagogical tools for language learning with my co-workers.

During the abrupt pivot from face-to-face instruction to crisis-prompted online language instruction in the Spring of 2020, I observed the great effort that instructors around the US made to adjust to this change. This crisis sparked a deep interest in professors' experiences, successes, and challenges in adapting to a new online environment and on how they integrated additional technology during this time. Gathering this information from these fellow professors is crucial for our evolving times. I believe that this world-wide pandemic, COVID-19, has forever changed the way professors approach teaching, and the present study will serve as a repository of valuable experiences to learn from.

Recruitment and Selection of Participants

The criterion for all participants was to have taught language in higher education during the Spring of 2020. To situate the study, these participants taught in the languages department of a mid-size private university in the Midwest. I requested participation via an email invitation to 19 faculty members of a private university (email content included in Appendix A). In this invitation, I introduced myself as a researcher, explained the nature and significance of the study, and provided instructions on participating in the study.

All contacted faculty members were identified as language instructors during the Spring of 2020. A total of 12 participants (6 females, 6 males) completed the online survey, and 11 faculty members participated in the one-on-one interview process. Eight participants ranged in age 36-55 years old (66.67%). Three participants identified as being over 56 years old (25%), while one participant identified as being less than 35 years old (8.33%). Over half of the participants were Hispanic/Latinx (n=7, 58.33%). Five participants identified themselves as

tenured (41.67%), two as tenured-track (16.67%), and five identified as adjunct faculty members (41.67%).

The range for teaching experience was on both sides of the spectrum, from one to more than 20 years. However, five participants disclosed having “more than 20 years” of teaching experience (41.67%). Over half of the participants, nine, taught Spanish (75%), two taught French (16.67%), and one taught German (8.33%). A complete demographic characteristic of the participants is shown in Table 3.1.

Table 3.1

Participants' Demographic Characteristics

	n	%
Gender		
Female	6	50%
Male	6	50%
Transgender/non-conforming/other	-	-
Prefer not to disclose	-	-
Age		
<35 years old	1	8.33%
36-45 years old	4	33.33%
46-55 years old	4	33.33%
>56 years old	3	25%
Ethnicity		
Asian	-	-
Black/African	-	-
Caucasian	5	41.67%
Hispanic/Latinx	7	58.33%
Pacific Islander	-	-
Native American	-	-
Prefer not to answer	-	-
Other	1	-
Faculty rank		
Tenured	5	41.67%
Tenured-track	2	16.67%
Adjunct	5	41.67%
Other	-	-
Teaching experience		
1-5 years	1	8.33%
6-10 years	-	-
11-14 years	2	16.67%
15-20 years	4	33.33%
More than 20 years	5	41.67%
Less than 1 year	-	-
Language section		
French	2	16.67%
German	1	8.33%
Italian	-	-
Spanish	9	75%

To maintain confidentiality, I used pseudonyms to protect participants' identities. I included these pseudonyms in each interview transcription. Table 3.2 provides a synopsis about the 11 study participants.

Table 3.2

Study Participants' Alias and Language Section

Alias	Gender	Age	Ethnicity	Rank	Experience	Language
Samuel	Male	>56 years old	Hispanic	Adjunct	More than 20 years	Spanish
Noah	Male	46-55 years old	Caucasian	Tenured	15-20 years	Spanish
Drew	Male	>56 years old	Caucasian	Tenured	More than 20 years	French
Summer	Female	46-55 years old	Caucasian	Tenured	More than 20 years	French
Eloise	Female	>56 years old	Caucasian	Tenured	More than 20 years	Spanish
Oliver	Male	<35 years old	Hispanic	Adjunct	1-5 years	Spanish
Blue	Female	36-45 years old	Caucasian	Adjunct	15-20 years	German
Alexis	Female	36-45 years old	Hispanic	Tenured	15-20 years	Spanish
Ana	Female	36-45 years old	Hispanic	Tenure-track	11-14 years	Spanish
Ned	Male	46-55 years old	Caucasian	Tenured	More than 20 years	Spanish
Emma	Female	36-45 years old	Hispanic	Tenure-track	11-14 years	Spanish

I obtained informed consent (Appendix B) from each participant online before they took the online survey. At the beginning of the semi-structured interviews, I verbally explained the

details of the study, the interview process, and allocated time for participants' questions. I also explained that any information revealed during the semi-structured interviews would be kept confidential and anonymous. According to Bogdan and Biklen (2011), assuring participants' confidentiality increases the probability for participants to be more open about their experiences.

Data Collection

Due to the present study's unique, retroactive, and reflective nature, only language instructors who taught in Spring 2020 participated in the study. Data collection included a survey which was sent via email and one-on-one semi-structured interviews with each participant. First, I sent an email to all potential participants to invite them to participate in the study. The email explained the two phases of the study. Upon acceptance, participants checked an "agree to consent" box to consent to their participation. Next, all participants completed the online survey on Qualtrics. The survey consisted of 15 questions to elucidate participants' teaching experiences during the transition from face-to-face instruction to online instruction. The first four questions were strictly related to demographics. The remaining 11 questions were about the use of technology in the classroom. Upon conclusion of the survey, participants had access to a summary of their answers. I sent out a reminder to participants a week after I sent the email invitation. The last date available to complete the survey was the last day of class for the Fall semester (December 15th, 2020), and it was not reopened after.

Next, participants scheduled a one-on-one semi-structured interview with me via Calendly. I used Zoom to conduct all one-on-one semi-structured interviews. Interviews lasted between 30-60 minutes. Before each interview, I provided time for participants to become comfortable in the Zoom environment and ask questions. I recorded all Zoom interviews in my University's Microsoft One Drive account. Recording each interview allowed me to fully engage

with each participant and make observer notes about their answers. I transcribed all interviews and sent the transcripts back to each participant to ensure data validation and credibility of results (Birt et al., 2016). All participants were satisfied with their transcripts. The last interview took place on December 4th, 2020. Please refer to Appendix C and D for online survey and semi-structured interview questions.

Data Analysis

To obtain a glimpse of participants' demographics, and their experience with the use of technology in the classroom, all participants completed a quantitative online survey (see appendix C). For the semi-structured interviews (see Appendix D), I took observation notes and manually transcribed all interviews.

I used Qualtrics to create the online survey and to analyze the quantitative data from the online survey. I used NVivo to code all transcripts from the semi-structured interviews. I analyzed and coded all qualitative data to identify themes (Yin, 2014). Then, I organized the analysis using the guiding research questions. I used a single case study approach as a "revelatory case" to explore and analyze a phenomenon, such as the experiences of language instructors pivoting from different modalities of instruction during the stay-at-home order COVID-19 (Yin, 2019, p. 50).

After interviewing each participant, I watched and listened to the recording, and transcribed it. Then, I played the audio file and followed along with the transcription for accuracy. Next, I re-read the final transcription of the interview to check for typos or spelling mistakes. To conclude, I emailed a copy of the transcript to each participant to make sure that I capture their answers correctly. Each interview lasted approximately sixty minutes. Altogether, this process took approximately three and a half to four hours per participant, around forty hours.

Next, I imported all interviews to Nvivo to start analyzing the data. I read each interview and identified emerging themes throughout the interviews. Then, I began to group these emerging themes into categories. I used the three research questions as guiding categories to group all themes that emerged from the semi-structured interviews. I repeated this process several times to make sure I did not miss a theme. Each interview took between one and a half to two days to fully code. I went through each interview at least three times before reviewing my findings and coding with a faculty member. We met to discuss the findings and coding twice before finalizing the categories and themes. In between meetings, I re-read all codes and started to make connections. Each of the categories and themes provided a more comprehensive understanding of the participants' experiences teaching languages during an unprecedented time.

The last steps involved revisiting my observation notes and additional thoughts about each interview. I wrote a memo after each interview to gather my observations, thoughts, and reflections about it. Writing memos is an essential technique for this type of analysis because they facilitate analytical thinking about the data (Groenewald, 2008; Maxwell, 2013). Next, I began the analysis with the guiding research questions and theoretical frameworks.

Validity and Reliability

The present study was a mixed-method approach. I employed quantitative and qualitative elements to provide a comprehensive view of the issue. According to Creswell (2014), "qualitative validity means that the researcher checks for the accuracy of the findings by employing certain procedures, while qualitative reliability indicates that the researcher's approach is consistent across different researchers and different projects" (p. 201). Using a mixed-method approach allowed me to use different data collection types, such as an online

survey and semi-structured interviews (Creswell & Poth, 2018). This offered diverse perspectives to approach the research questions (Maxwell, 2013).

In addition to using different data collection types, I resorted to using peer debriefing to ensure this research's validity. According to Marshall and Rossman (2016), peer debriefing is when "the researcher makes arrangements with knowledgeable and available colleagues to get reactions to the coding, case summaries, analytic memos written during data analysis, and next-to-final drafts" (p. 230). During this process, a faculty advisor reviewed my findings and interpretations to ensure credibility and validity. We worked closely to identify and deter from biases in the analysis.

To ensure reliability, I resorted to using a computer-assisted qualitative data analysis software, Nvivo, to easily access and code the data. According to Creswell and Poth (2018), providing a consistent platform facilitates reliable coding. In addition to using Nvivo, I used Zoom to record each of the interviews to transcribe them. Using technology to record and transcribe enhances reliability (Silverman, 2013).

CHAPTER FOUR: RESULTS

This research aimed to understand language instructors' experiences during the pivot from face-to-face teaching to teaching online during the stay-at-home order. I used a mixed-method approach to provide a comprehensive view of instructors' use of technology during this time, their experiences, their challenges, and their lessons. The quantitative survey provided insight into the participants' use of technology in the classroom, their comfort levels, and their online teaching experience. Comparatively, the one-on-one interviews yielded more in-depth information regarding the participants experiences during this time.

Quantitative Results: Survey

The 18-question survey results show language instructors' use of technology pre-, during, and post- pivot to teaching online. The survey consisted of six questions about demographics; and 11 questions about: 1) lesson planning and 2) technology in the classroom.

Lesson Planning

When asked about the weekly number of hours dedicated to lesson planning prior to the stay-at-home order was declared (from February to mid-March), over half of the participants (n=7, 58.33%) spent between 1 to 5 hours planning their classes. Others (n=3, 25%) spent between 11 to 15 hours, while the minority (n=2, 16.66%) spent between 6 to 10 hours (see Table 4.1). However, these numbers shifted during the stay-at-home order from mid-March to May. The majority of the faculty reported spending more time doing course preparation. For example, 44.33% of the participants spent 11-15 hours, 8.33% spent 16-20 hours, and 16.67% spent more than 20 hours per week preparing for their courses. The rest of the responses were found at the opposite ends of the spectrum. For example, three of the participants reported spending less than five hours a week preparing for their courses (n=3, 25%). Two participants

indicated spending over 20 hours (n=2, 16.66%), while one faculty member (n=1, 8.33%) reported spending between 16- and 20-hours doing course preparation.

Table 4.1
Number of Hours that Faculty Members Spent Planning Classes Prior and During the Pivot

# of approximate number of hours (per week) dedicated for lesson planning	Prior to the stay-at-home order n=12 (%)	During the pivot to teaching online and afterwards n=12 (%)
1-5 hours	7 (58.33%)	3 (25%)
6-10 hours	2 (16.67%)	2 (16.67%)
11-15 hours	3 (25%)	4 (33.33%)
16-20 hours	0	1 (8.33%)
>20 hours	0	2 (16.67%)

Technology in the Classroom

Participants answered several questions about the use of technology in their classes. First, participants identified the tools and apps they used in their courses prior to the stay-at-home order. Table 4.2 indicates that all participants used Canvas for their courses. In addition to Canvas, the second most used tool was Kahoot!, followed by Quizlet. Fewer participants used other tools such as PowerPoint, Vistas, Extempore, Google Docs, and Gimkit. Correspondingly, during the stay-at-home order, Canvas remained the most used tool along with Zoom (n=12, 100%). There is not clear difference in the use of other tools used prior to the stay-at-home order. However, participants added “new tools” to their repertoires such as YouTube and iClicker. It is important to note that none of the participants had previous experience with Zoom prior to the stay-at-home order.

Table 4.2

Technology Used Prior and During the Pivot

Tool/App	Prior to the stay-at-home order n=12	During the pivot to teaching online and afterwards n=12
Portable Devices	6	6
Canvas	12	12
Kahoot!	6	5
Quizlet	2	2
Other: (PowerPoint, Vistas, Extempore, Google Docs, Gimkit, YouTube, iClicker)	3	3
Zoom	0	12
FlipGrid	0	2
VoiceTread	0	0
Twitter	0	0
Nearpod	0	0
Google Tour	0	0
Google Expedition	0	0
Remind	0	0

Portable Devices

Prior to the stay-at-home order, half of the participants (n=6, 50%) indicated having students use portable devices such as cell phones, tablets, laptops in class to complete in-class activities. Students used these devices to either look up a word using an online dictionary, to write notes, to access the electronic textbook, to access handouts, and to access different apps such as Kahoot!, Quizlet live, and Gimkit. During the stay-at-home order, participants did not report changes on how they used portable devices to teach. Under the circumstances, all students had to use portable devices to connect to their classes

Technological Tools/Apps

This section focuses on the participants' comfort level with technological tools/apps. Prior to the stay-at-home-order, the majority of the participants felt either "very comfortable or "extremely comfortable" using the learning management system. In fact, only a few participants felt "neutral" about it. On the contrary, half participants reported not feeling comfortable using other tools such as online proctoring systems, lecture recording software, video lecturing recording, and teleconferencing applications. During the pivot and the stay-at-home order, participants quickly adapted to the new teaching modality and learned the tools they once expressed were not comfortable using. Tables 4.3 and 4.4 illustrate how the participants' comfort levels with different tools shifted during the pivot. The most noticeable shift relied upon teleconferencing apps, online proctoring systems, video lecture recording, and "other." During this time, these tools became essential to teach online.

Table 4.3
Faculty Level of Comfort with The Following Technologies Prior to the Stay-At-Home Order

	Not at all comfortable	Slightly comfortable	Neutral	Very comfortable	Extremely Comfortable	Total
Learning Management System (e.g., Canvas)	0	0	4	5	3	12
Teleconferencing apps (e.g., Zoom)	3	3	5	1	0	12
Online Proctoring Sytem (e.g., Proctorio)	6	3	1	1	0	11
Video Lecture Recording (e.g., Panopto)	3	4	5	0	0	12
Other	0	0	1	0	0	1

Table 4.4
Faculty Level of Comfort with the Following Technologies During the Stay-At-Home Order

	Not at all comfortable	Slightly comfortable	Neutral	Very comfortable	Extremely Comfortable	Total
Learning Management System (e.g., Canvas)	0	0	3	6	3	12
Teleconferencing apps (e.g., Zoom)	1	1	6	3	1	12
Online Proctoring Sytem (e.g., Proctorio)	4	2	3	1	1	11
Video Lecture Recording (e.g., Panopto)	2	2	4	2	1	11
Other	0	0	1	0	1	2

Teaching Online

Prior to the stay-at-home order, none of the participants had previous experience teaching languages via Zoom. In fact, only few participants indicated previous experience teaching language online (n=4, 33.33%, see table 4.5). These four participants taught different modalities including: online synchronous, online asynchronous, hybrid, and other. Data shows that more faculty members felt neutral about teaching online than they did prior to the stay-at-home-order (see table 4). With that in mind, it is not surprising to find that participants' level of comfort teaching online prior and during the stay-at-home-order indicate that the majority of the faculty members (n=10, 83%) did not feel comfortable, while the minority (n=2, 17%) had neutral feelings about it. These numbers shifted during the stay-at-home-order but not significantly.

Table 4.5

Faculty Experience Teaching Online Prior to the Pivot

Survey question	Yes n=12 (%)	No n=12 (%)
"Prior to the stay-at home-order, had you used Zoom to teach remotely?"	0 (0%)	12 (100%)
"Prior to the stay-at-home order (from February to mid-March), had you taught a lower-level language class online?"	4 (33.33%)	8 (66.67%)

Qualitative Results

Based on the data retrieved from the semi-structured interviews, several themes emerged after analyzing the data. I grouped the data into the following categories: challenges, opportunities, and recommendations. I identified major themes in each category. This section presents the results from the semi-structured interviews by category.

Challenges

The participants identified the challenges they faced during the transition from face-to-face instruction to unplanned online instruction. In this category, four major themes emerged from the semi-structured interviews: technology adaptation, student-instructor interaction, time, and student participation.

Technology Adaptation

The first theme to emerge in this category was technology adaptation. Primarily, participants discussed their experience with the University's video conferencing software, Zoom, prior to the stay-at-home order. None of the participants had used Zoom prior to the stay-at-home order; for that reason, most participants expressed feeling concern during the pivot because they had to learn how to use Zoom to teach online. For example, Summer said, "I was very worried because I had not used Zoom." Likewise, Emma reported, "everything was new, right? We did not know how Zoom worked…" Similarly, Drew said, "I was going blindly into this. I knew nothing about Zoom, and I mean, just the first day, just freaked me out completely, but then I got over it, I must admit, I mean, they thought it went okay." Likewise, Noah explained going from not knowing much about Zoom to learning about the importance of joining a meeting through the Canvas course. Participants' comments provided an intimate insight into what most of them went through at the time of the pivot. For some participants, it was their first time teaching

online and using Zoom. Most of them were unsure what to expect, but as time progressed, they learned the nuances of using Zoom as the semester progressed.

Participants described the pivot as a time of stress, anticipation, and uncertainty. Despite participants' initial concerns, they experienced a sense of accomplishment after their first day of teaching through Zoom. Their attitude and willingness to learn were remarkable despite the short amount of time they had. In this section, participants shared their experience learning Zoom and adapting to teaching online during the stay-at-home order.

Student-Instructor Interaction

This section provides an overview of the interaction between instructors and students during the pivot to teaching online, how it changed, and the role technology played during this time. The transition to teaching online was during an emergency, and the participants of the present study did their best to provide a smooth transition and a personalized learning experience. However, there was a learning curve for both instructors and students while pivoting to online instruction in such a short amount of time. Participants shared how the virtual classroom changed the class dynamics, including establishing rapport with students, reading student non-verbal cues to check for understanding, and the energy and camaraderie from working together towards achieving a common goal, learning a language.

Samuel explained that one of the main differences between teaching face-to-face vs. teaching online is not participating fully with all your senses and being present. According to him, teaching face-to-face is easier as an instructor because one gets to sense if students understand the material. Being physically present made a big difference, especially dealing with individual issues and just talking with students.

Similarly, Noah described how the virtual classroom changed the interaction between students and between students and instructors. He stated, “You cannot recreate the physical proximity, and maybe you know some of the chit-chat, you know, the pre-and post-class. I think maybe students are just a little bit more reluctant to ask a question.” Similarly, Eloise pointed out that physical proximity provided a way to get to know the students outside the classroom, which differs from the virtual classroom. She described that in the face-to-face class, it was natural to strike up a conversation with her students in the hallway and get to know them better. For example, Eloise indicated learning where students were from and certain things about them, such as their academic interests and other interests was important. Contrary to the face-to-face class, Eloise reported that the virtual class was not conducive to getting to know her students.

Other participants such as Ana and Alexis addressed other differences between the interaction in the physical vs. the virtual classroom. For example, the energy from a physical learning space versus the quietness that comes with teaching online, “It is like, you know, the students would do most of the talking in the face-to-face classroom, now that is gone, and the noise from the classroom is not there. It is now just my face. Yeah” (Ana). Alexis explained how teaching online using Zoom changed communication and how it affected teaching and learning in the new modality. For example, “You are on mute. I could not hear you, you know, another student also answered at the same time. So, that very dynamic environment, flowing with information, was gone and became very much like… something visual.” Alexis’s example summarized and illustrated what teaching via Zoom was like. It evidenced how Zoom hindered the flow of communication that led to a more lecture-friendly teaching mode.

Pivoting to a new teaching modality changed class dynamics and student interaction within a short period of time. Participants explained how the lack of physical proximity affected

the flow of communication in the class and how instructors established rapport with their students. In this section, participants shared their experience navigating a new teaching modality and finding ways to stay connected to their students.

Time

There are several instances where participants talk about "time"; however, participants referred to different types of "times", such as the amount of time they had to transition to teach online, class time, and time to plan and prepare for classes. For example, Samuel explained that the transition felt fast-paced. First, he recalled only having a few days, maybe a couple, to get familiar with Zoom and get his students onboard. He remembered feeling a sense of uncertainty. He had not had time to process the pivot completely, "At the very beginning, when I heard this, I did not understand completely. What it entailed and how we were going to do all this, especially based on the minimum amount of knowledge to deal with applications." Similarly, Eloise described the transition as abrupt and rapid, "I remember thinking that I wish we had, you know, one week to prepare instead of the weekend." Everything happened quickly due to the circumstances amid a global Pandemic. There was no time to stop and reflect, just to act and to keep the class moving forward.

Participants used time to also address class time. They indicated that class time felt shorter in the virtual classroom vs. the face-to-face classroom. For example, Emma indicated feeling rushed in the 65-minute classes. She explained that classes went by faster online than in person and that to her, the 90-minute classes worked better for that modality. Since she was teaching both types of classes, she found herself having to cut back on the activities and even find new ones. Eloise reiterated having the same experience. She recalled not having much time after sharing important announcements, taking attendance, and warm-up activities. Similarly,

Ana explained that in her case, some activities took more time online than in the face-to-face classroom. She stated, "[When you use] Zoom, you are not going to have time to do as much as you have in the classroom… You cannot be walking around the classroom to check that they are doing their work." Ana described that teaching online required more time in the front-end. First, she indicated that initially, she spent more time writing instructions to ensure clarity. She stated that if the instructions are not clear, the assignment was not going to be successful. Next, she explained that she had to think outside the box for any writing task to prevent students from relying on Google Translate. In addition, she had to prepare the actual assignment and share it with students. For example, creating separate Google Docs for each group in advance, and posting the links to Canvas, etc.

Participants also discussed time in terms of how much time it took to develop materials to teach online. Most participants explained that developing materials for the online class was more time-consuming than developing materials for the face-to-face instruction. For example, Oliver explained that due to the nature of the pivot, time was of the essence. He indicated that everything had to keep moving, and for that, he needed more time. Oliver stated that finding the "right realia" and developing the "right follow-up materials" to go along took more time. He indicated that it was not just a matter of finding new material to fit the lesson but also creating scaffolding materials. Having a balanced lesson plan with a mix of different types of activities was his priority. Summer conveyed participants' experiences by explaining that it was not just about finding realia or developing new activities but also about learning how to make them available electronically, such as creating quizzes on Canvas.

Due to the abrupt pivot and lack of time, most participants found themselves trying to use as many materials as possible from their face-to-face classes. For example, Ana stated, "I told

myself, I am going to teach synchronously, use as much as I can from my lesson plans in the face-to-face class because of the amount of work it takes to recreate things to do asynchronously… I could not do it." In contrast, Ned decided to teach asynchronously because he was overwhelmed by Zoom and the pivot. He initially thought that he did not have enough time to learn everything needed to teach synchronously.

Ned explained that he felt more comfortable after a couple of weeks; however, it was too late to change the class modality. He said that once he had announced that the class would be asynchronous, there was no turning back; students had already made commitments during class time, and he could not change it back. Ned shared that he would have done just fine teaching synchronously, but there was no time to stop and think. He recalled spending several hours preparing materials and activities for his asynchronous class. Ned stated, "all the hours I spent preparing materials, and it was just, it was just crazy. It was insane. That is like all I did for the rest of the semester, prepare materials." However, he admitted that he looked forward to teaching the course in the future and having many activities to choose from.

In this section, participants described time in different ways. For example, some used the term to describe the short period they had to pivot to a new teaching modality. Others used the term to describe time in terms of class length, while others used it to describe their experience developing materials to teach online. Despite their use of the term, all participants described that time felt different in the virtual class. Preparing materials to teach online was time-consuming, yet time felt shorter while teaching synchronously.

Student Participation

Student participation was another topic that emerged from the semi-structured interviews. Participants discussed how the new teaching modality had an impact on student participation.

Most instructors noticed that student engagement changed in the online environment, and it was more noticeable when students did not engage with the material and with their peers. Most participants indicated that students in upper-level classes were more motivated than their peers taking lower-level courses. For example, Ana explained that students enrolled in advanced courses were more motivated to make it work despite the changes and the stress. However, that was not her experience with students taking lower-level Spanish classes because most of them just took a language to fulfill a requirement.

She also attributed the lack of motivation and student engagement to the university's grade policy changes. According to her, once her students had the choice to either pass or fail, the engagement level went considerably down. Similarly, Alexis noted that students stopped coming to class once students opted to either pass/fail. She observed students doing the bare minimum to pass. She explained, "211 is such a tough crowd. They are like, I do not want to be here, to begin with. So, to be thrown into this online situation was really hard to convince them." Both participants expressed how challenging it was to engage students who felt like they had checked-out from the course. They explained that once students had the option to change their grades, the motivation to learn was gone. Some students stopped going to class, and others just did enough to pass. Ana and Alexis explained that even though some students kept up with the new normal, the class dynamics had changed and were never the same.

The participants also expressed that pivoting from teaching face-to-face to teaching online also added another layer of complexity to the new modality. For example, Ned explained that it was clear that students had a hard time coping with the abrupt change. He felt like he had to be more energetic, more outgoing to keep the students engaged in helping them get through the semester, "I feel like there is some pressure to be like even a more entertaining person. And I

do not know that I have never really stepped up to that... students seemed to be really kind of depressed and not always motivated." Ned explained that times were challenging, and the way that students felt was beyond the class material and their student responsibilities.

Participants observed that students were dealing with other issues due to the pandemic. For example, Similarly, participants explained that some students stopped going to class because they dealt with death and other issues caused by the pandemic. For those reasons, it was challenging for some students to stay focused for the rest of the semester. Eloise explained that under normal circumstances, without COVID-19, students deal with stress in their lives. She noted that after the pivot, students were more stressed and anxious about COVID-19. She tried her best to adapt her class as much as possible and offer as much support as needed. She recalled having a student who needed some time to be away from her screen because she experienced panic attacks. Eloise explained that it was not easy to see her students go through that. However, she understood and tried her best to help them in any way that she could.

During the stay-at-home order, everyone experienced isolation in one way or another. Teaching online during this time was not the same as teaching pre-COVID. Some students had moved home, while others had decided to continue living arrangements with other roommates for the remainder of the term/quarantine. Having students connect to class remotely came hand-in-hand with unintentional distractions from roommates, family members, and pets.

In addition, pivoting to a new modality, students had to learn how to participate and interact in Zoom. Even though classes ran successfully, students were not able to participate as they did in a regular face-to-face class, "students simply have not had as many opportunities for exchange and practice as they would have had in the normal classroom. They were frustrated due to the mental fatigue that they were experiencing" (Eloise). In the same fashion, Oliver explained

that having the option to have the camera on or off complicated things. For example, he dealt with students disconnecting from the class because they did not want to participate in the breakout room activity. Like Oliver, participants expressed how challenging it was to teach during these circumstances, but they understood that this behavior was because everyone was going through something.

In this section, participants described student participation during and after the pivot. During this time, participants indicated that the way students interacted with their instructors and peers changed. Participants noted that some students did not engage online in the manner they did in the face-to-face environment. For example, participants observed that students' behavior changed, some lost motivation due to a change in the grading policy. Participants noted that they had to think of creative ways to keep students engaged through the rest of the semester.

This section described four overarching themes that summarized the challenges that participants faced during an unprecedented time. Table 4.6 provides a summary/overview of these challenges: (1) technology adaptation, (2) student-instructor interaction, (3) time and (4) student participation.

Table 4.6

Challenges

Themes	Definition	Example	Proportion of the theme among instructors (n_1=11)	Proportion of the theme among meaning segments (n_2 = 110)
Technology adaptation	Faculty experiences in utilizing technology for online instruction.	"trying to figure out how to navigate the Zoom thing and how to run, what do you call those groups? breakout rooms, things like that. It was all learning hands on experience" (Drew).	11 (100%)	39 (35.45%)
Student-instructor interaction	Differences between instructors and student interaction from the transition to teaching online.	"I guess, you know the physical proximity, you cannot… you cannot recreate and maybe you know some of the, I do not know, some of the... the chit chat, you know, the pre- and post-class. I think maybe students are just a little bit more reluctant to ask a question" (Noah).	11 (100%)	26 (23.64%)
Time	Amount of time to transition to teach online, class time, and time to plan and prepare for classes	"I think we... we got the news on Thursday that on Monday we were going online. So that we can try to prepare for Tuesday class, right. I did not have a plan beyond where it says, Okay, I am going to be ready for Tuesday and Tuesday. I will see how I do Thursday. I could not… I could not see bigger picture. It was like I was just reacting to the next class I had" (Alexis).	11 (100%)	23 (20.91%)
Student Participation	Differences in student engagement and participation in the online language class.	"I think the classes were running successfully. It is just that you know, I… I think that the students simply have not had as many as many opportunities for exchange and practice as they would have had in the normal classroom… and they were frustrated due to the mental fatigue that they were experiencing" (Eloise).	7 (63.64%)	25 (22.73%)

Opportunities

Transitioning to teaching online during the stay-at-home order created opportunities for innovation and creativity. This section provides an overview of how technology had an impact on maintaining a community of learning and maintaining communication with students. The main themes that emerged from the semi-structured interviews were: 1) community and 2) communication.

Community

Prior to the stay-at-home order, all of the participants of the present study had been teaching face-to-face classes. They had an opportunity to meet students in person and spend approximately six weeks working with their students and getting to know them. When the modality of instruction switched to online, the participants noticed that they could maintain a sense of community in the virtual classroom despite the lack of physical proximity. For example, Summer explained that during this time, she had grown close to her students, and she looked forward to seeing them in person on Zoom. She described that despite the circumstances, teaching online was a positive experience. For her and her students, class became a way to connect with others. Similarly, Eloise explained that unlike the face-to-face classes, some students seemed more friendly. She noticed that students would smile and wave at the beginning and at the end of each class. She described the interaction as very positive and encouraging.

During this time, participants noted that their job had changed, in the sense that, due to the circumstances, everything became more personal. Oliver described that teaching had become more than just the material but paying more attention to his students' well-being. He stated, "the traditional idea of the professor who goes lectures and is only available during their office hours… No, being a professor is just a 24/7 thing." Oliver explained that it was important that

students knew that he was there for them regardless of the time of day. Another participant, Emma, described that she became more empathetic during this time. She changed her class structure to allocate time to check-in with students. She recalled being concerned about her students' well-being and how they were coping with all the changes. Ned summarized this experience by describing the different hats he wore during this time. He described instructors being advisors, counselors, and sometimes cheerleaders. Ned explained that everyone was doing what needed to be done to get through these unprecedented times. He was uncertain about how his role would change in the long run, but he knew that it would no longer be about just teaching.

The ongoing circumstances during the stay-at-home order unveiled a new way of connecting and brought everyone closer together. For example, Emma explained that it was still possible to create a sense of community in the classroom, to her surprise despite physical proximity. She felt that teaching synchronously helped to maintain the human connection between her and her students. Similarly, Blue described that being present through Zoom enabled her and her students to keep up with the new normal. She stated that seeing familiar faces helped maintain some of the continuity of the semester.

Part of this continuity included participants finding ways to somewhat recreate the face-to-face learning experience in the virtual world. From the student side, participants noted that students were more open to working with others. For example, Drew explained that in the regular classroom, students preferred working with the same classmates. He described that students tended to work with students sitting by them or with their friends in the face-to-face class. However, this changed in the online class. Drew explained that the breakout room option in Zoom provided an opportunity for students to work with different students each class period. These activities allowed students to interact with classmates that they probably would not have

worked with within the face-to-face class. According to Oliver, this experience was invaluable because it also became a learning experience for students' professional lives as they had to learn to work with different people and personalities.

Transitioning abruptly to a new modality of teaching during a pandemic was unexpected and sometimes challenging. However, it was rewarding in different ways. Participants indicated that it was not just about teaching or about passing a class, but it was more about care for one another. It was about creating and maintaining a strong and supportive community.

Communication

The majority of participants taught fully synchronous classes using Zoom. They connected with their students on a regular basis, twice or three times a week. Although most of the communication was done synchronously, participants recalled dealing with a greater volume of emails. Students preferred email to ask specific questions about class or an assignment. Some participants reported spending several hours responding to multiple emails addressing the same question. After experiencing that for a few days, Ana used that as feedback to restructure her course on Canvas. She revisited her class announcements and assignments to make them as clear as possible. Similarly, Oliver sent follow-up emails after each class to summarize what was done and to remind students of what was going to be covered the following class.

Besides email, some students preferred connecting with instructors during regular office hours. Some participants experienced an increased demand for their office hours. For this reason, some added more office hours to accommodate students' needs. Summer explained that while some of her students preferred emailing back and forth, at least half of her students felt more comfortable meeting with her one-on-one via Zoom. Participants said that at times, it was easier

to meet with the students because they could walk them through the assignment and answer multiple questions, instead of addressing multiple emails from the same student.

Participants noticed that just like they had to adapt their teaching to a new modality, they also had to adjust how they communicated. Some participants decided to allocate class time to address questions, while others found creative ways to simplify communication. For example, in addition to email and one-on-one meetings with students, Samuel found that it was more efficient to allocate class time to go over questions. He explained that most of the time, multiple students had the same question. Therefore, he started to give class time for questions, comments, and concerns. This additional time paid off in many ways because it allowed others to learn from their peers and reinforced the lesson. He recalled that at first, he had to learn to wait until students felt comfortable asking questions. In the beginning, nobody had questions, so he started asking them. As the semester progressed, he noticed that multiple students asked questions, and the process became an organic part of the class.

In hopes of simplifying email, Alexis came up with a creative solution. She used WhatsApp to create a group with all her students. Her goal was to create a place where students could have instant access to their peers and her. She recalled that students found it very helpful under the circumstances because it provided a quick and casual way to ask questions. She noticed that, at times, her students were faster responding to their peers' questions. She felt that students took more responsibility and accountability in class. Simultaneously, forming this group provided students with a low-stake, more personal way to connect with others and to feel part of the community.

The pivot unveiled challenges and opportunities for instructors to adapt to a new teaching modality. This section discussed the opportunities that emerged from teaching online in the times

of COVID-19. Table 4.7 provides an overview of the themes covered in this section, 1) community and 2) communication.

Table 4.7

Opportunities

Themes	Definition	Example	Proportion of the theme among instructors (n_1=11)	Proportion of the theme among meaning segments (n_2 = 110)
Community	A safe space where students and instructors can interact.	"I really had grown close to my students, I ended up very much looking forward to seeing them in person on Zoom and it was like coming back together. So, it was actually a much more positive experience in every class we had I looked forward to it" (Summer).	11 (100%)	33 (30%)
Communication	Ways in which instructors and students communicated with each other.	"Email worked very well. I would also use class time to address some issues with… with homework. But no, a few times, if they were stuck with something to say and working with exercise such and such. This is what it says, and this is what I write, and the software is not accepting it. You know this was very easy to address. I would immediately clack, clack, clack. and the student would see and understand what was wrong and would move on. So, that worked very well because in a matter of seconds I solved the problem" (Samuel).	11 (100%)	20 (18.18%)

Recommendations

Towards the end of each interview, participants had a chance to look back and reflect on their experience teaching online for the first time amid a global pandemic. Some recommendations emerged from these conversations concerning learning and instructional strategies. The following section provides an overview of these themes, 1) instructional strategies and 2) learning.

Instructional Strategies

Participants argued that the pandemic would forever change higher education. They indicated that this experience changed their perspective about teaching online. First, participants described the amount of time and organization it takes to run a successful class online. Students need to be able to work independently. In addition, they need to be familiar with the assignment objectives and expectations. For example, Alexis explained that it came down to either being clear or having to explain the task over and over, "You either think carefully or you answer 30 emails. So, it is your choice. What do you want to do?"

Moreover, she learned to organize her materials and assignments on Canvas. Likewise, Ana explained that she realized that sharing her lesson plans in advance would save her time. She explained that sharing that level of detail with students simplified the number of emails she had to answer. She stated, "this is what we are going to do like the three bullet points, day by day, something that my syllabus does not really have that level of detail… So, when students missed class or something, they knew where to find it." Ana knew that she could not replicate her face-to-face class in the virtual environment. Therefore, providing students with all the necessary information made a big difference. Participants concluded that their most important

takeaway was setting clear expectations and goals for each assignment and communicating with students regularly.

Second, participants discussed assessment in the new modality. Although at least half of the participants had used electronic exams prior to the pivot, only a couple of participants had used Proctorio. Due to the unexpected demand for Proctorio licenses, initially, the university could not provide a license to everyone. In other words, some participants had to find creative ways to monitor exams without using Proctorio. Some participants were uncomfortable with the whole idea.

For this reason, at least a couple decided to trust and rely on their students' code of ethics while taking an exam. Others experimented with Zoom and asked students to share their screens while taking the exam. Participants agreed that there was a need to evaluate current assessments and find alternative ways to assess student learning. Summer explained that these alternative ways could include more conversation-oriented activities to have students demonstrate their language competency. Her takeaway was to find other types of assessments instead of relying on the typical test.

Third, participants discussed student engagement. They explained that it is okay to put more responsibility in students' hands. Participants noted that students engaged more with the material and with their classmates when they were given more control. For example, at the early stages of the pivot, Summer described that she had complete control of everything on Zoom. She stated, "eventually, it was like, no, you know, use the whiteboard or letting everyone just rotate through sharing the responsibilities that kind of thing." Summer explained that by shifting that control to the students, she could entirely focus on them rather than divide her attention between

the task and the students. Doing this allowed her to feel more like a facilitator rather than a manager or editor.

Learning

Pivoting to a new teaching modality was, without a doubt, abrupt. Nor faculty nor students planned for it nor signed-up for it. However, the participants of the present study went above and beyond to adapt and keep up with the new normal. Looking back, most participants agreed that prioritizing to learn new technologies and their pedagogical application is on the top of their list. They concurred that it does not have to be an overwhelming experience. It can be as easy as experimenting with just one tool at a time. Some participants stated that this experience taught them that they could do more than they imagined. However, most of the time, it comes down to a question of time. Participants indicated that finding time could be challenging because of their research and service with the department, the university, and the community.

Participants agreed that the new modality of teaching would not go away. Some participants, like Ana, stated that all instructors must be prepared for it. She explained that knowing how to teach online after the Spring of 2020 will be expected and part of the job description. She stated that this marks a start of a new era in education. All must be prepared for what is yet to come—for example, teaching in-person but being able to accommodate students via Zoom or asynchronously as needed. She noted that although this is not a new concept; however, in the past, only a few people knew how to do it. Nowadays, everyone knows how to, some better than others, but everyone has a better idea.

To conclude, the common message that participants wanted to transmit was not to be intimidated by technology. The only way to learn is by putting themselves out there, experimenting, making mistakes, and, most importantly, focusing on the instructional

effectiveness of the technology being used. Table 4.8 provides an overview of the themes covered in this section, 1) instructional strategies and 2) learning.

Table 4.8

Recommendations

Themes	Definition	Example	Proportion of the theme among instructors (n_1=11)	Proportion of the theme among meaning segments (n_2 = 110)
Instructional strategies	Class organization, planning, material development, LMS	"Looking back, I probably, if I find myself in a position to get more put more responsibility on the students like that, they should we could do more presentations and that sort of thing on their end, because by the end of it, I did have students, each one, once a week, whichever day people could volunteer to share something language related and lead us through it and some of it was superficial was maybe music…" (Summer)	11 (100%)	50 (45.45%)
Learning	Being aware of new technologies, and allocating time for learning to apply the tools in a pedagogical way	"technology for teaching is not going away, and we learned the hard way that we should have made an effort to make everybody be ready at least to use Canvas. And Zoom, Zoom was a meeting tool. It was not a teaching tool before March, but Canvas was…" (Ana)	6 (54.55%)	12 (10.91%)

Summary

This chapter outlined findings from the quantitative survey and the semi-structured interviews. I used a mixed-method approach to provide a comprehensive view of instructors' use of technology during this time, their experiences, their challenges, and their lessons. The online survey provided demographic data and information regarding participants' experience with technology in the classroom. Data from the semi-structured interviews provided more in-depth information regarding participants' experiences during the Spring of 2020. This section provides a summary of the findings based on the following categories: challenges, opportunities, and recommendations.

Challenges

Pivoting from teaching face-to-face to teaching online amid a global pandemic brought a set of challenges to the participants of the present study. This section described four overarching themes: 1) technology adaptation, 2) student-instructor interaction, 3) time, and 4) student participation.

First, the findings revealed that most participants did not have prior experience teaching online. Therefore, participants experienced stress and anticipation because there was not much time to learn different tools. Despite facing a steep learning curve, participants learned how to navigate and teach synchronously via Zoom. Second, participants explained that the lack of physical proximity changed the class dynamics. They had to adapt how they taught to make-up for the lack of non-verbal in the physical classroom. Third, the findings revealed that teaching online was time-consuming to plan; however, all online synchronous sessions felt shorter than regular face-to-face sessions. Fourth, students did not engage online in the manner they did in the face-to-face class. Participants attributed this change to technology but also students' well-being and mental health. Despite the challenges that participants faced, their willingness to adapt was

remarkable. They were resilient and creative in finding ways to keep students engaged through the rest of the semester.

Opportunities

This section summarizes how technology impacted maintaining a community of learning and maintaining communication with students. These main themes described in this section were 1) community and 2) communication.

First, participants discussed their approach to translate the experience from the face-to-face class to the online class despite the lack of physical proximity. Conducting classes synchronously helped students and instructors remain connected and keep that sense of community. Also, participants reported that teaching became more than learning. Their role shifted to a more supportive role that led to paying more attention to his students' well-being. Consequently, participants found their roles changing to accommodate students' needs. The new modality of teaching under the circumstances lent to creating and maintaining a solid and supportive community to keep going.

Second, participants addressed how communication changed due to the new teaching modality. Initially, most participants indicated dealing with a large volume of emails and adding more office hours to meet students' needs. These led to implementing creative solutions to address most of the students' questions. These solutions included 1) restructuring the materials on Canvas, 2) re-writing assignment instructions, 3) allocating class time to address questions, and 4) creating a group through WhatsApp. The objective behind each solution was to make communication clearer and more transparent to the students to avoid misunderstanding. These changes made a difference in student success and achievement.

Recommendations

This section provided an overview of participants' recommendations after teaching online for the first time amid a global pandemic. The themes described in this section were 1) instructional strategies and 2) learning.

First, participants explained that the key to a successful online class relies on the course organization and clarity. The student experience heavily depends on the clarity and transparency of the information, including course objectives and lesson plans. Moreover, participants discussed the need to find alternative ways to assess student learning outcomes. They concurred that student learning could be measured in other ways than a typical written exam. In addition, participants explained that shifting their roles to facilitators allowed students to take more control of their learning. This led to an increase in student engagement and participation in their classes.

Second, participants discussed the importance of technological and pedagogical training. They conferred that it comes down to learning how to apply technology in a pedagogical way rather than just using technology for the sake of using it. Participants concluded this theme by noting that online teaching is here to stay. Now that everyone has experienced it, at least during the Spring knowing how to do it effectively is part of the new normal.

CHAPTER FIVE: ANALYSIS

The purpose of this case study was to examine language instructors' perceptions and experiences during the transition from face-to-face instruction to online language instruction; and how they integrated technology during the COVID-19 stay-at-home order in the Spring of 2020. I interviewed 11 higher education language instructors to get insight into what it was like to teach during the pivot from face-to-face instruction to online instruction during a global pandemic. In this chapter, I analyzed participants' responses using the Community of Inquiry (CoI) and SAMR frameworks as lens to examine the findings.

The Community of Inquiry (CoI) framework contextualizes the language classroom as a collaborative online learning environment. It provides guidance on how to create an active online environment where students can successfully participate. In relation to my study, the CoI framework presents a roadmap for technology integration and instructor-student, student-student interactions to promote a successful community of learning.

SAMR provides the tools to analyze the degrees of the use of technology in the classroom. In other words, the SAMR model offers a lens to examine how language instructors integrated technology during the pivot to online instruction. The present study used both models due to their practical, hands-on implications to the use and integration of technology in the online classroom in COVID-19 times. Next, I discuss the present study's findings below.

Community of Inquiry

The CoI framework is the most referenced framework for online and blended learning (Garrison, 2016). The Community of Inquiry (CoI) provides learners with an opportunity to be more engaged with the material and further their learning outcomes (Lipman, 2003). Under this framework, participants have the opportunity to deepen their learning and understanding even more when partaking in the role of teacher and student (Garrison, 2016). The CoI framework centers around the role and influence of its three presences: social, teaching, and cognitive. Each presence provides a distinctive way to explore and analyze the findings of the present study. Next, I begin with Table 5.1 to provide a summary of the course activities and their relation to each presence. Next, I will discuss each presence in relation to the present study.

Table 5.1

CoI's Theory and Identified Course Activities by Category

	Community of Inquiry (CoI)		
Course Activities	Social Presence	Cognitive Presence	Teaching Presence
Social time	X		X
Class announcements	X		X
Reading and writing assignments		X	X
Instructor facilitated discussion	X		X
Team based collaboration (breakout rooms, chat, screen sharing and annotation)	X	X	X
Homework, quizzes, exams		X	X
Instructor communication			X
Student participation	X	X	X

Social Presence

Social presence promotes and fosters relationships between participants. Garrison defined it as "the ability of participants to project themselves socially and emotionally as 'real people' (i.e., their full personality), through the medium of communication being used" (Garrison et al., 2000, p. 94). Social presence is essential to establishing a sense of belonging for a learning community to be effective (Garrison, 2017). Social presence calls for student-centered learning

and open communication. In this section, I will present the findings that aligned with social presence practices.

Tichavsky et al. (2015) stated that face-to-face instruction facilitates interaction between instructors and students. In the present study, participants described different approaches to encourage social presence during the pivot to online teaching. Most participants explained that they tried their best to recreate the face-to-face experience in the online class. They wanted to keep their focus on the student experience. Participants explained that they did not want to lose the rapport that they had built with their students prior to the pivot. Therefore, they tried their best to remain connected with their students.

Bollinger and Inan (2012) explained that taking a course online can be an isolating experience. They stated that the greater psychological and communication distance (transactional distance), a student might experience more isolation and disconnectedness. According to them, interaction with the instructor is vital for a positive experience in an online course. Moreover, to support learners in an online environment, it is critical to share [with students] information about instructor accessibility, course communication, and student interaction (Rueter et al., 2019).

Despite the lack of physical proximity, participants agreed that continuing classes synchronously preserved their connection to their classes. Participants discussed social time during and after the pivot to teaching online. For example, Blue explained that she always allocated time for social time. She indicated that the social connection between her and her students constituted the base of her teaching. She stated that social time allowed her to connect with her students and provided a space for her students to communicate with one another. Another participant, Summer, described her synchronous classes as a way for the class to come back together as a community. She explained that seeing and hearing each other made a

difference in her class online. Similarly, Eloise explained the excitement that some of her students showed when class started. She stated that students would wave on their way in and out of class online. Eloise explained that they waved at each other and that they seemed genuinely excited to see their classmates. She indicated that the waving gesture made her, and her students feel welcomed and part of a community.

Bowers and Kumar (2015) explained that it is possible to establish a solid social presence in fully online courses. However, Weidlich et al., (2018) explained that one of the critical differences between face-to-face and online courses is that the latter relies on technology mediation. As a result, some of these interactions are less natural and intricate to put together than they would be in the face-to-face environment. One common issue that participants reported was how they adapted to teaching using Zoom. They explained that they had to learn how to deal with their students' quietness on mute; and other distractions from being at home. Moreover, participants also stated that Zoom changed the dynamic environment from the face-to-face class experience to a more visual and passive experience.

Participants also described how the virtual class changed the interactions among students and between students and instructors. Noah stated that it was not natural or easy to recreate the chit-chat pre-and post-class in the virtual class. He observed that students seemed more reluctant to ask questions as they did in the face-to-face class. However, he explained how he used technology to keep students engaged. For example, he used playlists in the target language to find a way to connect with students through music. He noted that students would engage with him to express their likes or dislikes based on the playlist. He also explained how he grouped students in pairs in the breakout rooms and worked with questions that made them reflect, ask questions, and report their findings with the classroom. Similarly, Eloise described assigning

students to breakout rooms and having them complete a survey to gather information about their peers while practicing the target language. According to Blue, group work is essential in the language class because it allows students to connect with their peers and makes the material more relevant to their lives.

According to Garrison and Akyol (2015), interaction between students and student-instructor are the foundation of a meaningful learning environment. During the pivot, participants indicated that their students were their priority. They explained that they checked-in more often regarding their well-being, absences, and course work. For example, one of the participants, Eloise, recalled observing students being more stressed and anxious during these unprecedented times. In fact, she noted that some students were dealing with panic-attacks while in class. She explained that during the pivot, she sent follow-up emails with students to make sure they were okay. She knew that some of her students were dealing with stress related to the pandemic and the stay-at-home order.

The findings suggest that instructors used different approaches to promote social presence amid a global pandemic. Participants discussed how they used technology to facilitate social presence in various ways. Moreover, they indicated making their students and their learning a priority. Table 5.1 outlined how participants allocated time for social interaction in different forms: social time, class announcements, instructor-facilitated discussion, team-based collaboration activities, and student participation.

Cognitive Presence

Cognitive presence facilitates a dynamic environment where learners can work together, to understand a problem by inquiry, exploration, and application (Garrison, 2017). It applies Dewey's Practical Inquiry model as its foundation, which asserts that learning should happen organically and using life experiences (Garrison & Anderson, 2003). During and after the pivot, participants did not report learning new tools. However, they reported learning more about the tools they were familiar with (Canvas, Kahoot!, Quizlet) or tools that they had to use (Zoom). In this section, I present how participants fomented cognitive presence under a new teaching modality.

In the early stages of the pivot, participants noted that students could not participate in the same way they did in the face-to-face classes. Initially, participants felt like students did not have as many opportunities to participate in the new modality. However, as participants got more comfortable with the tools available to them, such as Zoom, they provided as many opportunities for student collaboration as possible. They used various activities that focused on students trying to explain something, rather than just filling the blanks or answering yes/no questions. For example, most reported using the breakout rooms to facilitate a space for students to work together and help each other out with the material. Participants noted that the breakout room activities encouraged students to push outside of their comfort zone to interact with different peers every single time. Breakout room activities included creating dialogues in groups, reading a grammar concept or cultural note and reporting back to the class, one-on-one short interviews to present to the class, etc.

In addition to the breakout room activities, participants reported using FlipGrid for student introductions and presentations. Furthermore, students used this tool to provide feedback

to their peers and communicate with each other asynchronously. For example, if a student created a presentation and had questions about other peers' feedback, they would respond to their video to get more feedback. Participants enjoyed this feature because they could see how students engaged with each other and with the material. Similarly, other participants opted to use collaborative tools such as Office 365 or embedding links to Google Docs within Canvas for group activities and discussions. Just like in FlipGrid, participants could see students interact with one another in a meaningful way.

During the pivot, participants learned that putting more responsibility in students' hands led to positive learning outcomes. By doing so, it shifted the instructor-centered class to a student-centered environment. For example, Summer explained that she encouraged students to use the share screen and the annotation tool to brainstorm and share their answers to class activities. She explained that students were more engaged in class by doing this and took ownership of the material. She noticed that by letting students do that, the experience was more collaborative.

According to Garrison et al. (2001), cognitive presence is the learners' ability to understand and apply the material through discourse and reflection in a community of inquiry (p. 11). The findings suggest that students responded positively to meaningful collaborative activities. Participants indicated using breakout rooms to provide a space for group discussion and reflection. Also, they discussed using tools such as FlipGrid, Google Docs, and Office 365 to promote deeper engagement with the material. Table 5.1 outlined some examples of how participants facilitated cognitive presence in the form of reading and writing assignments, team-based collaboration, homework, quizzes, exams, and student participation.

Teaching Presence

Teaching presence promotes a collaborative environment where learners take responsibility for their learning and support each other's learning through inquiry. It provides guidelines for effective instruction online, and it consists of design and organization, facilitation, and direct instruction (Anderson et al., 2001). In addition, it offers an environment where instructors facilitate learning by providing clear instructions, scholarly knowledge, and timely feedback. In sum, teaching presence is the relationship between instructor and learners and between learner and learner. In this section I present how participants applied teaching presence while teaching online for the first time.

The findings revealed that the majority of participants did not have prior experience teaching online. To pivot to a new modality was a stressful and uncertain time for most of them. Most participants learned and adapted to teach online while doing so. In fact, none of the participants had used Zoom before the pivot. They indicated learning the nuances of Zoom as the semester progressed. Some suggested allocating class time to try a feature and see what worked best for each section. This gave participants another opportunity to further their rapport with their students. Participants explained that teaching synchronously via Zoom provided them with a way to stay connected with students. Participants indicated that being vulnerable and asking for their students' help fomented open and honest communication among the members of the class. They noted that by doing this uninventively, some students felt more comfortable asking questions throughout the class, even during announcements.

Similarly, one of the participants, Oliver, discussed the importance of being present and connecting with students. He emphasized the importance of transparent and open communication. For example, he said that student not only knew of his presence because they

saw him via Zoom, but also through his communication style. He explained that he sent constant announcements after class, and reminders so that students knew exactly what was happening in class. He explained that he wanted his students to know and feel that he was there for them despite the physical distance.

Relatedly, other participants explained that teaching online required more organization. They stated that the basis for a successful assignment was setting clear expectations and goals. For example, one participant explained that students had less questions if the material on Canvas was well-organized and easy to navigate. Another participant, Ana, indicated posting detailed lesson plans on Canvas. That way, students could refer back to them if they missed class. Ana explained that it helped students know exactly what was going to be done. Unlike the past where she would share the topic and page numbers from the textbook, she shared the breakdown of her lesson plan. She observed that some students took advantage of this and were more prepared.

Another participant, Samuel, discussed allocating time to address student concerns and questions-on top of being organized. He explained that allocating time at the beginning of class provided students with a space to check-in with each other and ask questions. He explained that he used this time to answer questions and to clarify students' concerns. He recalled that most students used this time to go over the more challenging homework exercises and this benefited everyone in the class. He noted that after he went over a particular exercise, students would follow-up with more questions. He explained using that as an opportunity for review before moving into the next topic.

During the pivot, participants noted that the synchronous classes felt shorter than in-person classes. They explained that by the time they were done with announcements, or reviewing the previous lesson, they were about half into class time. For this reason, participants

had to adjust their activities to fit the new modality. Some participants reported spending considerably more time either adapting or developing materials for their online classes. For example, Ana indicated revisiting her PowerPoint presentation to make them more efficient. She explained that doing this allowed her to shift from a more instructor-centered mode into a more student-centered experienced. She described including comprehension checks every four or five slides and creating more engaging activities like in Kahoot! That way, she could assess for understanding in a more dynamic way.

Garrison (2017) referred to teaching presence as planning, developing, and facilitation of student learning. In this section, the findings suggest that participants promoted teaching presence by providing instruction and materials, initiating discussion, and assessing instruction in dynamic ways. Participants guided their teaching under a new modality based on the student experience. They adapted their materials to be more interactive with clear objectives and organized their LMS efficiently. Table 5.1 outlined some examples of how participants practiced teaching presence in the form of social time, class announcements, reading and writing assignments, instructor facilitated discussion, instructor communication, etc. Next, I discuss the activities that participants used while teaching online through the SAMR lens.

Substitution Augmentation Modification Redefinition

Puentedura's Substitution Augmentation Modification Redefinition (SAMR) Model provides a framework to integrate technology into instruction (Hilton, 2016). According to Cummings (2014), the SAMR model facilitates the integration of emerging technology to promote 21st-century skills. In this section, I discuss the level of technology integration in language courses taught online during the stay-at-home order.

In the SAMR framework, substitution is the task of replacing other tools for technology to complete a task that did not require the use of technology in the first place (Hilton, 2016). In other words, "substitution" entails identifying a technological tool to use in the classroom to replace another one. The findings revealed that most participants used technology to recreate the face-to-face environment in the virtual class. Due to participants' time constraints, lack of experience teaching online, and the nature of the pivot, most participants used as many of their activities from their face-to-face classroom in the online environment. For example, PowerPoint was participants' tool of choice. They explained that PowerPoint allowed them to use their existing presentations to teach online without making changes. Participants explained that most of these presentations consisted of succinct grammar overviews, review exercises, and group tasks. In other words, most participants were able to lecture online in the same way they did in the face-to-face environment. However, a few participants reported revising and curating their PowerPoint presentations to fit the new modality of instruction. For example, Ana included an assessment slide every two three slides to check comprehension. Oliver reported adding short video clips to have more variety in his lessons and encourage student engagement.

Similarly, participants used Zoom to facilitate learning. Most participants indicated using the breakout room functionality to promote student participation and collaboration. They

explained that this function provided them with a way to assign groups just like they did in the regular classroom. However, some argued that forming groups would take longer than doing it in the physical space initially. Participants explained that the breakout room function allowed them to facilitate all kinds of activities. Some ways that participants used this function were 1) to have students fill-in the blanks to an exercise, 2) to facilitate speaking practice, and 3) to collaborate in task-based activities. For example, Eloise used the breakout rooms to facilitate activities that encouraged meaningful conversation between peers. She explained that this tool provided her students a way to practice with different students each time around. Similarly, Noah indicated using the breakout rooms for activities that resembled speed-dating without the romantic connotation. He explained that this type of activity facilitated interaction between students and meaningful information exchange and reporting.

Other Zoom functionalities that participants found applicable included 1) polling, 2) emojis, and 3) chat. Participants argued that these three functionalities allowed them to recreate what they were doing in the face-to-face environment. For example, some used a standing poll to assess student understanding. Likewise, other participants used emojis instead of a head nod or thumbs up as they did in the face-to-face classroom. Last, participants indicated using the chat function for assessment. For example, they share a slide with a question and ask students to type their answer using the chat but waiting to hit "enter" until instructed.

Undoubtedly, participants found creative ways to use Zoom's functions to recreate group activities from the face-to-face class into the online environment. They felt the need to keep everything simple to facilitate clear instruction continuity. The activities mentioned above fell under the Substitution level because participants used technology to replace a task that did not

require technology in their face-to-face classes. Next, I outline other types of activities that add the use technology to enhance a task (augmentation).

Augmentation amplifies substitution because it uses technology to improve a task (Hilton, 2016). In the present study, participants indicated using different tools to assess student learning such as, Kahoot! and Gimkit. The minority of participants indicated using Nearpod as an add-on tool in their PowerPoint presentations to create comprehension checks within the lesson. These tools provided the instructors with an instant overview of student understanding of the lesson. Unlike the traditional thumbs up or down, these tools provided participants with a precise way to assess their students.

Participants also opted to use collaborative tools such as Office 365 and Google Docs. These tools facilitated live student collaboration. They explained that this type of activity helped students engage with the materials and with their peers. Moreover, participants could keep an eye on multiple groups at the same time, while noting their strengths and weaknesses. This type of activity led students to delve into the material and ask follow-up questions.

The findings indicate that participants of the present study reached the augmentation level mostly to assess student learning. Tools such as Kahoot!, Gimkit, Office 365, and Google Docs enhanced traditional tasks just like those under the substitution level. Next, I describe a couple of more "advanced" tools and activities that a handful of participants used during the stay-at-home order. I categorized these activities as advanced because they required a more involved use of technology (modification).

According to Magaña (2018), the modification level involves modifying a pre-existing task by integrating technology. The findings revealed that only one activity fit under this level. It involved using FlipGrid to post and share students' presentations. A few participants asked

students to post their presentations and watch and provide feedback to other peers' presentations in the form of video. They explained that initially, students were hesitant about this. However, students expressed that this type of feedback made it more personable and was not perceived harshly. By modifying this activity to integrate technology, participants reported seeing and hearing everyone's presentation and feedback. They explained that this is not the case in the traditional face-to-face class due to time constraints.

In this section, I described the instructional activities that participants used during the pivot and their level of technology integration. The findings suggested that the majority of activities fell under the Substitution level. They indicated that participants used technology to replace a task that did not require technology in their face-to-face classes. Table 5.2 provides a summary view of the instructional activities through the SAMR lens.

Table 5.2

Summary of Tools Used in SAMR Levels

SAMR Level	Apps used
Substitution	PowerPoint presentations, Zoom functionalities: breakout rooms, polling, emojis, chat.
Augmentation	Kahoot! GimKit, Google Docs, Office 365
Modification	FlipGrid
Redefinition	n/a

Summary

The findings of the present study provided an overview of participants' experience teaching online for the first time through the lens of CoI and SAMR. Moreover, it offered insight into participants' level of technology integration through their activities in the new modality. In this section, I will provide a summary of the findings. First, I start with the CoI framework followed by SAMR.

The Community of Inquiry framework can serve as a blueprint for creating active online learning experiences (Castellanos-Reyes, 2020). In the present study, participants carefully designed and facilitated engaging opportunities for learners to interact with one another online. They identified open and transparent communication, organization, and clarity as key elements for a successful online course. Similarly, they discussed the importance of establishing connections with their students and among students taking the same class. The unique circumstances shifted participants' strategies to be more aware of the student experience. Most participants indicated looking for meaningful ways to engage students with the material and with their peers under the new modality.

By holding synchronous class sessions via Zoom, the majority of participants provided a virtual space and opportunities to collaborate and connect (social presence). Participants also encouraged students to interact with different peers when using the breakout rooms. In order to facilitate meaningful discussion and understanding of a topic, participants offered various types of activities (cognitive presence). Last, the majority of participants allocated time at the beginning of class to address students' questions. Similarly, they facilitated engaging activities to assess student learning and understanding, such as integrating films and documentaries (teaching presence).

Lomicka (2020) explained the role of social presence to foster a sense of community in the classroom. She stated that "social presence is vital to the development of both cognitive and affective objectives as it can support critical thinking and engage learners in the social interaction process" (p. 308). In the present study, participants explained that in order to learn a language, students need to feel at ease and comfortable with each other to freely practice and make mistakes. Even though the participants in the present study adapted quickly to the new technology and learned as the semester progressed, they used technology creatively. The findings suggested that they tried different ways to engage and connect students in the virtual classroom.

Pandolpho (2018) explained that students connect more with instructors who share their vulnerability. The author posited that "when we allow ourselves to be vulnerable, acknowledge our imperfections, and tell our stories, we show our students that we are, in fact, more like them than they may imagine" (n.p.). Despite participants' lack of experience teaching online, specifically synchronously using Zoom, they tried different ways to foment meaningful exchange. Some indicated that it was a humbling experience to share with students that they were learning Zoom along with them. Some would allocate a few minutes of class to try different function of Zoom with their classes and determined if it worked for the section or not. This experience provided participants with an opportunity to open up more and to share their vulnerability with students and connect with them in a more human way.

The findings indicated that most participants opted for collaborative activities to foster more meaningful and deeper understanding of the material (cognitive presence). González-Lloret (2020) explained that "collaborative activities in the class have a dual purpose. On one side, they promote language interaction among learners and maximum engagement with the task, and on the other, they have the important function of building a community of learning" (p. 262). In

other words, collaborative activities provide a space for students to produce and engage in the target language. These along with timely feedback are essential to develop a second language (Gass, 1997; Long, 1981; Swain, 1995; Swain & Watanabe, 2013). Furthermore, according to Panitz (1999), collaborative activities stimulate critical thinking and reduces student anxiety.

Lomicka (2020) discussed the role of teaching presence in an online environment. She explained that teaching presence is tightly connected with student satisfaction. In other words, student satisfaction increases when there is a strong teaching presence (p. 309). In the present study, participants did a remarkable job re-organizing their materials on the LMS system. They tried their best to make their courses easier to navigate with clear instructions to enhance the student experience. Moreover, they re-structured their assignments with clear learning objectives. In addition, they re-evaluated their class activities and adapted them to be student-led. Participants fomented teaching presence also through office hours and allocating additional time to connect with students. They indicated that they wanted students to know that they were there for them at all times.

Current literature on CoI focuses on the student perspective such as, student academic performance (Almasi et al., 2018; Cutsinger et al., 2018), student engagement (D'Alessio et al., 2019), student satisfaction (Richardson et al., 2020), student perception (Taylor, 2016), student performance (Lawa et al., 2019), and teacher presence (Han et al., 2018; Kilis et al., 2019; Kucuk et al., 2019; Nasir et al., 2018; Nazar et al., 2018, Rubio et al., 2018). However, the present study used CoI to analyze and explore how instructors adapted to a new modality of teaching. In other words, the present study used CoI as a blueprint to guide the findings. Next, I summarize the findings related to SAMR.

According to Cummings (2014), the SAMR model facilitates the integration of emerging technology to promote 21st-century skills. In the present study, participants shared how they used technology to deliver their instructional activities. Under the new teaching modality, most participants used technology to recreate the face-to-face environment in the virtual class. Due to participants' time constraints, lack of experience teaching online, and the nature of the pivot, most participants used as many of their activities from their face-to-face classroom in the online environment. Crompton and Burke (2020) stated that most instructors use technology to replicate activities that did not require technology in the first place (substitution). Furthermore, they explained that instructors do not integrate technology at its full potential or transformative level in the SAMR model in most cases. The present study corroborates Crompton and Bruke's findings. In other words, the findings revealed that most instructional activities fell under the substitution and augmentation levels. Only a few participants revised and modified their activities during the remainder of the stay-at-home order. Contrary to the number of activities that fell under the substitution level, only one activity fell under the modification level.

The findings aligned with Hilton's (2016) and Chou and Block's (2019) studies stating that most instructors stay at the Substitution and Augmentation levels. According to Chou and Block, activities that fall into these levers address content learning (p. 1290). Similarly, the findings from the present study suggest that assessment activities fall into the augmentation level.

The present study provided an overview of participants' experience teaching online for the first time. I used the CoI and SAMR frameworks to guide the explanation of the findings. The present study offered a unique perspective due to its rare timing. Furthermore, it offered an overview of the instructors' experience teaching synchronously online during the pivot from

face-to-face instruction to online instruction. Similarly, it provided insight into participants' level of technology integration through their activities in the new teaching modality.

CHAPTER SIX: SUMMARY, RECOMMENDATIONS, IMPLICATIONS AND LIMITATIONS

This research intended to understand the implications of crisis-prompted language teaching. The present study provided insight into the use of technology in language classes during the stay-at-home order in the Spring of 2020. It highlighted instructors' challenges, opportunities, and lessons learned from their experience during such a unique time. I applied two theoretical frameworks, the Community of Inquiry (CoI), and SAMR as lenses to examine the findings of the present study. These frameworks guided the findings to understand instructors' use and integration of technology in the times of COVID-19. In this chapter, I summarize the findings of this research, their implications, and recommendations.

Research Summary

Spring 2020 was unprecedented, one of a kind; undoubtedly, instructors' level of preparation and comfort with technology varied due to different factors, and unforeseen circumstances. According to Hechinger and Lorin (2020), prior to the COVID-19 global pandemic, approximately 70% of higher education instructors had never taught online. The participants of the present study were not the exception to Hechinger and Lorin's findings. This mixed-methods study explored how higher education language instructors navigated the transition from teaching face-to-face to teaching online. Second, it examined how these instructors used technology in the new teaching modality. I used a mixed-method approach to provide a comprehensive view of instructors' use of technology during this time, their experiences, their challenges, and their lessons. First, 12 participants completed the 15-question online survey. The survey provided an overview of participants' use of technology during the pivot. The first four questions were strictly related to demographics. The remaining 11 questions

were about the use of technology in the classroom. Second, 11 out of 12 participants opted to participate in the one-on-one semi-structured interviews. The purpose of these interviews was to elucidate participants' teaching experiences during the transition from face-to-face instruction to online instruction.

I used two theoretical frameworks to analyze the data. I began with the Community of Inquiry framework and described participants' experiences in relation to the CoI's presence: (1) social presence, (2) cognitive presence and (3) teaching presence. The Community of Inquiry framework helped explain the challenges and opportunities of the new teaching modality. Next, I analyzed participants' level of technology integration through their instructional activities. I used the SAMR model to identify the technological level of each of the activities. I described specific activities and tools that participants used while adapting to the new teaching modality. This model helped identify how instructors utilized technology to facilitate their activities online.

This mixed-method study explored the experience of higher education language instructors teaching online after abruptly pivoting from teaching face-to-face to teaching online within a matter of days. The participants of the present study explained their experience teaching online for the first-time using Zoom. All participants described how they learned to use Zoom and its nuances creatively in order to keep up with the new normal and to provide students with the best experience. Similarly, participants also shared how they used other tools, including Canvas, to try to replicate the face-to-face class in an online environment. Specific applications discussed included Zoom, Canvas, Kahoot!, Google Docs, Oficce 365, Gimkit, FlipGrid, iClicker, the web, etc. Participants explained how they used these applications to provide students with opportunities to practice in the target language.

In the present study, participants experienced transformational leadership on the field amid a global pandemic. Transformational leadership is a theory that describes the actions of leaders responding to fast-paced changes and increasing pressure on their leadership practices. Despite the challenges that participants faced, their willingness to adapt was remarkable. Northouse (2016) suggests transformational leadership as a holistic approach involving individuals' feelings, values, and long-term goals. Transformational leadership is a type of leadership that encourages followers to be creative, try new methods, and develop innovative ways; according to Burns (1978), transformational leadership is a process between peers who share a common goal to advance to a higher level.

Avolio and Bass (2004) described a transformational leader as a role model that provides inspiration, motivation, and intellectual stimulation. Correspondingly, transformational leadership helps increase motivation and creativity in the work environment (Gumusluoglu & Ilsev, 2009). In the present study, participants were resilient and creative in finding ways to keep students engaged through the rest of the semester. They tried their best to make their courses easier to navigate with clear instructions to enhance the student experience. Moreover, they re-structured their assignments with clear learning objectives. They re-evaluated their class activities, adapted them to be student-led, and allocated additional time to connect with students. Their attitude and willingness to learn were extraordinary despite the short amount of time they had.

The present study revealed how its participants experienced and reacted to the fast-paced changes. Their ability to work under increasing pressure and willingness to adapt to a new teaching modality had an impact on instructors' aspects of their teaching. Their experience pivoting from face-to-face to online instruction led them to apply strategies recognized as more

effective teaching. This changed evolved as the participants learned more about teaching online and got more comfortable with it. In other words, they learned to improve their existing methods and gained more understanding of their students' wellbeing. According to Mezirow (1978), transformative learning is a process in which perspectives evolve based on a frame of reference. These frames of reference are defined as "structures of assumptions through which we understand our experiences" (Mezirow, 1997, p.5). The participants in the present study experimented with a paradigm shift in their teaching frame of reference. The pivot to a different type of instruction changed their perspective of online instruction and affected their instruction and how they connected to their students. Next, I discuss recommendations.

Recommendations

My recommendation for future research includes focusing on students' experiences during this time. This would provide an insight into student engagement in synchronous language classes. Additional investigation from the student perspective is needed to better understand how CoI's presences intertwine in synchronous language classes. I believe that exploring both instructors' and students' experiences will provide a more comprehensive understanding of how technology was incorporated. Similarly, it will provide an overview of best practices for both language instructors and language learners. Moreover, this information may be used to enhance potential online language classes after the pandemic.

Other recommendations for further research also include exploring pedagogy of care and trauma-informed pedagogy in online environments. Exploring those areas would expand higher education instructors to contemplate specific students' needs in planning and designing their

future courses. Next, I provide a list of recommendations for teaching languages online drawn from the present study's learning.

Essential Principles for Online Language Learning Communities

The following recommendations are based on the intersection between the present study's findings and the frameworks used to analyze them:

1. *Visibility and Presence (CoI's teaching presence)*: due to the lack of physical proximity, it can be challenging to recreate the same personal interactions from the face-to-face classroom. Therefore, language instructors need to be accessible in different ways throughout the course. Instructors should be able to provide enough instances where students can ask questions and interact with the instructor. Visibility and presence can be conveyed through written communication or video. In other words, visibility and presence go beyond the 65-minute synchronous classroom. In fact, it should be distributed across office hours, assignment feedback, email check-ins, written or video class announcements, etc. The findings of the present study also highlight the importance of letting go of perfection and showing vulnerability with students. In other words, finding ways to humanize the class and make it a more engaging experience.
2. *Instructional Strategies (CoI's teaching presence)*: course materials should be organized and easy to navigate. Materials should be easy to find. Every assignment should be clearly labeled and should outline clear objectives, expectations, and deadlines. Ideally, language instructors would scaffold assignments to help students grasp the material. That way, students can build confidence in the material and get the necessary feedback before tackling a more comprehensive assignment. In addition, the findings of the present study suggest providing students with preliminary examples of what an A, B, C, etc. look like

to let students understand instructors' expectations. Finally, another recommendation based on the present study is to create alternative assessment measures to assess student learning outcomes rather than relying on single tests.

3. *Establishing Community* (*CoI's social presence*): to learn a language, students need to feel at ease and comfortable with each other to freely practice and make mistakes. Communication must be between all members of the class, to create a sense of community. Therefore, instructors must allocate virtual space for students to connect and collaborate. Providing such space generates a positive and inclusive experience for students and it foments student engagement and participation. In Zoom, the breakout rooms facilitate this space. However, the objective of the activities must be communicative rather than fill-in the blanks.
4. *Facilitating Meaningful Learning Opportunities and Discussion* (*CoI's cognitive presence*): instructors must create and provide collaborative spaces for students to practice and engage in the target language. This way, students will be able to self-assess their ability in the target language and further their learning. In order to facilitate such learning, instructors must develop and offer various types of activities for students to participate and exchange ideas. A creative way to do this is through FlipGrid where students can discuss topics in the form of video.
5. *Evaluating instructional activities (SAMR)*: evaluate the learning objectives and outcomes of current materials used in the face-to-face classes to evaluate their fit in the online language classroom. Then, evaluate if additional tools are needed to successfully complete the task. When using new tools, evaluate if objectives of the activity align with the technology in place. Is it clear why technology is being used to achieve certain goals?

Implications and Limitations

The findings of the present study have implications for higher education instructors and faculty development programs in regard to technological pedagogical training. Participants of the present study faced stress and uncertainty due to the abrupt and rapid pivot from face-to-face instruction to online instruction. None of them had previous experience teaching synchronous classes and had to learn as the semester progressed. Although the university provided training resources prior and during the stay-at-home order, participants had limited time and availability. Future research may investigate creative ways to motivate and engage faculty members to complete faculty development programs.

The limitations of the present study are related to a geographic location, participant selection, and content area. For the present study, I interviewed higher education language instructors from a private university in the Midwest. The sample size was 12, with six women and six men participants. However, the majority were tenured or tenured track faculty. Future research may investigate language instructors' experiences in various institutions to provide a broader perspective in the matter.

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APPENDIX A

Quantitative Online Survey

Background information:

1. Please indicate your gender
    a. Female
    b. Male
    c. Transgender/nonconforming/other
    d. Prefer not to disclose

2. Please indicate your ethnicity
    a. Asian
    b. Black/African
    c. Caucasian
    d. Hispanic/Latinx
    e. Native American
    f. Pacific Islander
    g. Prefer not to answer

3. Please indicate the number of years of teaching experience in the field
    a. 1-5 years
    b. 6-10 years
    c. 11-15 years
    d. 15-20 year
    e. Above 20 years

4. Please indicate the language that you taught during Spring 2020
    a. French
    b. German
    c. Italian
    d. Spanish

Workload:

5. Please indicate an approximate number of hours (per week) that you spent planning your classes between February-mid March.
    a. 1-5 hours
    b. 6-10 hours
    c. 11-15 hours
    d. 16-20 hours
    e. >20 hours

6. Please indicate an approximate number of hours (per week) that you spent planning your classes between mid-March-May.
    a. 1-5 hours
    b. 6-10 hours
    c. 11-15 hours
    d. 16-20 hours
    e. >20 hours

Technology in the classroom:

7. From the list below, please select the tool(s)/apps that you used in your language classes pre-pandemic:
    a. Kahoot!
    b. Quizlet
    c. Padlet
    d. FlipGrid
    e. Remind
    f. Twitter
    g. Pear Deck
    h. Nearpod
    i. Zoom
    j. Google Tour
    k. Google Expedition
    l. Other:

8. From the list below, please select the tool(s)/apps that you used in Spring 2020 during the stay-at-home order:
    a. Kahoot!
    b. Quizlet
    c. Padlet
    d. FlipGrid
    e. Remind
    f. Twitter
    g. Pear Deck
    h. Nearpod
    i. Zoom
    j. Google Tour
    k. Google Expedition
    l. Other:

9. Pre-Pandemic, had you used cell phones/laptops for in-class activities?
    a. Yes
       Please describe:
    b. No

10. Had you used Zoom Pre-Pandemic?
    a. Yes
    b. No
11. Experience teaching online Pre-Pandemic:
    a. Yes
       Synchronously Asynchronously Hybrid Other:
    b. No

12. Using the following scale indicate your level of expertise teaching online pre-pandemic:
    a. Very poor
    b. Poor
    c. Fair
    d. Good
    e. Excellent

13. Using the following scale indicate your level of expertise teaching online pre-pandemic:
    f. Very poor
    g. Poor
    h. Fair
    i. Good
    j. Excellent

14. Using the following scale indicate your level of comfort with teaching online pre-pandemic:

	Not at all comfortable	Slightly comfortable	Neutral	Very comfortable	Extremely Comfortable
Learning Management System (e.g., Canvas)					
Teleconferencing apps (e.g., Zoom)					
Online Proctoring Sytem (e.g., Proctorio)					
Video Lecture Recording (e.g., Panopto)					
Other					

15. Using the following scale indicate your level of comfort with teaching online at the end of the Spring semester 2020:

	Not at all comfortable	Slightly comfortable	Neutral	Very comfortable	Extremely Comfortable
Learning Management System (e.g., Canvas)					
Teleconferencing apps (e.g., Zoom)					
Online Proctoring Sytem (e.g., Proctorio)					
Video Lecture Recording (e.g., Panopto)					
Other					

APPENDIX B

Semi-structured Interview Questions

1665770-1: Instructors' Perceptions of the Opportunities and Challenges of Integrating Technology in Crisis-Prompted Online Language Instruction in The Times of COVID-19

Thank you for taking the time to meet with me and talk about your experience teaching during a Global Pandemic in the Spring of 2020. This interview consists of 11 questions, and it has been divided into three parts. First, we will talk about your experience teaching pre-pandemic/ stay-at home order, then we will dive into what it was like teaching during the pandemic, most importantly, pivoting from in-person teaching to online teaching. Finally, the third section, will be about the lessons learned. Do you have any questions for me before we start? Again, I am very grateful for your time and willingness to participate. Let's get started.

Semi-structured Interview Questions

1. Before Covid-19,
    1. Let's go back to the beginning of the semester, back to February, could you describe what your typical class looked like?
    2. What kind of in-person activities did you do in the classroom? Can you think an activity that you like using in class?
2. During the stay-at-home order…
    1. Now, let's fast-forward to mid-March, to the time when the stay-at-home order were in place. Where did you hear the news? What thoughts came to mind about pivoting to teaching online?
    2. What was the transition like from in-person teaching to teaching online?

1. Can you identify any major challenges of pivoting to teaching online during the pandemic?

3. During the stay-at-home order, was there anything you miss from the face-to-face class that you could not recreate online?
4. What type of materials did you create to fit this new model of online teaching?
5. Can you think of one activity that you thought worked well online? Please describe.
6. During the stay-at-home order, for the first time in our lifetime, we were asked to stay home, work from home, home school, etc. How did you stay connected with your colleagues and students?

3. Lessons learned:
    1. Can you describe a positive experience/opportunity of teaching online during the pandemic?
    2. Looking forward, how has this experience informed your teaching? Has anything changed?
    3. What are some of the lessons learned that you would like to share with your colleagues and/or future instructors? What worked? What did not work?
    4. Finally, if you had the opportunity to go back in time and go over this experience for a second time, what would you do differently?

APPENDIX C

Consent for Survey Research

1665770-1
Instructors' Perceptions of the Opportunities and Challenges of Integrating Technology In Crisis-Prompted Online Language Instruction In The Times Of COVID-19

The purpose of this study is to explore language instructors' experiences and challenges during the transition from face-to-face instruction. You were selected as a possible participant because you taught lower-level language classes in the Spring of 2020.

This study is being conducted by: Shirley N. Kramer under the direction of my advisor, Dr. Candace Chou (ccchou@stthomas.edu), at the Graduate School of Education at the University of St Thomas, MN. This study was approved by the Institutional Review Board at the University of St. Thomas.

If you agree to participate, I will ask you to answer several survey questions focused on the use of technology before and during the stay-at-home order during the Spring of 2020. The survey should only take 15 minutes to complete.

The study has no foreseen risk.
There are no direct benefits for participating in the study.
The records of this survey will be kept confidential. In any sort of report I publish, I will not include information that will make it possible to identify you.

Your participation in this study is entirely voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of St. Thomas. If you decide to participate, you are free to withdraw at any time up to and until the survey is submitted. You may withdraw by closing the survey on your computer. You are also free to skip any questions I ask.

You may ask any questions you have now and any time during or after the survey by contacting the researcher. You may contact me at: *niet1392@stthomas.edu*. You may also contact the University of St. Thomas Institutional Review Board at (651) 962-6035 or muen0526@stthomas.edu with any questions or concerns.

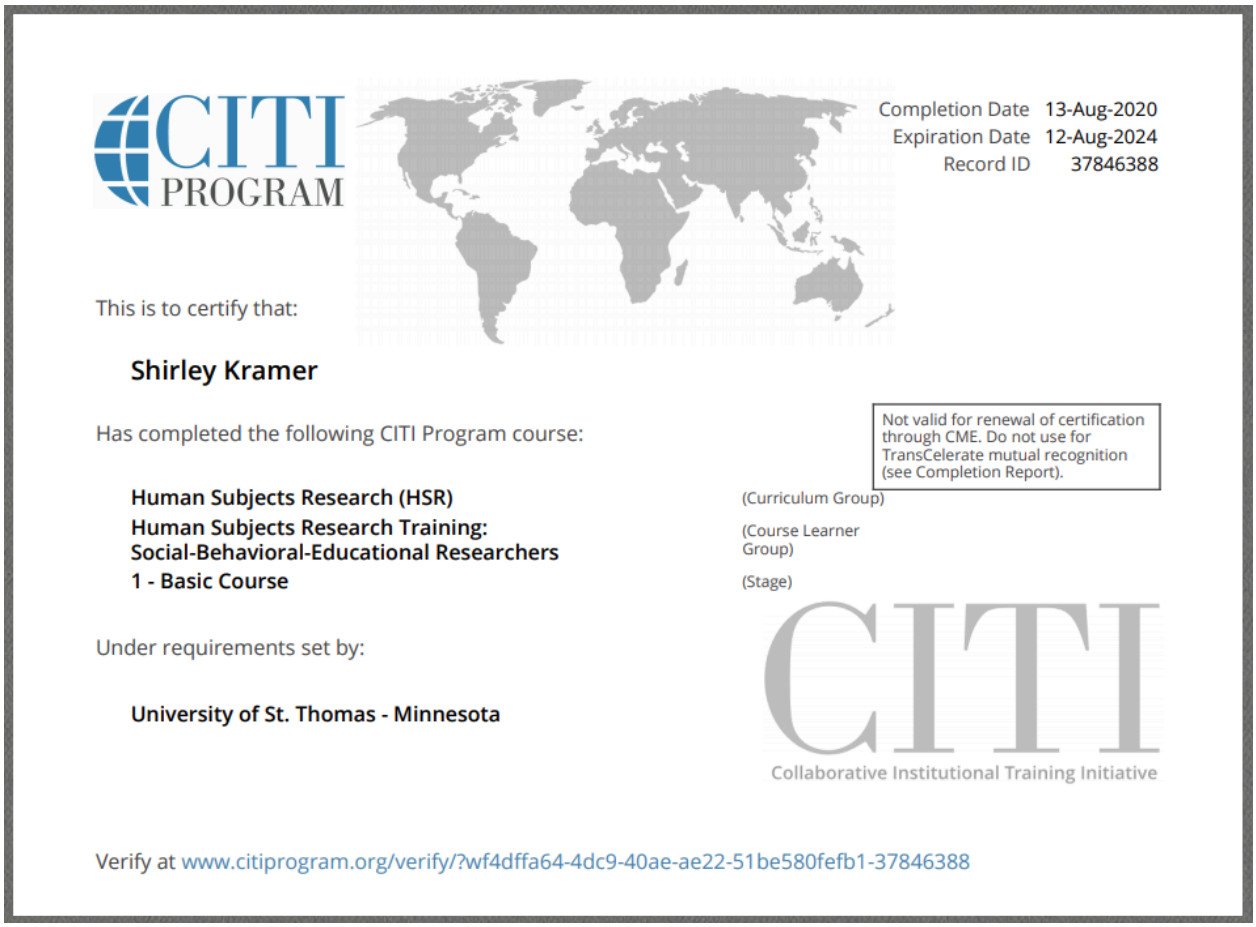
By clicking "Agree," I consent to participate in the study. I am at least 18 years of age.

Please print this form to keep for your records.

Appendix D: Institutional Review Board Certificate

1. Link to Completion Report: citiprogram.org/verify/?k3d562b44-a1fd-4c9a-9171-70b32020b0b8-37846388

2. Link to Completion Certificate: citiprogram.org/verify/?wf4dffa64-4dc9-40ae-ae22-51be580fefb1-37846388



CITI PROGRAM

Completion Date 13-Aug-2020
Expiration Date 12-Aug-2024
Record ID 37846388

This is to certify that:

Shirley Kramer

Has completed the following CITI Program course:

Not valid for renewal of certification through CME. Do not use for TransCelerate mutual recognition (see Completion Report).

Human Subjects Research (HSR) (Curriculum Group)
Human Subjects Research Training: Social-Behavioral-Educational Researchers (Course Learner Group)
1 - Basic Course (Stage)

Under requirements set by:

University of St. Thomas - Minnesota

CITI
Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?wf4dffa64-4dc9-40ae-ae22-51be580fefb1-37846388