FACTORS INTENSIVE ENGLISH PROGRAM INSTRUCTORS PERCEIVE AS PLAYING A ROLE IN FACILITATING COMMUNICATIVE LANGUAGE TEACHING ACTIVITIES IN THE EMERGENCY REMOTE TEACHING ENVIRONMENT

By

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To the wonder women

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CALL	Computer-Assisted Language Learning uses computers or digital technology to enhance language instruction (TESOL Technology Standards, 2008).
CEA	Commission on English Language Program Accreditation was founded in 1999 and recognized by the U.S. Secretary of Education in 2003. CEA provides accreditation for English programs that enroll non-immigrant international students. (https://cea-accredit.org/)
CLT	Communicative Language Teaching is an approach in which instructors guide students to improve communicative competence through interaction with their peers by using authentic tasks and materials that promotes the need for negotiation of meaning and is necessary for language acquisition. The instructor acts as facilitator and interdependent participant in classroom activities.
ERTE	Emergency remote teaching environments are the alternate delivery mode in temporary crises situations (Hodges et al., 2020).
EFL	English as a Foreign Language is recognized as taught in places where English is not the first language spoken by the community.
ESL	English as a Second Language is recognized as taught in places where English is the primary language in the community.
F2F	Face-to-face classrooms that are in person, opposed to online or through electronic communication (Blended Learning Essentials, http://ble-leeds.wikidot.com/wiki:face-to-face)
IEP	Intensive English Programs provide accelerated academic English instruction from 18 – 30 contact hours a week in differentiated levels, for international students at the post-secondary level (Carkin, 1997; Wallace, 2003).
LMS	Learning Management System is an online, secure platform, typically provided by the university that enables instructors to facilitate asynchronous resources and homework. Students participate in discussions and post assignments and assessments.
SEVP	Student and Exchange Visitor Program. A Department of Homeland Security program in the United States, which tracks student and exchange visitors for U.S. Immigration and Customs Enforcement.
TESOL	Teaching English to Speakers of Other Languages, Inc., is the non-profit international organization devoted to best practices, professional learning communities, and advocacy.
TESL	Teaching English as a Second Language is the field of teacher education. TESL degrees are available at the bachelor's, master's, and doctoral levels.
UCIEP	University and College Intensive English Programs is the first consortium of Intensive English Programs, founded in 1967. UCIEP programs are administered by accredited universities and colleges and are required to maintain professional standards of instruction and management for the purpose of cultural orientation and

	academic preparation of international students (Forbes, 2012; https://www.uciep.org/).
UTAUT	Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003) is a framework used to measure individuals' behavioral intention and user behavior in accepting and using technology and systems. The validated theory unified constructs and moderators from eight overlapping models from a variety of fields.

Abstract of Dissertation Presented to the Graduate School
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While the use of educational technology in online instruction has increased in higher education, it is still limited in intensive, academic English programs. Precipitated by COVID-19, U.S. Intensive English Programs (IEPs) quickly transitioned from face-to-face (F2F) instruction to the emergency remote teaching environment (ERTE) when the public health crisis occurred. The purpose of this study was to identify how University and College Intensive English Program (UCIEP) instructors used technology, to explore their perceptions of factors that played a role in using technology, and to understand how they learned to use technology.

Using purposeful sampling, 10 UCIEP instructors were interviewed using the general qualitative approach (Merriam & Tisdell, 2016). The Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) served as the theoretical framework for the study and guided the development of the interview protocol.

The findings indicate the influence of the CLT approach on how the instructors used technology to facilitate activities. Instructors described how the facilitator role in

CLT activities changed, and how they questioned translanguaging in the remote environment. During remote teaching instructors relied on Zoom features and used various technologies, collaborative tools, and video in synchronous and asynchronous environments. Their use of technologies was influenced by several factors, including their reported prior experience with educational technology, their ease in using technology, and input from their colleagues and students. Additional perceived factors that played a role in facilitating CLT activities in the ERTE included the usefulness of technology, their effectiveness in using technology, and barriers such as the lack of access to stable internet and adequate bandwidth. In regards to how instructors learned to use technology for facilitating CLT activities, they credited the education and technology resources provided by their IEP and university. Implications for teaching with technology and instructor development in IEP programs in the United States are provided.

CHAPTER 1
INTRODUCTION

Precipitated by the COVID-19 pandemic in March 2020, U.S. Intensive English Programs (IEPs) quickly transitioned from face-to-face (F2F) classrooms to an emergency remote teaching environment (ERTE) to maintain continuity and connection with international students as campuses began to close. IEP instructors quickly transformed F2F, intensive, academic English lessons, which typically incorporate communicative language teaching (CLT) activities, to an emergency remote teaching environment in a period ranging from two days to two weeks in March 2020. The following months proved demanding for all IEP instructors as they learned how to adapt to teaching via remote technologies and accessing professional learning resources in this environment.

Emergency remote teaching environment (ERTE) is the term used in this study to describe our “first mass attempt at distance learning” (Whittle et al., 2020, p. 318) in the “temporary shift of instructional delivery to an alternate delivery mode due to crises circumstances” (Hodges et al., 2020, p. 6). In the case of IEPs, ERTE was implemented with the understanding that face-to-face instruction would resume when conditions allowed. In traditional online or hybrid model, instructors typically have access to resources on their university campuses and appropriate release time for development for such classes. However, this quick shift to the ERTE did not allow for such preparation; in reaction to the unprecedented public health circumstances, institutions needed to provide instructional continuity while helping faculty develop skills to work and teach without access to the physical campus while managing increased workloads (Gacs et al., 2020; Hodges et al., 2020). In March 2020, IEP instructors were

challenged by the sudden shift to remote teaching and working. They needed to learn how to access colleagues and professionals in the field for training, by videoconferencing, email, messaging, and other remote communication channels. Provisional, or just-in-time (Lowenthal et al., 2019), faculty development was organized and presented by IEPs' host universities, local and global faculty colleagues, English as a Second Language (ESL) organizations, such as University and College Intensive English Programs (UCIEP) and EnglishUSA, and national and international Teaching English to Speakers of Other Languages (TESOL) members.

In normal circumstances, remote instruction is rare in IEPs that issue I-20s, a document granted to international students upon acceptance. The I-20 is required for international students to interview in a U.S. embassy or consulate in order to obtain an F-1 student visa. The Student and Exchange Visitor Program (SEVP), the federal entity that monitors F students and their enrollment in certified language training programs for the U.S. Department of Homeland Security (DHS), stipulates that full-time English language students attend at least 18 in-person classroom hours each week (Department of Homeland Security, 2021a).

In response to the outbreak of COVID-19 in the US, SEVP relaxed their in-person requirements in March 2020, releasing a broadcast message stating that active "F students will be permitted to temporarily count online classes toward a full course of study in excess of the regulatory limits" (March 9, 2020, SEVP Broadcast Message) regardless of their location. Once IEP students learned of the new SEVP rules regarding their English studies, some chose to return to their home countries, while others stayed in the US. Some stayed in the US but left their initial location to join

friends or family in a different US city. IEP instructors were challenged not only with the mandatory pivot (Gacs et al., 2020), the term used for the move to online or remote instruction, but also keeping track of students' time zones and making allowances for students with less than ideal remote learning conditions, including unreliable internet connections, electricity shortages, and political upheaval in their home countries.

In addition to the challenges of keeping track of a widely dispersed group of students, instructors were charged with teaching students how to navigate university and college websites, acquiring and using various identification numbers, passwords, and two-factor authentication, along with Virtual Private Network (VPN) access, and Learning Management Systems (LMS), even as students struggled with the uncertainty and fear of the current public health crisis.

As teaching faculty struggled, administrators were faced with their own set of challenges. They needed to maintain program continuity, navigate pandemic protocols, monitor changing immigration regulations, and communicate with students to monitor where they were located, and if they were able to access the IEP classes. Administrators were also responsible for deciphering human resources and campus requirements for remote working agreements, while providing procedures and support for the entire unit. Furthermore, administrators were challenged with understanding instructors' needs for appropriate hardware, infrastructure access, and professional learning during this transitional time.

Intensive English Programs

The mission of U.S. university-administered Intensive English Programs (IEPs) is to provide academic English language preparation for F-1 international student visa-holders intending to enter an undergraduate or graduate degree program. IEPs provide

immersion for students to learn English, while embedded in the ambient language and culture. Instructors, university students, and the host university community help IEP students navigate the complex nuances of the immersion experience. The IEP community fosters authentic language practice within the classroom and facilitates interaction with community members to experience the sociocultural dimensions of educational life.

Orchestrating the transition that IEPs made from the in-person setting to the emergency remote environment fell to administrators who had to consider the needs of the entire community of stakeholders within a landscape of a novel coronavirus pandemic. Student language learning, the delivery of an immersion experience in a remote environment, and instructors' needs in negotiating technology and pedagogy to maintain continuity were some of many issues IEP administrators considered. My own team of administrators experienced this in March 2020. I am a full-time faculty administrator at the University of Florida English Language Institute (UF ELI). On the final Friday afternoon of spring break, University of Florida Public Affairs sent an email stating that students and faculty who visited countries with rising numbers of COVID-19 cases would need to quarantine away from campus for 14 days before returning (Berry & Lane, email communication, March 6, 2020). Three days later staff and faculty received an email from UF Public Affairs that announced, due to the COVID-19 outbreak in the United States, "Provost Joe Glover sent a memo to academic deans today recommending that instructors move their courses from face-to-face delivery to an electronic delivery mode effective immediately, wherever possible" (UF Public Affairs, email correspondence, March 9, 2020). Students were directed to leave campus and

employees would work from home, if possible. My team of administrators mobilized to continue operations and instruction immediately in the remote environment. Lacking explicit U.S. government interpretation of full-time remote courses for enrolled F-1 visa students, all IEPs improvised instructional procedures to serve the international students the best we could under the unprecedented circumstances.

One of my responsibilities as a Senior Lecturer at the University of Florida English Language Institute is providing supervised teaching and professional development support for graduate teaching assistants (TAs), who are graduate students in the Linguistics Department. Because of my role in facilitating professional development and teaching training, I had a central role in supporting our instructors as part of the administrative team. During the COVID-19 pandemic shift to ERTE, our administrative team supported instructors in exploring educational technology and ESL pedagogy through remote video conferencing meetings on Zoom, email, Facebook, WhatsApp messaging, and individual consultations. We gave our instructors teaching resources from our international and U.S.-based professional peers at TESOL, EnglishUSA, and University and College Intensive English Programs (UCIEP). Our program administrators include the Director, Associate Director, two Assistant Directors, Office Manager, Student Life Coordinator, and Cultural Immersion Program Coordinator. We form an ELI Core Emergency Group, responsible for all students, staff, and faculty well-being and continuity of operations through campus incidences, weather events, and other urgent situations that arise. In this case, the ELI Core Emergency Group worked to interpret U.S. government, the State of Florida, and University of Florida guidelines to implement best practices to serve our international students and

instructors. During this immediate, critical health emergency, the Core Emergency Group and other expert faculty, the Skills Coordinators, worked together to provide collaborative and individual professional development opportunities and instructional support in an entirely remote environment during the pandemic.

Throughout the emergency, our team attempted to assist instructors by communicating opportunities for learning about language instruction using educational technology internally within the ELI and larger UF community, and external regional, national, and international online workshops with peers. We were learning along with our IEP administrative peers across the U.S. that we had a variety of needs and circumstances, and regardless of what we were attempting to provide, we were unsure of the learning resources they sought and educational technology they used during the year. The emergency did expose the need for instructors' input in communication, programming, and resources they determined as playing a role in their individual and collaborative learning about facilitating appropriate communicative language teaching activities in remote instruction. The situation revealed "gaps in design, experience, and equal access" (Gacs et al., 2020, p. 389) in the sudden move to online instruction. Our institute, other university and college-based IEPs across the U.S., and the wider field of professionals (TESOL) may benefit from exploring instructors' perceptions of the factors they felt played a role in facilitating CLT activities and the learning processes they experienced in this sudden shift. These instructors' perceptions will guide leaders to provide future innovative and accessible opportunities for using technology to support language learning.

Purpose of the Study and Research Questions

While educational technology may be used by some IEP instructors to support academic English language instruction, some instructors may choose to provide interactive and communicative activities without relying on technology in their classrooms. Stipulations by Student and Exchange Visitor Program (SEVP) limit online courses in immersion culture and language programs and restrict the use of online instruction for F-1 students (DHS, 2021). Individual IEPs may have few or no requirements to integrate educational technology including a Learning Management System (LMS). Consequently, in March 2020, when universities and colleges across the U.S. closed and moved entirely to an emergency remote teaching environment (ERTE) due to the COVID-19 pandemic, IEP instructors had a wide range of proficiency and preferences for educational technology for apps, online learning platforms, video conferencing, LMS, and other tools. Lack of familiarity with online and remote instruction may be assumed from the excessive emails, discussion board questions, free webinars offered, and Facebook group posts from TESOL, EnglishUSA, and UCIEP.

My own IEP observed a range of instructors' understanding of instructional design (ID) practices and educational technology affordances in synchronous and asynchronous tools for language teaching. Affordances are "opportunities for learning which the students perceive within the learning structure" (Cotterall & Murray, 2009, p. 42). The COVID-19 pandemic became the ''disorienting dilemma'' or ''trigger event'' that urged IEP instructors to pursue technology education (King, 2002, p. 287) in online triage to facilitate courses in a remote environment immediately (Gacs et al., 2020). Accessing colleagues and professional learning opportunities in the remote environment may have been overwhelming for many instructors. This confounding experience may

not only have been the lack of familiarity with available educational technology, but also the “emotional and financial trauma” (Gacs et al., 2020, p. 381) in attempting to understand the global impact on international student mobility caused by a pandemic, which resulted in worries regarding the loss of employment for some IEP faculty.

The purpose of this study was to identify how IEP instructors used technology to facilitate CLT activities, to explore their perceptions of which factors played a role in their use of technology to facilitate activities, and to understand how they learned to use technology to facilitate CLT activities. The research questions guiding this study to understand instructors’ experiences are the following:

1. How did IEP instructors facilitate communicative language teaching activities in a remote teaching environment?
2. What factors played a role in facilitating communicative language teaching activities in a remote environment?
3. How did IEP instructors learn to use technology to facilitate communicative language teaching activities in a remote teaching environment?

Significance and Contributions

Interviewing instructors about their experiences with adapting CLT activities using technology and the pivot to an emergency remote teaching environment will inform my institute, other university and college-based IEPs, and the larger field of Teaching English as a Second Language (TESOL). Findings may highlight the need for innovative professional development programming to support English language instruction and insight into the kinds of collaborative or individual learning experiences instructors prefer. Additionally, the study may prompt further research on leadership required in IEPs regarding pedagogy and educational technology, instructional design, and emergency remote teaching environments. The data may contribute knowledge to

guiding institutional administrators, “to recognize the importance of integrating technology in their teaching, to develop and monitor suitable implementation of technology in their language programs, and to set reasonable goals when training existing staff” (TESOL Technology Standards Framework, 2008, p. 7).

Most literature regarding specific educational technologies to support students’ learning is in international settings, and primarily for pre-service English as a Foreign Language (EFL) instructors. Research in the U.S. university IEP context for in-service instructors’ acceptance and use of educational technology in facilitating CLT activities was not available.

Emerging literature from emergency remote teaching environment research during the 2020 pandemic suggests we continue to prepare for unpredictable changes in the environment, conflicts, and other natural disasters (Bozkurt & Sharma, 2020; Gacs et al., 2020; Hodges et al., 2020; Whittle et al., 2020). As participants in international education affected by global circumstances, U.S.-university and college based IEPs can provide responsive leadership to continue to prepare instructors through innovative programming and learning experiences with educational technology.

Summary

This chapter focused on the problem of practice in Intensive English Program (IEPs) instructors’ professional learning experiences in the forced pivot to an emergency remote teaching environment due to the COVID-19 pandemic. The overview of the context, the goal of the study, the purpose of the study and the research questions were presented. Additionally, the significance and contributions to the field were shared. The next chapter will review literature in Communicative Language Teaching (CLT) and the theoretical framework the Unified Theory of Acceptance and Use of Technology

(UTAUT), specifically situating the study in behavioral intentions to describe instructor acceptance and use of technology to facilitate CLT activities in an emergency remote teaching environment.

CHAPTER 2
REVIEW OF LITERATURE

The purpose of this study is to explore how instructors facilitated Communicative Language Teaching (CLT) activities in the remote teaching environment, to discover factors they identify as important in the facilitation of CLT activities in the remote environment, and to examine how they learned to use technology to facilitate CLT activities in the remote teaching environment. Therefore, an investigation of relevant literature regarding CLT, Computer-Assisted Language Learning, and the Unified Theory of Acceptance and Use of Technology (UTAUT) was necessitated. The search for literature was performed through University of Florida Libraries, primarily EBSCO, Web of Science, ProQuest, and ERIC databases. Key search terms included communicative language teaching (CLT) approaches, ESL Intensive English Programs, CALL, adoption, technology acceptance and use, and the UTAUT.

This chapter outlines the literature to provide perspective of the context, purpose, and significance of this research. The first section provides a brief history of university-based Intensive English Programs in the United States, IEP administration features, and unique instructional features. The CLT approach is presented to situate instructional characteristics and activities, and highlight the instructor's role in the classroom. The next section reviews Computer-Assisted Language Learning and learning to teach online. The final section presents salient literature on the theoretical framework to address the factors of acceptance and use of available technology, primarily the notion of behavioral intention of individual users.

University and College-Administered Intensive English Programs in the United States

Several factors contributed to the inception and transformation of the IEP as found today on U.S. university campuses. Although the impetus for the creation of IEPs was a response by educators to support international students who required additional language competence to compete academically with domestic classmates, very few curricular plans had been laid and very few faculty trained to provide appropriate instruction (Kaplan, 1997). In fact, universities relied on volunteers or teaching assistants for supplemental language instruction. With the unique linguistic needs of international students in mind, linguist and educator Charles C. Fries founded and directed (Marckwardt, 1968) an IEP at the University of Michigan, considered the first in the U.S. In addition to assisting international students to increase linguistic competency for their studies, intensive English instruction, as Fries understood it, would play a critical role in international relations.

Fries' University of Michigan model gave rise to the hundreds of IEPs found across the U.S. today. Currently, there are three models of Intensive English Programs in the U.S. The first model is based on the original University of Michigan program. These programs are within the structure and governance of the host institution, and the faculty and staff are considered employees of the university or college. The second model is the independent providers, not associated with a college or university. The third model is the independent provider, located on a college or university campus, which provide the service of English language teaching but are not administered by the university or college, nor are staff or faculty employed by the host institution. For this study, the focus is exclusively on the first model, the U.S. university-administered

Intensive English Program (Alberola, 2021; Forbes, 2012; Kaplan, 1997; Institute of International Education, 2022; Wallace, 2003).

Administrative Features

In accordance with the Accreditation of English Language Training Programs Act (2010), all English language training programs in the U.S. that enroll international, full-time F-1 student-visa holders must be accredited, by either a regional or national agency or by one recognized by the U.S. Department of Education (Department of Homeland Security, 2021b). Maintaining accreditation requires adherence to common standards in the field in terms of administrative, teaching, and fiscal practices, submission of annual reports, and systematic program review. Administrators of IEPs are responsible to maintain the overall quality of the program and provide structure and guidance for all interconnected academic and administrative components within them (Forbes, 2012; Pennington & Hoekje, 2010; Stoller, 1997). IEP administrators manage instructors, office staff, student services, and cultural services, which are all dedicated to providing the fullest cultural and academic student experience. In an IEP, faculty may be a part, or may be expected to be a part, of the larger university community and serve on committees or activities benefitting the students and faculty. In the University of Florida English Language Institute (UF ELI), the faculty lecturers are considered part of the larger academic community.

Across the U.S., IEPs have a variety of structures and host departments. Since they may collect their own tuition and fees, their financial structure may fall under different umbrellas, (Eskey, 1997). IEPs may employ a variety of core faculty, adjunct instructors, and office staff. In addition, the UF ELI employs graduate teaching assistants from the Linguistics Department or the College of Education. The UF ELI also

employs Language Assistants, undergraduate UF students who act as peer leaders for informal language support as part of Listening/Speaking classes, and in weekday activities and weekend trips. Again, globally in U.S. university-based IEPs with a variety of structures, faculty designations may vary, and may include a combination of full-time administrators, hybrid instructor-administrators, and instructors depending on appointments or how the college or department views release time for administrative duties. This release time is rarely for research duties.

University of Florida English Language Institute (ELI) is integrated into the University of Florida structure, housed within the College of Liberal Arts and Sciences, with the Department of Linguistics being its academic home. The ELI students are enrolled in non-credit, intensive, academic English courses, but they are not considered UF students. As they do not pay student fees, they do not have access to all university facilities. The ELI is entirely self-funded, supported by student tuition.

The UF ELI is a founding member of the University and College Intensive English Programs (UCIEP) consortium. It also belongs to EnglishUSA, an organization with membership of over 200 English language programs that include all three models of institutes. UF ELI is accredited through the Commission on English Language Program Accreditation (CEA). Following UCIEP guidelines and CEA standards, IEP administrators and instructors have equal qualifications to teach academic ESL, with the minimum of a MA TESL (Teaching English as a Second Language), or a closely related degree, and are therefore familiar with teaching methods, curriculum development, assessment, and second language acquisition (SLA) theory to provide program leadership (Commission on English Language Program Accreditation, 2019; UCIEP

Guidelines, 2017). Instructors may include faculty lecturers, adjunct instructors, and graduate teaching assistants.

Most full-time instructors have 15–20 student contact hours each week (UCIEP Guidelines, 2017) and may teach three semesters or multiple shorter terms per year, depending on their appointments. Administrators are not only trained instructors, but are responsible for marketing, social media, recruitment, immigration procedures and guidance, and budgets and fiscal reporting (Commission on English Language Program Accreditation, 2019; UCIEP Guidelines, 2017). Full-time instructors at UF ELI have 20 classroom contact hours and 9-month appointments, with the option of working in the summer semester. Full-time administrators are a mix of 12-month and 9-month faculty and work three semesters a year. The structural complexity and typical lack of release time to conduct research could account for the reality that there "is a dearth of research" (Thompson, 2013, p. 211) on topics benefitting both administration and instructional faculty in IEPs.

Instructional Features

Intensive, academic English instruction in IEPs provides leveled reading, writing, listening, speaking, and grammar classes to prepare students to integrate successfully into undergraduate or graduate study (Commission on English Language Program Accreditation, 2019). Student learning outcomes (SLOs) are focused on productive and receptive skills for which instructors facilitate authentic communicative language teaching activities to provide practice (Savignon, 2001). Instructors guide learning activities in which students participate in socially constructed knowledge-building. In addition, in appropriate levels of the program, instructors explicitly describe and facilitate activities to promote strategies to support students' metacognitive awareness of their

own learning (Morely, 2001; Oxford, 2001). Instructors also typically reassure students these skills and strategies will transfer to the activities and projects required for content courses in their academic program (Johns & Price-Machado, 2001; Morely, 2001. These instructional approaches, along with ample opportunities for students to demonstrate comprehension and proficiency, are necessary when guiding students through authentic interactive tasks designed to improve their sociocultural and language competence (Savignon, 1991; Savignon, 2017).

Other instructional features of an immersion program include opportunities for students to participate in academic and sociocultural interaction with host university students who act as “cultural informants” (Carkin, 1997, p. 54). Intensive, academic language programs immerse international students in authentic, sociocultural activities and classroom instruction in leveled skills, where instructors may embrace the CLT approach to encourage interaction and increased language proficiency.

Communicative Language Teaching Approach

This section reviews literature surrounding Communicative Language Teaching (CLT) approach. Included is a brief overview with definitions followed by tenets of CLT including interaction, negotiation of meaning, and the instructor role of facilitator.

Communicative language teaching (CLT) is a student-centered approach in which instructors facilitate engaging, authentic activities for learners to improve communicative competence in a second (L2) or additional language. CLT is a foundational approach informed by Second Language Acquisition (SLA) research and a “unified but broadly-based theoretical position about the nature of language and language learning and teaching” (Brown, 2000, p. 266) presented as a model practice for instructors in Intensive English Program (IEP) classrooms. Within communicative

activities, collaborative opportunities are guided by instructors to engage in interpretation, expression, and negotiation of meaning (Breen & Candlin, 1980; Richards, 2006; Savignon, 2001) to achieve mutual understanding and task completion. Instructors provide strategies for students to negotiate meaning in order to "resolve impasses" (Pica, 1996, p. 241) when communication is hindered. Negotiation of meaning is interaction in which "learners seek clarification, confirmation, and repetition of L2 utterances they do not understand" (Pica, 1994, p. 56) and is a dimension of learning necessary for language acquisition (Gass, 1997; Varonis & Gass, 1985).

The formation of CLT was a response to the communicative needs of language learners. Prompted by linguists in the 1970s, CLT focused on the importance of meaning as a function of language (Halliday, 1975), and communicative competence (Hymes, 1972). The communicative competence construct shaped curricula going forward and set the stage for active English as a Second Language (ESL) classrooms that integrate additional components of grammatical, discourse, sociocultural, and strategic competencies (Canale & Swain,1980) to promote authentic interaction in all skills. These components are integrated, not isolated, and produce "a corresponding increase in overall communicative competence" (Savignon, 2001, p. 17).

CLT is not without controversy or misunderstanding. Discussions continue in the literature regarding the mischaracterization of the approach as a methodology or theory of learning (Newby, 2006), as CLT could more accurately be described as a general principle or "domain of ideology" (Richards & Rodgers, 2001, p. 241). Newby (2006) considers additional unaddressed issues such as the lack of suitability of CLT to reliably assess student progress, since language ability is viewed as "variable and highly

dependent upon context and purpose as well as on the roles and attitudes of all involved" (Savignon, 2001, p. 19).

Interaction and Negotiation of Meaning

Shaped by the communicative competence models in ESL classrooms, CLT focuses on providing active engagement while rejecting the once prevalent passive language teaching approaches. Some assumptions of the CLT approach include classrooms providing "semantic notions and social functions" (Celce-Murcia, 2001, p. 8) of language, not only linguistic form. Other assumptions of the CLT approach (Celce-Murcia, 2001) include group or pair work to provide situations to negotiate and transfer meaning, role play or dramatizations to encourage students to adjust use of language for context, engaging activities with authentic, real-life materials. Improving students' communicative competence through classroom instruction relies on these assumptions to create activities through which instructors facilitate interpersonal interaction to promote second language learning.

Negotiation of meaning was founded on Krashen's (1981, 1982, 1985) "notion that knowledge of a second language is acquired through exposure to comprehensible input" (Foster & Ohta, 2005, p. 405) and on which, Long (1981) subsequently built the interaction hypothesis. The interaction hypothesis claims comprehensible input through modifications of language using strategies of negotiation of meaning to make that input comprehensible for language learning (Long, 1985, 1986). In addition to interaction and negotiation of meaning between interlocutors in second language classroom activities, using confirmation checks, clarification requests, comprehension checks, and other strategies to modify output in order to mutually agree on meaning and understanding, improves students' communicative competence (Ellis, 1991; Foster & Ohta, 2005; Gass,

1997; Krashen, 1981; Long, 1981, 1985; Pica et al., 1987; Richards, 2006). Students are taught these interaction strategies in an active ESL classroom, in order to modify and collaborate through negotiation of meaning with pairs and in groups in activities in all skills (Lazaraton, 2001; Oxford, 2001). The instructor provides students level-appropriate modeling for students to negotiate meaning in communicative activities (Morely, 2001).

Instructor as Facilitator

The role of an instructor in communicative language teaching activities is two-fold. In the first role, instructors guide students through communication strategies (Popescu & Cohen-Vida, 2013; Rubin, 1987) to facilitate ESL learners' knowledge and improve language acquisition through communicative activities. Instructors also explicitly model scripts that a student may use to ask for clarification, confirmation, and provide comprehension questions that help navigate interaction with their peers. Research on this peer interaction strategy instruction shows a positive impact on students' learning and best practices suggests this strategy as part of the communicative classroom (Dao, 2020; Fuji et al., 2016; Kim & McDonough, 2011). Collaborative, interactive learning in a student-centered classroom where English is used to construct meaning with peers may not be present in all language learning contexts; however, IEP practices encourage instructors to call attention to the approach.

In the second role, the instructor acts as an interdependent participant to facilitate the collaborative, communicative process between students and the activities and texts (Breen & Candlin, 1980). Additionally, to support the interdependent nature of the instructor role, instructors organize appropriate resources and authentic materials as well as participate as joint negotiator to assist students in the communicative tasks.

Typical communicative tasks for students to complete through interaction requiring negotiation of meaning could include activities with maps, games, graphs, charts, diagrams, cards, magazines, newspapers, travel itinerary, calendars, and apps. Using these artifacts and realia are common in the interactive in-person IEP classrooms. How language instructors used technology to integrate artifacts and realia in CALL is a goal of this study.

Computer-Assisted Language Learning (CALL)

The use and research of educational technology in language instruction has spanned several decades. This section reviews literature surrounding Computer-Assisted Language Learning (CALL). Included is a brief overview of the history through the behaviorist, communicative, and integrative phases of CALL. The section ends with the current phase.

In the global education community, Computer-Assisted Instruction (CAI) emerged as an interactive education system in an electronic environment (https://www.newworldencyclopedia.org/entry/computer_assisted_instruction). CAI heralded a new era of teaching, and “the promises and expectations of the pedagogical effectiveness of CAI began to increase in direct proportion to the development of the capacities of hard drives and RAM” (Salaberry, 2001, p. 44). With the development of available computing technology in the 1950s and 1960s, researchers and instructors of second language teaching launched a sub-field of CAI called Computer-Assisted Language Learning (CALL). Beatty (2010) defined CALL as “any process in which a learner uses a computer, and as a result, improves his or her language” (p. 7).

The history of CALL has been presented in three distinct stages corresponding to three pedagogical approaches in the literature: behavioristic, communicative, and

integrative (Warschauer & Healey, 1998) up to the 2000s and the advent of internet technology. Briefly, behavioristic CALL focused on self-paced, repetitive drills with immediate feedback. Communicative CALL highlighted students working together with the technology to manipulate language to solve tasks. Finally, integrative CALL sought to incorporate authentic language tasks with educational tools "more fully into the language learning process" (Warschauer & Healey, 1998, p. 58). Details of each phase are presented in the following sections.

Behaviorist Phase

The alignment of structural linguistics, the theory of language, and behaviorism, the theory of learning in the 1950s, supplied the foundation for the Audiolingual Method (ALM) of teaching language (Richards & Rodgers, 1986). The behaviorist theory of learning developed by B. F. Skinner, a professor of psychology at Harvard University, posited that when provided stimulus, a response is triggered. Appropriate reinforcement will increase future positive responses to become habitual, thus creating a learned behavior (Richards & Rodgers, 1986). The U.S. government became part of the behaviorist CALL phase using recording technology to train military linguists. The military's adoption of CALL influenced educators to create the language lab approach (Salaberry, 2001). This approach first used audio tape recorder tools, but shifted to computer labs in the 1960s and 1970s when software was available to provide the programmed instruction for repetitive language drills known as the drill-and-practice or "drill and skill" (Tafazoli & Golshan, 2014; Warschauer & Healey, 1998).

The computer's role in behavioral CALL was regarded as a tutor that delivered instructional materials enabling the language learner to progress through the drills at their own pace (Dina & Ciornei, 2013; Salaberry, 2001). The best-known program at the

time called Programmed Logic for Automatic Teaching Operations, or PLATO, provided questions requiring responses from the user, feedback on correct responses, or suppression of incorrect responses (Richards & Rodgers, 1986; Tafazoli & Golshan, 2014; Warschauer & Healey, 1998). The PLATO lessons covered grammar, reading, and listening skills in eight series. The lessons provide discrete language segments, rather than texts with contextualized meaning (Chapelle & Jamieson, 1986).

Despite the “drill and kill” name that the repetitive, behavioral CALL approach received, there were benefits to the computer supplying materials for language practice. Dina and Cironei (2013) stated that the benefits included having no time constraints in accessing materials, having access to the same material, providing non-judgmental feedback from the computer, and granting the learner individualized pacing through the materials.

The use of ALM and the behavioral CALL approach declined as it was found that the acquisition of discrete language segments learned in repetitive drills did not transfer to situations in which students encountered the need for authentic interaction (Richards & Rodgers, 1986). This realization marked a shift in linguistic theory from structural or generative grammar to Chomsky’s theory of transformational grammar wherein “the fundamental properties of language derive from innate aspects of the mind and from how humans process experience through language” (Richards & Rodgers, 1986, p. 59). These elements informed a more meaningful, experiential and interactive approach to language learning. “Drill and Kill” fell at out of favor as interest turned to CALL’s potential for facilitating communicative activities. This shift ushered in CALL’s communicative phase.

Communicative Phase

Communicative CALL emerged in the 1970s through the 1990s in response to the communicative competence theory of language and meaningful and authentic use of language in the theory of learning applied to CLT methods. This theory of learning combines SLA research in linguistic, social, and cognitive processes. With the emphasis on the cognitive view in classrooms, computers were the tutor, stimulus, or tool (Dina & Ciornei, 2013) used to facilitate collaborative tasks and simulations for groups of students (Warschauer & Healey, 1998). Computer games were the dominant and significant programs that provided tasks using critical thinking but spelling and grammar checks for users in the writing process were now made possible (Dina & Ciornei: 2013; Tafazoli & Golshan, 2014). At the time, Chapelle (1989) recognized the future of using software designed for the editing and revision of writing, known as Artificial Intelligence (AI), for individualized language learning. Also, at this time corpus linguistics influenced CALL as concordance software became available as reference tools to learn vocabulary and collocations (Tafazoli & Golshan, 2014). A corpus is a collection of authentic language captured and stored for access and analysis. The development of corpus linguistics generated programs to create glosses, which spotlights vocabulary and definitions for the learner. Studies have shown students who use CALL glosses show higher mastery of student learning outcomes compared to those students who do not use CALL glosses (Chapelle, 2009; Plonsky & Ziegler, 2016). Glosses are used in variety of reading comprehension tasks, assessment and testing environments (Salaberry, 2001). Even with the computer capabilities and software programming advances to create corpora or glosses, the tool was seen as ancillary to classroom

materials and the human teacher, who could provide contextualized feedback (Salaberry, 2001).

Student learning and instructor adoption is a theme in Garrett's (2009) seminal research on instructors' use of technology for language learning. During this Communicative Phase of CALL, there were very few Apple II, Apple IIGS, and IBM-PC microcomputers available in schools. Instructors often had little input in the purchase of these computers and needed guidance on how to incorporate them into their classroom activities; Garrett suggested ways for instructors to use their classroom computers if they were fortunate enough to have one. Suggestions included using the database feature to update assessments and randomize the questions to print different test versions for students, using the computer for grading, and projecting the monitor onto a screen so that the teacher or students could type during an activity for everyone to view. Also, the classroom computer could be used for games to create lively, motivating lessons, and also as a tool for homework tasks and interactive problem-solving. The author (Garrett, 2009) reported that instructors who tried these activities were surprised by the amount of interaction and discussion between the students in the target language. Going forward, Garrett (2009) suggests that when adopting technology in the language learning classroom, instructors consider integration of language and culture, communicative potential, and using "technology-based materials to collect data on the learning process" (p. 717) to inform scholarship to connect teaching methodology and research for best practices in CALL research. This perspective of merging the teaching of language skills (reading, writing, listening, and speaking) with the use of technology was explored in the integrative phase.

Integrative Phase

In the integrative phase of the 2000s, SLA researchers emphasized the social or socio-cognitive dimensions of authentic language use. CALL development moved towards more task-based, project-based, and content-based materials with the availability of “the multimedia networked computer with a range of informational, communicative, and publishing tools now potentially at the fingertips of every student” (Warschauer & Healey, 1998, p. 58). This multitude of media available was launched by the World Wide Web (WWW) from the mid-1990s, which heralded a new communication era. Language learners could now integrate all reading, writing, listening, and speaking skills in the CALL environment. Internet-based Computer-Mediated Communication (CMC) was the designation of online platforms and applications through which students could interact in asynchronous formats like email, instant messaging, blogs, discussion forums (Blake, 2009). This communication-rich environment was a place for students to create, collaborate, and respond using authentic language focused on building communicative competence to convey meaning rather than focusing on reproducing grammatical forms. Blake (2009) found that CMC tasks using chat programs in particular resulted in the use of negotiation of meaning strategies between classmates.

The internet made language and tools accessible everywhere, inserting CALL into the learning environment beyond weekly visited to the computer lab. (Warschauer & Healey, 1998). Following the Integrative Phase, researchers are reflecting on the past phases and considering the potential that future technology may hold for interactive learning, immersive, and complex learning environments in CALL.

Web 2.0 Phase

Since the acceleration of internet adoption in education, there have been changes in the computer's role as a tutor or tool for the drills, software, and educational games as there is wide-spread availability in IEP classrooms for instructors using computers in their daily teaching. Networked computers, monitors, and projectors are available in many university and college classrooms, and students have access to computer labs and wireless internet on campus.

Though much current CALL research focuses on adopting technologies to inform pedagogy, some have voiced the need for a more unified and systematic CALL research agenda. Golonka et al. (2014) list challenges in CALL, including the lack of research on appropriate variables or factors that will inform all foreign language instructors, as well as studies "based on untrained users of the technology" (p. 71). In particular, the authors express a need to set a research agenda which include variables or factors that can inform all foreign language instruction, as well as studies as well as studies "based on untrained users of the technology" (p. 71).

Since the integrative phase of CALL, research concentrated on increasing language proficiency through interaction with materials, other students, and focusing on language meaning using technology like electronic, asynchronous written discussions on online platforms, and videoconferencing technology (Hampel & Stickler, 2012; McAndrew et al., 1996). Emerging topics on the advancing technology in the literature, up until the emergency remote teaching environment during the 2020 pandemic, include investigating using tele-collaboration, internet-supported language learning, Mobile Assisted Language Learning (MALL), gaming, virtual worlds, and other CMC platforms (Dooly, 2015). A meta-analysis of the most frequently published CALL topics in

ReCALL, CALICO, and CALL journals between 2006-2016 included CMC, Web 2.0, and MALL (Gillespie, 2020) technologies. The order of appearance of most published topics out of the 777 articles reviewed was “writing, CMC, vocabulary, speaking, corpora, NLP, design, teacher education, reading, listening, Web 2.0, grammar, and feedback” (Gillespie, 2020, p. 131).

Additional research in the social, CMC technologies, for collaborative and interactive exchanges on participatory (e.g., wikis, blogs, YouTube, Facebook, Instagram, etc.) platforms was investigated in the late 2010s (Chun et al., 2016). Data collection using learning analytics tools to determine evidence of interaction and collaboration to improve language proficiency was performed with embedded software, by using video screen capture programs, or eye-tracking technology (Chun et al., 2016). The CALICO (Computer-Assisted Language Instruction Consortium) organization is dedicated to using and producing materials for CALL developers and practitioners. The InfoBytes page on the CALICO site show six high-interest overviews of current topics that include teaching with virtual reality, using technology to teach vocabulary, social reading, discovery learning, virtual exchange, and teaching languages with video games (https://calico.org/infobytes/). The overviews provide a rich description of the technology, research supporting their efficacy, and guidance on teacher exploration to adopt the technology in language learning classrooms.

Complex and Immersive Phase

In the current phase, CALL practitioners and researchers investigate immersive technologies in complex learning environments (Han, 2020). In a systematic review of most recently published studies on the efficacy of foreign language learning applications (apps), there are possibly hundreds or thousands available, with millions of users

downloading them (Tommerdahl et al., 2022). Like previous decades of CALL researchers, the authors recommend designers build “apps that focus on communicative ability as a whole” (Tommerdahl et al., 2022, p. 26), rather than teaching vocabulary in isolation, reminiscent of behavioristic CALL from the 1980s that provided instant, non-judgmental feedback, continuous access to the same material, and individualized pacing (Buendgens-Kosten, 2020; Dina & Cironei, 2013).

The rapidly changing electronic environment and the development of educational tools “outpace advances in language learning practices” (Chapelle, 2009, p. 751). SLA theories on interaction and negotiation of meaning, namely that “communicative competence needs to include the ability to communicate using readily accessible L2 technology aids” (Chapelle, 2009, p. 751), inform IEP instructors’ use of CLT activities to develop communicative competence. Language learning is complex and considered difficult to teach, thus “our job is to create an environment-in class or in our materials-in which students can work on acquiring that ability” (Garrett, 2009, p. 707) to communicate using technology. Chapelle (2009) summarized Garrett’s argument by saying “theoretical perspectives were needed to help make sense of the intensively interactive and linguistically rich environments afforded by technology” (p. 741). Plonsky & Ziegler (2016) reported that the field of SLA and CALL “has turned from examining questions about whether CALL is effective for language learning to how the affordances of technology might best be exploited to provide learners with optimal language learning opportunities” (p. 17). Chun et al. (2016) support this pursuit by encouraging instructors to consider these technology affordances in language learning, in order to determine their effectiveness in the classroom.

The pandemic provided researchers with an opportunity to address the questions regarding determining effectiveness of these technology affordances. In these studies, the challenges and benefits of using Learning Management Systems (LMS), or eLearning, and videoconferencing tools to provide productive student-student or student-computer interaction in language learning classrooms were investigated (Cheung, 2021; Gordon, 2020; Kohnke & Moorhouse, 2020; Ng, 2020). Benefits of Zoom, a videoconferencing technology, include using audio, video, chat, whiteboard, polls, breakout rooms, screen sharing, and recording features to facilitate activities (Cheung, 2021; Gordon, 2020). Challenges include monitoring large numbers of students, the difficulty in timing spoken responses so that students do not speak over each other, timing small group discussions in breakout rooms, and poor quality or lack of video image of participants (Ng, 2020). In addition, an instructor's limited knowledge of technology, their preferences for hands-on professional development, and the lack of support from one's institution may also pose challenges in an online synchronous environment (Cheung, 2021). Reflecting on the research topics and technology in CALL highlights the interconnection between SLA theories that inform ESL classroom practices. CALL research provides an overview of the technology and language learning capabilities from the behaviorist phase to the current phase. The affordances the most recent innovations in electronic technology, CMC, LMS, videoconferencing platforms, virtual worlds, and apps may provide beneficial language-learning support in IEPs. The research findings that instructors lack adequate preparation for language teaching using technology may add insight into professional development opportunities sought out during emergency remote teaching.

Learning to Teach Online with Technology

Research providing guidance on developing competencies, which is the set of skills to perform the tasks of online instructor roles successfully, suggests the need for further faculty development (Magruder & Kumar, 2018). This training includes using educational technology to benefit student learning in language classrooms (Chun et al., 2016; Kern, 2006; Nami et al., 2016; Rilling et al., 2005; Tafazoli & Golshan, 2014; Warschauer, 2002; Warschauer & Healey, 1998). As CMC, LMS, videoconferencing, and AI technology advances, instructors "must be prepared for new ways of structuring tasks, establishing exchanges, guiding and monitoring interaction, and evaluating performance, not to mention mastering the relevant computer applications" (Kern, 2006, pp. 200-201). The professional learning and training to support mastery of online teaching competencies are critical and becoming more available in institutions and professional organizations.

Ongoing professional learning is an expectation for all university and college educators, including instructors and administrators at IEPs. Studies have been done for several decades on learning to teach using technology, but the imperative to create online learning opportunities for university instructors to "learn about and improve their pedagogy to influence student outcomes" (Giles, 2018, p. 105) became pronounced in 2020 when language learning moved to the remote environment on a global scale.

Studies show that ESL instructors perceive that they lack training in integrating tools to the affordances of LMS and "pedagogy enhanced by technology" (Karamifar et al., 2019, p. 71). Findings from Moorhouse et al. (2021) show that for ESL instructors to utilize appropriate interaction in their synchronous online lessons, they need to build multiple competencies, including technological competencies to use platforms and tools

that can be “integrated with existing practices” (p. 11). To build instructors’ confidence and competencies, institutions should provide training and support for using technology in the language classroom (Hartshorn & McMurry, 2020).

Studies focused on higher education show that faculty need training using technology to teach online, as they may have not taken online courses and are not experienced with the context (Lowenthal et al., 2019). They may be transferring pedagogy and content from their F2F courses to the online environment (Baran et al., 2011) and need to understand how technology, pedagogy, and content are interconnected in facilitating activities (Koehler et al., 2007). In order to explore and improve these competencies in using technology to present content, Martin et al. (2019) suggest seeking out professional development in an online environment at their own institution, within professional organizations, or to find resources and similarly proactive colleagues to learn independently. Institutions need flexible learning options to support isolated or part-time instructors (Pedro & Kumar, 2020). The authors found that “an institutional environment that not only fosters faculty development of knowledge and skills related to online teaching, but also recognizes and rewards faculty engagement in such learning is needed” (Pedro & Kumar, 2020, p. 60).

Training instructors to embrace the competencies for their roles in the online teaching environment are critical to all higher education faculty. Literature introducing expectations of the competencies, roles, and facilitation strategies in the online teaching environment may provide insight for the responsive leadership and institutional support for educational technology use and in language instruction.

Magruder & Kumar (2018) address improving competencies for the roles faculty need to adopt in order to transform their online teaching practices through development and training. Preparing faculty through training is essential and specific to each institution, however, the authors recommend delivering programs online, thus providing experience in the online learning environment. In online professional development, the need to expose instructors to various philosophical approaches like behaviorism, cognitivism, and constructivism as part of online pedagogy is necessary. Exploring one's own teaching practices and identifying how the approaches can inform online instruction will benefit instructors learning to teach online. The training will expose instructors to the expectations of the roles they will take in the online environment. Briefly, those roles are pedagogical, administrative/managerial, technical, evaluation, active learning facilitator, and instructional designer.

Additionally, Martin et al. (2019) identified roles and competencies online faculty describe as necessary for performing tasks in course design and teaching. Those faculty considered "the engagement, the support, the mentoring of the students as they move through courses" (p. 190) as important skills in their role as facilitator, course designer, course manager, subject-matter expert, and mentor. The competencies they reported needing to teach effectively online were technical skills, willingness to learn, knowledge of how people learn, translating their content expertise to be accessible online, course design skill, and assessment practices in the online environment.

Training faculty to understand the roles they must inhabit for online instruction is a necessity. One critical element required for this development is institutional support. The types of institutional supports for developing online teaching skills include

technology infrastructure, technology support, online course development and teaching, instructor rewards and incentives, administrative and academic support, institutional policies and culture, and program and legal support (Pedro & Kumar, 2020). Fostering a supportive environment is needed to help faculty learn to use technology, develop appropriate courses, and incentivize learning in which changing instructional modalities and roles are prevalent.

When learning to use and adopting technology during the pandemic, IEP instructors may have been in a position of "dissonance created by recognizing a new situation or information as inconsistent with previous understandings" (Black, 2015, p. 83) when tasked to transform content to the remote environment with just-in-time support (Lowenthal et al., 2019). EFL instructors in Kuwait who taught during the pandemic found e-learning technology to be useful and easy to use (Al-Anezi & Alajmi, 2021) and they responded that various social influences were not a factor in adopting e-learning technology. The overall results indicated a high acceptance of using educational technology, but varying levels of adoption. Based on recommendations that institutions provide adequate faculty development for teaching online rather than relying on just-in-time support, IEP administrators can explore the factors that led instructors to use and adopt particular technology for communicative activities.

The Unified Theory of Acceptance and Use of Technology

The Unified Theory of Acceptance and Use of Technology (UTAUT) serves as the theoretical framework for this study to focus on the behavioral intention and use behavior of individuals. The first section provides a conceptualization of the UTAUT, followed by the core constructs, moderators, and possible advantages or limitations of

the theory. Finally, alignment of the UTAUT with the facilitation of the CLT approach using educational technology in emergency remote teaching environments is presented.

Conceptualization of the Framework

Early research in computer information systems produced theories on user acceptance and technology innovation and diffusion (Wedlock & Trahan, 2019). Venkatesh et al. (2003) realized the need for a unified theory to guide technology researchers and organizational managers understanding of an individual's acceptance and use of new systems to increase adoption. Multiple theories from various disciplines and technology research contexts were available to measure intention and behavior of new information technology acceptance. Venkatesh et al. (2003) strove to develop a more useful, consolidated tool that could contain dimensions of the eight prevalent models currently used. The eight models subsumed by the UTAUT were: Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Combined TAM and TPB (C-TAM-TPB), Motivational Model (MM), Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT).

The Theory of Reasoned Action (TRA) is grounded in social psychology research and states that an individual's behavioral intention is a major predictor in actual behavior (Fishbein & Ajzen, 1974). Additional theorization posits that attitude toward "performing the target behavior" (p. 216) and the subjective norm, the perception of social pressure about performing a behavior, are the two primary influences on an individual's behavior.

The Technology Acceptance Model (TAM) was an adaptation of TRA, presented by Davis (1989), in response to a need to gauge perceived usefulness and ease of use in technology acceptance. The author analyzed existing theories including adoption of

innovations, self-efficacy, and Theory of Reasoned Action; TAM acknowledged new variables were necessary to capture users' self-reported perceptions of usefulness and ease of use of a new system.

The Theory of Planned Behavior (TPB) extended TRA to postulate three determinants of intention: attitudes, subjective norms, and perceived behavior control (Ajzen, 1991). Attitude refers to the individual's assessment of the behavior. Subjective norm is the "perceived social pressure to perform the behavior" (p. 188) and that perceived behavioral control is the "perceived ease or difficulty of performing the behavior," (p. 188) which could now account for nonvolitional behaviors (Wedlock & Trahan, 2019).

The Combined TAM and TPD (C-TAM-TPB) presented combined variables from previous theories in response to a surge in technology developments, increased system users, and the subsequent need for more robust measurements of user intention and behavior. The combined model (Taylor & Todd, 1995) included perceived behavior control of the TPB, and a decomposed TPB model that included relative advantage, complexity, and compatibility from the diffusion of innovation theory (Rogers, 1983), as well as additional control belief structures (Ajzen, 1991), and self-efficacy (Bandura, 1977) variables. It also included usefulness and ease of use to describe users' perceptions of technology systems from TAM. The analysis resulted in the combined theory, providing a better understanding of cognitive processes in behavioral intentions in adopting technology (Taylor & Todd, 1995).

The Model of PC Utilization (MPCU) draws from previous research to test social factors, affect, perceived consequences, and facilitating conditions as predictors in the

intention to use PCs (Thompson et al., 1991). Findings showed that social factors, complexity, job fit, and long-term consequences had significant effects on PC use.

The Motivational Model (MM) created by Davis et al. (1992), predicts that those who use technology to benefit themselves are extrinsically motivated, and those individuals who use technology without observable benefit are intrinsically motivated. The MM borrows from previous research that includes multiple types of motivation within intrinsic, extrinsic, and amotivation (Wedlock & Trahan, 2019).

The Innovation Diffusion Theory (IDT) was built on the Diffusion of Innovation (DOI) theory, wherein the rate of innovation adoption was classified as early, late, and laggards. These classifications referred to individuals' level of willingness to adopt technology. In addition, DOI included five characteristics of innovation of relative advantage, compatibility, complexity, trialability, and observability (Rogers, 1962, 2003). In extension, Moore & Benbasat (1991) adapted the DOI to elicit users' perceptions of relative advantage, ease of use, image, visibility, compatibility, visibility, results demonstrability, and voluntariness of use in information systems and technology within organizations.

The Social Cognitive Theory (SCT) is composed of outcome expectations-performance and personal, self-efficacy, affect, and anxiety variables (Wedlock & Trahan, 2019) originally posited by Bandura (1989), expanded by Compeau & Higgins (1995) to include consequences of behavior related to jobs and self-esteem.

Venkatesh et al. (2003) reviewed and compared the literature of the eight theories from psychology, sociology, and information systems in information technology studies to assemble thirty-two overlapping variables present in the competing theories.

A subsequent longitudinal study was conducted over six months at four sites that implemented voluntary and mandatory programming in which new technology was introduced. Data from three survey measurements comprising the thirty-two variables from the eight competing models were collected and examined to determine if intention could be predicted with a unified model. Venkatesh et al. (2003) determined that three constructs, performance expectancy, effort expectancy, and social influence were significant direct determinants of behavior intention. In addition to these three constructs, facilitating conditions and behavior intention were direct determinants of use behavior of new technology systems. Further cross-validation using data from two additional organizations that provided mandatory and voluntary implementation revealed the UTAUT model (see Figure 2-1) performed consistently using these four constructs and four moderating influences of experience, gender, age, and voluntariness of use.

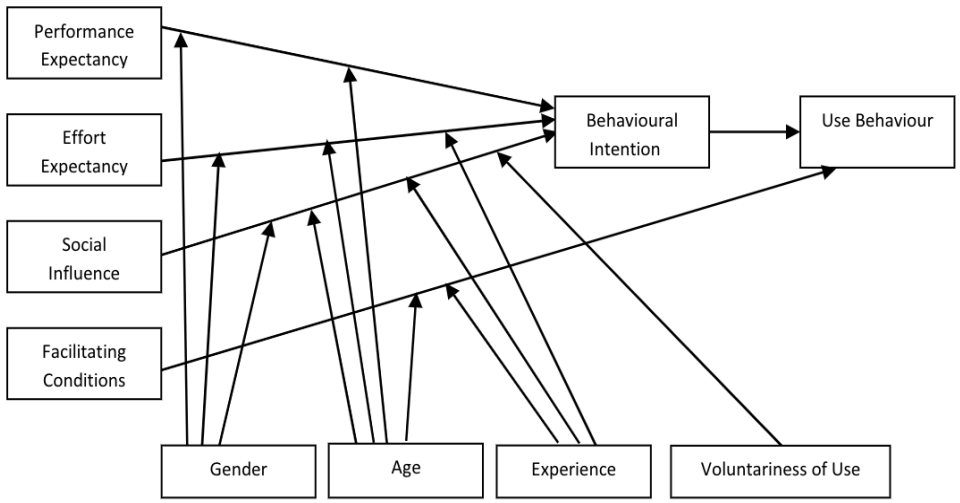

Figure 2-1. The Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003)

The UTAUT was empirically validated to be a “universally accepted model for adoption and usage of technology” (Wedlock & Trahan, 2019, p. 6) which “outperformed

the eight individual models" (Taiwo & Downe, 2013, p. 49) with about 70% of variance in behavioral intention (Venkatesh et al., 2003) and 50% of variance in technology use (Dwivedi et al., 2019; Venkatesh et al., 2012).

The UTAUT provides the framework to determine user acceptance in a variety of organizational environments and more recently higher educational settings with myriad technologies. These organizational environments used the UTAUT to gauge an individual's acceptance and use of information technology, including e-banking, and e-commerce (Williams et al., 2015). Educational technology studies have included e-learning research (Tan, 2013) information and communications technology (ICT) (Ma et al., 2019), online and distance learning in higher education (Venkatesh et al., 2016; Wedlock & Trahan, 2019) by university instructors (Pynoo et al., 2011), as well as English and foreign language students and instructors' use of mobile-assisted language learning (MALL) or M-Learning (Abu-Al-Aish & Love, 2013; Cavus & Ibrahim, 2009; Hoi, 2020; Morchid, 2019).

Core Constructs

Venkatesh et al., (2003) posit that when adopting new technology, individual behavioral intention and use behavior can be predicted by four constructs and four key moderators. The four moderators are not direct determinant factors but have an impact on the four constructs involved in behavioral intention or use behavior. The UTAUT provides the foundation to measure IEP instructors' perceptions and behavioral intentions related to acceptance and use of educational technology in a mandatory ERTE situation.

The constructs determined to be significant in predicting acceptance and use of educational technology within the UTAUT are performance expectancy (PE), effort

expectancy (EE), social influence (SI) and facilitating conditions (FC); the additional moderating variables are gender, age, experience, and voluntariness of use (Venkatesh et al., 2003; Venkatesh et al., 2016; Wedlock & Trahan, 2019). Findings showed the following: 1) influence and significance of “at least one construct” (Venkatesh et al., 2003, p. 446) in each model stayed consistent over the duration of the study, 2) several constructs were initially significant, but did not maintain significance during the study, and 3) social influence was significant but only in mandatory implementations. All findings further solidify support for using PE, EE, SI, and FC in the UTAUT model to examine behavioral intention to use technology to facilitate communicative activities.

Performance expectancy (PE)

Venkatesh et al. (2003) defined performance expectancy as the “degree to which an individual believes that using the system will help him or her to attain gains in job performance” (p. 447). Perceived usefulness (TAM/TAM2, C-TAM-TPB) is the strongest indicator of behavioral intention to accept and use technology (Venkatesh et al., 2003). Other instrumental constructs subsumed from the eight theories include extrinsic motivation (MM), job fit (MPCU), relative advantage (IDT), and outcome expectations (SCT). In the IEP context, the PE construct may indicate perceived usefulness of tools available to accomplish facilitating activities in the ERTE.

Effort expectancy (EE)

Venkatesh et al. (2003) defined effort expectancy, as the “degree of ease associated with the use of the system” (p. 450). Perceived ease of use (TAM) is a positive indicator of willingness to accept and use the educational technology (Khechine et al., 2020; Venkatesh et al., 2016). Additionally, complexity (MPCU) and ease of use (IDT) were determined to be instrumental. In the IEP context, this construct refers to

instructors' perceptions that the educational technology available is easy to use as well as easy to understand how to use the systems to facilitate communicative language teaching activities in the ERTE.

Social Influence (SI)

Venkatesh et al. (2003) defined social influence as the "degree to which an individual perceives the important others believe he or she should use the system" (p. 451). Original constructs within the eight theories determined to be present included subjective norm (TRA, TAM2, TPB/DTPB, and C-TAM-TPB), social factors (MPCU), and image (IDT).

Social influence (SI) was present and most influential in predicting behavior intention or usage of technology of individual users' in the mandatory implementation of technology, in the longitudinal study by Venkatesh et al. (2003). In the six studies to predict an individual's intention to use a new technology in their context, Venkatesh et al. (2003) implemented three in voluntary settings, and three in mandatory settings. In the current study, the pandemic precipitated mandatory implementation of remote technology for instruction in IEPs. Individual IEPs may not have required professional learning opportunities; however, they could be perceived as mandatory for instructors who needed additional peer, regional, or national support to learn how to provide interactive activities. The extent to which instructors accepted and used technology stemming from influence of peers or administrators in the IEP will be explored through the UTAUT framework.

In the IEP context, social influence refers to the instructors' colleagues and supervisors present in the remote professional learning environment who influenced the

individual's intention to use technology to facilitate engaging communicative language teaching activities in the ERTE.

Facilitating Conditions (FC)

Venkatesh et al. (2003) defined facilitating conditions as the "degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system" (p. 453). Original constructs subsumed in FC were perceived behavioral control (TPB/DTPB, and C-TAM-TPB), facilitating conditions (MPCU), and compatibility (IDT). In forming the UTAUT model, Venkatesh et al. (2003) determined when PE and EE constructs are present, an individual's perceptions of facilitating conditions do not directly influence behavior intention. Perceptions that technical and leadership support exist does determine use behavior. In the IEP context, facilitating conditions refer to the "human, organizational and technical support" (Khechine et al., 2020, p. 2310) that instructors perceive as available and sufficient for using educational technology and accessing professional learning in the ERTE.

Moderators

The UTAUT includes four moderators of gender, age, experience, and voluntariness of use, which are not direct determinant factors but impact the independent variables of PE, EE, SI, and FC in predicting an individual's behavioral intention and use behavior. Given the unique circumstances in which all instructors were required to use remote technology to teach and work during the pandemic, uncovering the moderators' impact of the performance expectancy, effort expectancy, social influence, and facilitating conditions will be particularly interesting.

Perceptions of educational technology and behavioral expectations during mandatory use in facilitating a specific pedagogical feature in IEP may be impacted by

self-reported gender, experience, age, and voluntariness of use. Voluntariness of use is a perception the user has regarding the technology use being voluntary, or of free will (Moore & Benbasat, 1991). The individual perception of voluntariness influences behavior to use or reject technology. These moderating influences may present relationships key to understanding perceptions of learning about, accepting, and using educational technology in facilitating CLT in an ERTE. The demographic and experiential information that instructors provide may illuminate the factors that contribute to behavioral intention and use. In determining behavioral intention (Venkatesh et al., 2003), findings showed gender and age as key moderators of performance expectancy. Gender, age, and experience impacted effort expectancy; gender, age, experience, and voluntariness of use impacted social influence. Determining usage behavior showed age and experience impacting facilitating conditions. In the UTAUT (see Figure 2-1), these relationships are represented with arrows from the key moderators of gender, age, experience, and voluntariness of use to the corresponding construct.

Advantages and Limitations of the UTAUT

The UTAUT is used in commercial, government, and educational research to measure individuals' acceptance and use of a new technology or system. The UTAUT has been found to show how aspects of "intention and behavior evolve over time" (Venkatesh et al., 2003, p. 468) and provides a comprehensive approach to determine relationships among many "psychological and social factors that might impact information technology adoption" (Yoo et al., 2012, p. 944). The UTAUT instrument presents consistent, valid, and reliable results in myriad fields like information technology and mobile learning (Lin & Bhattacherjee, 2008; Wang et al., 2009).

Limitations of the UTAUT could include its lack of parsimony in that it requires multiple variables to achieve a considerable level of variance. In its formation, Venkatesh et al., (2003) reported using highest-loading factors of observed variables from some of the previous models, and that in using only the highest-loading items, some models were not represented in the UTAUT constructs. Additionally, the social influence (SI) and facilitating condition (FC) constructs are too complex to be measured accurately (van Raaij & Schepers, 2008). Frequently used internationally to understand technology acceptance, the UTAUT does not include cultural factors (Im et al., 2011) and although IEPs are based in U.S. universities and colleges, they employ a range of international and culturally diverse instructors.

The Use of UTAUT in this Study

The UTAUT model provides the theoretical framework to explore how IEP instructors perceived learning to use educational technology in the mandatory shift to an emergency remote teaching and working environment. The IEP instructors' perceptions of usefulness, ease of use, social influences of peers and administrators, and available systems to facilitate CLT activities in a remote teaching environment moderated by demographic and experiential information will be investigated in this study. Using the UTAUT as the theoretical framework to guide interview questions will assist with examining the factors influencing instructors' use and acceptance of educational technology to facilitate communicative language teaching activities in an emergency remote teaching environment.

Literature Review Summary

This chapter focused on providing an overview of the literature of Intensive English Programs, and the unique administrative and instructional features within, as

well Computer-Assisted Language Learning (CALL) and learning to teach online. Finally, the UTAUT framework was presented, including the advantages and limitations, and its alignment with the research questions and context.

CHAPTER 3
METHODOLOGY

This chapter provides a description of the methodology used for this qualitative study, including sampling, data collection, and data analysis. In addition, processes to ensure trustworthiness in the investigation are explained, followed by the subjectivity statement.

Purpose of study

The purpose of this study was to explore how IEP instructors facilitated Communicative Language Teaching (CLT) activities in various classroom environments, to understand which factors played a role in the facilitation of CLT activities, and to discover which learning experiences they sought during the COVID pandemic from March 2020 through April 2021. The research questions guiding this study were:

1. How did IEP instructors facilitate communicative language teaching activities in a remote teaching environment?
2. What factors played a role in facilitating communicative language teaching activities in a remote environment?
3. How did IEP instructors learn to use technology to facilitate communicative language teaching activities in a remote teaching environment?

Research Design

The ontological assumption of this study was that all realities are socially constructed by individuals experiencing the world. Knowledge and meaning are acquired by individuals interacting with their realities guided by an interpretivist-relativist epistemology paradigm. In this subjective “reality mediated by our senses” (Scotland, 2012, p. 11), “knowledge has the trait of being culturally derived and historically situated” (p. 12). The general qualitative approach (Merriam & Tisdell, 2016) in this study provided the means for instructors to construct a narrative to process their lived

experience (Altheide & Johnson, 2011), and to present perspectives on learning to use technology in a remote teaching and working environment. Researchers using a qualitative approach seek a “detailed understanding of the issue” (Creswell & Poth, 2017, p. 45) only possible by directly speaking to participants to uncover how they “interpret their experiences, construct their worlds, and what meaning they attribute to the experiences” (Merriam & Tisdell, 2016, p. 24).

Instrumentation

Guided by the general qualitative approach, interviewing participants to discover phenomena to answer the research questions, “is necessary when we cannot observe behavior, feelings, or how people interpret the world around them” (Merriam & Tisdell, 2016, p. 108). The UTAUT is the theoretical framework (see Chapter 2) guiding this study to explore IEP instructors’ acceptance and use of educational technology to facilitate CLT activities in an emergency remote teaching environment (ERTE). Since the situation called for mandatory learning and training on new educational technology, the UTAUT framework was deemed most appropriate for this qualitative study.

The UTAUT guided development of the interview questions prompting IEP instructors to narrate the perceived usefulness, ease of use, social influences of peers and others important to them, and the perception that their unit had the organization, computing infrastructure, and personnel to support their acceptance and use of new technology.

The UTAUT framework can assist in predicting an individual user’s adoption and integration of technology, using performance expectancy (PE), effort expectancy (EE), social influence (SI) and facilitating conditions (FC) constructs, and the additional moderating variables of gender, age, experience, and voluntariness of use (Venkatesh

et al., 2003; Venkatesh et al., 2016; Wedlock & Trahan, 2019). The UTAUT provided guidance to explore instructors' perceptions about the usefulness, ease of use, social influences and infrastructure available to them during the pandemic to answer the research questions.

Interview questions. Using the UTAUT as a guide, semi-structured interview questions were developed to uncover instructors' perceptions of usefulness, ease of use, social dimensions affecting adoption, and the available infrastructure that influenced their acceptance and use of technology through stories and reflections (Kvale & Brinkmann, 2009; Merriam & Tisdell, 2016). These questions were developed and aligned with the IEP context and the research questions including how instructors facilitated CLT activities, the factors they felt played a role in facilitating, and how instructors learned to use technology in the remote environment. The UTAUT's moderating variables were used as a guide to create the demographic questions of age, gender, and years of experience. The initial interview protocol was reviewed by my faculty advisor and by my dissertation committee. Next, a think-aloud was conducted with two UF ELI faculty members.

Think aloud. In preparing the interview questions, a cognitive interview (Desimone & Le Floch, 2004), or think-aloud, the term used in this study, was conducted with two faculty lecturers from University of Florida English Language Institute who are representative of the UCIEP instructors in this study. The purpose of the think-aloud protocol was to determine how UCIEP instructors would interpret and answer the interview questions (Desimone & Le Floch, 2004). The invitation email was provided, along with the informed consent within the UF Qualtrics

(https://ufl.qualtrics.com) poll to consider prior to participating in the think-aloud. In the introduction email, a paragraph from Desimone & Le Floch (2004) was sent, regarding the expectations and examples of feedback the think-aloud commentary was intended to provide. Both faculty members gave their consent to be recorded, and they were individually interviewed via UF Zoom (https://ufl.zoom.us), to replicate the interviewing conditions with the study participants. Each interview question was projected on-screen and kept visible for the time that faculty member needed to reflect and respond to it. Notes were made on how each instructor responded to the question, their opinion on the structure of the question, and their reflections. These notes and reflections revealed a few issues (Presser et al., 2004) with several questions that could have caused misinterpretation and may not have accurately measured the "aspects of the phenomena being examined" (Desimone & Le Floch, 2004, p. 4). Several questions were changed to improve clarity, based on the faculty members' input (see Appendix D for original questions and amendments).

The most significant changes made to the original questions included rewriting the acronym CLT to communicative language teaching, and removing redundant occurrences of the word teaching, in an effort to make the meanings exact (see Appendix D questions 1-15). Other changes included rephrasing information questions to use the softening modal can to encourage personal narratives (see Appendix D questions 1-11).

The final interview questions and the related four UTAUT constructs (Venkatesh et al., 2003) that guided the development of each question are presented in Table 3-1. The interview questions are presented with the corresponding research questions.

Table 3-1. UTAUT constructs guiding the development of interview questions

UTAUT Construct (Venkatesh et al., 2003)	Interview Questions and Corresponding Research Questions
Performance Expectancy (PE) The degree to which an individual believes that using the system will help attain gains in job performance.	Can you tell me about your experiences teaching communicative language activities remotely during the pandemic? (RQ1) How did you facilitate communicative language activities in the remote teaching environment? • Would you be willing to share examples with me of your activities showing how you used technology where students were engaged in communicative activities? (RQ1) What kinds of technology did you use when teaching communicative language activities remotely? (RQ1) How and why did you chose to facilitate communicative language teaching activities in that manner? (RQ1) How effective do you think you were as an instructor during the pandemic in a remote teaching environment? (RQ2) Can you tell me more about why you chose to use those technologies for communicative language teaching activities at that time? (RQ2) How useful did you find those technologies to be for facilitating communicative language activities? (RQ2)
Effort Expectancy (EE) The degree of ease associated with the use of the system.	How difficult or easy was it for you to facilitate communicative activities in a remote teaching environment? (RQ2) What kinds of barriers were present during your facilitation of communicative language activities in the remote teaching environment? (RQ2) How difficult or easy was it for you to learn to use those technologies for communicative language activities? (RQ3)
Facilitating Conditions (FC) The degree to which an individual believes that an organizational and technical infrastructure exist to support use of the system.	Can you tell me how you learned to use technologies for communicative language activities? (RQ3) What resources did you use to learn about remote teaching? (RQ3) In what ways did your Intensive English Program administration or host institution support your use of technology for remote communicative language teaching? (RQ3) What kinds of assistance did you receive at your Intensive English Program or host institution for learning to teach remotely? (RQ3)

Participants

Purposeful sampling was used to invite instructors from the University and College Intensive English Program (UCIEP) consortium. Instructors from 72 UCIEP member institutes were invited to participate in the study because of their similar characteristics to provide “information rich and illuminative” (Patton, 2002, p. 40) narrative of the personal perspectives and experiences with teaching and learning in the emergency remote environment. The UCIEP schools are located across 33 states, plus the District of Columbia. The University of Florida English Language Institute was excluded from the study.

The UCIEP consortium belongs to the initial IEP model wherein faculty and staff are employees of the university or college, and the administration is within the structure and governance of the host institution. Additional models include for-profit businesses, not associated with a college or university, and proprietary, for-profit business, located on a college or university campus. The latter two models were excluded from the study to maintain similar educational and experiential characteristics (Alberola, 2021; Forbes, 2012; Kaplan, 1997; Wallace, 2003). Member institutes of the UCIEP are required to demonstrate an adherence to established consortium standards, verified through an application, an in-depth initial site-study, submission of periodic updates, and ongoing periodic review, to maintain an active status. The UCIEP mission states it, “supports and strengthens university-governed intensive English program leadership through collegial engagement, applied research, IEP advocacy, and the active promotion of the highest professional standards” (UCIEP Bylaws, 2017, pp. 1-2).

Minimum qualifications for UCIEP personnel are required for administrative faculty, full-time teaching faculty, part-time or adjunct faculty, and teaching assistants

(UCIEP Guidelines, 2017). The minimum requirements for full-time administrative and teaching faculty include prior teaching experience in an ESL/EFL setting, and an MA TESL, or equivalent, “with documented coursework in linguistics, culture and society, educational foundations, second-language pedagogy, second-language assessment, and language teaching practicum” (p. 3). UCIEP recommends that part-time or adjunct faculty have some prior teaching experience in the field, and a master’s in TESL, or related, degree. If an instructor is lacking experience or required coursework, the recommendations include having an administrator supervise that instructor.

Data Collection Procedures

Institutional review board (IRB) approval from the University of Florida was obtained prior to the beginning of the study. Data were collected primarily through personal interviews with UCIEP instructors who were working remotely from March 2020 through April 2021 during the COVID-19 pandemic in which F2F English as a Second Language (ESL) instruction moved to an emergency remote teaching environment (ERTE).

Interview. The invitation (see Appendix E) to participate was emailed to the UF ELI director, Dr. Megan Forbes, who forwarded it to the UCIEP directors’ listerv. The email provided a personal introduction, a description of the purpose of the study, and the invitation for directors to forward the email to instructors who taught at the UCIEP member school between March 2020 and April 2021, and were teaching and working remotely during the COVID-19 pandemic from March 2020 through April 2021.

When the UCIEP instructors indicated interest in participating, the survey link was sent directly from the UF Qualtrics site. Eleven instructors indicated interest in participating and received the link. Ten instructors completed the survey and were

successfully scheduled and interviewed. Upon consultation with my faculty advisor after the interviews were completed, it was determined that 10 participants was a useful sample for the study, as a pattern of similar responses had emerged (Merriam & Tisdell, 2016). The UF Qualtrics website included additional information about the study, the informed consent, and a description of the participants' rights. When indicating they understood their rights and consented to participate, participating instructors were directed to a short, six-question poll to gather demographic data including their age, gender, years of teaching experience, their academic position or affiliation, and if they experienced a change in their job or title during the pandemic (see Appendix A). After the instructors completed the poll, the Zoom interview was scheduled. Ten UCIEP instructors were invited to interview. Within the group of 10 instructors, none had worked with me previously.

The interviews were conducted in the Fall 2021 semester using UF's videoconferencing platform Zoom Pro, which has the capability to record audio and video, and to produce a transcript. It is a useful platform, not only for the convenience of these recording capabilities, but for the potential to make interpersonal connections (Archibald et al., 2019) similar to in-person interaction. The semi-structured interviews took approximately 45 minutes each.

After each interview, the text was edited using the accompanying audio and video download from UF Zoom Pro to create an accurate transcript. After transcribing the interviews and ensuring they were accurate, a copy was emailed to the instructors for member checking to verify accuracy of representation. Some instructors made changes by redacting information they felt was not pertinent to the topic we were

discussing, and names of their colleagues or host institutions, but all ten instructors gave permission to use the interview for the study. Member checking is critical for establishing trustworthiness as views from participants “allow for a fuller and rounder understanding of what is happening in the field” (Loh, 2013, p. 7).

Artifacts. During the interview, the UCIEP instructors were asked if they would be willing to share examples of activities showing communicative language teaching activities from their remote teaching. They were also asked if they would be willing to share the resources that helped them to learn to teach remotely with technology. Instructors could choose to share such examples and resources or not, including paper copies of communicative lessons they facilitated. The 10 instructors shared learning resources verbally but did not provide any lesson plan documents.

Researcher Journal. During data collection, journal entries and observations to document and track the research process were made in a notebook (Creswell & Creswell, 2018; Merriam & Tisdell, 2016; Saldaña, 2013). The self-reflection exercise was used to take notes during and after interviews, and to record personal thoughts and reactions throughout the data analysis and coding processes. The journal was used to manage data and record “feelings, reactions to the experience, and reflections about the personal meaning and significance of what has been observed” (Patton, 2015, p. 388).

Data Analysis Procedure

After reviewing the first transcript for accuracy, my faculty advisor and peer-coding partner from my cohort met to discuss the coding process and coded a section of the transcript together to ensure a common coding process and to guide our subsequent coding. In the next phase, my coding partner and I performed initial coding

on the first transcript to “symbolically assign a summative, salient, essence-capturing, and/or evocative attribute” (Saldaña, 2013, p. 3) separately. After completing our independent coding, we met via Zoom to review and discuss our codes to identify similarities and differences.

Overall, my peer and I had very similar codes. Differences in our codes were minor and we discussed the phrases we had chosen. One difference was that I assigned codes at an overly detailed sentence level with several first categories that could cause confusion with unnecessary categories. My peer coded at a broader level to capture the entire section of data. An example showing my initial codes applied at the sentence level using the first level codes facilitating CLT, remote teaching, and teaching with CLT, with a variety of sub-codes, and the more general initial code my peer applied for the same selection of text is shown in Table 3-2. In our discussion, we determined that condensing multiple first-level codes to create facilitating CLT in ERTE, would capture the meaning of the various strategies and activities. I continued to code larger sections of data, using more general first-level codes.

Table 3-2. Example of initial codes in the peer coding process

Initial code	Initial peer code	Final code
FacilitatingCLT Strategy Grouping SimilarLevels FacilitatingCLT Strategy Grouping ActivitySuccess RemoteTeaching Strategy StudentsChooseGroups TeachingwithCLT ClarificationStrategies	FacilitatingCLT Strategies	FacilitatingCLTinERTE Strategies

Trustworthiness

To address trustworthiness and dependability, established qualitative inquiry conventions were intentionally followed throughout the entire study (Merriam & Tisdell, 2016). The procedures used to address these establish standards throughout data collection and analysis are presented below.

The interview protocol was developed following accepted guidelines (Creswell, 2013; Merriam & Tisdell, 2016) and scripted using the UTAUT (Venkatesh et al., 2003) as the theoretical framework as a primary source. Two faculty colleagues at University of Florida English Language Institute, a UCIEP member institute whose faculty are representative of the participants recruited for the study, were interviewed in a cognitive think-aloud procedure (Desimone & Le Floch, 2004; Presser et al., 2004) to determine how the questions would be interpreted.

To address dependability and comparability, participants were asked the same initial structured demographic and experiential questions in the survey, and the same open-ended interview questions. The interview questions were presented to each UCEIP instructor in the same order (Patton, 2015). They were projected on the Zoom shared screen to provide visual, written support. Instructors shared vocabulary on the interview question topics (Merriam & Tisdell, 2016).

To address mitigating coercion, the participants were purposefully sampled from all UCIEP institutions, excluding UF ELI, in the event an instructor may have worked under my supervision. I had not worked with any of the participants professionally.

Following data collection, transcript accuracy was verified through listening and watching the available downloaded audio and video from UF Zoom Pro a minimum of two times. To address credibility of the study, member checking, where each participant

was given the opportunity to review the transcript, was performed. The transcript was sent to each instructor via email for verification of the words and meanings, and for final approval of its use in the study (Creswell & Creswell, 2018; Merriam & Tisdell, 2016).

Addressing trustworthiness in the data analysis was done through an established process of assigning codes to symbolize meaning (Saldaña, 2013). Peer coding was used to increase reliability (Creswell, 2013) and to reduce the possibility of bias due to my embeddedness in the IEP context. My peer-coding partner from my cohort provided an impartial perspective in the coding process. In the first phase, I met with my faculty advisor and my peer-coding partner. Following my faculty advisor's guidance, my peer-coding partner and I completed two phases of peer coding after the first and last transcripts were coded. Finally, my codes were reviewed for accuracy by my faculty advisor after the 10 transcripts were completed.

To address transferability in this study, several strategies were used. First, a rich description was used to detail the context and participants (Merriam & Tisdell, 2016). The transcripts and videos from the participant interviews, notes in my journal, and the memos within MAXQDA were used to create the detailed presentation.

To address further potential bias, reflective journaling (Creswell, 2013) throughout the study was done to explore my personal experiences as an IEP administrator. An example of a journal entry included the multiple perspectives I encountered regarding how instructors' expressed their understanding of the CLT approach. This audit trail (Merriam & Tisdell, 2016) documenting the entire study within my researcher journals include records of interaction with the participants, transcripts, codes and memos, meetings with my faculty advisor and my coding peer, and my own

reflections asking questions about the data, the process, and how my biases may be presenting in interpretations or coding.

Subjectivity Statement

Understanding how IEP instructors experienced moving quickly to an emergency remote teaching environment was directly connected to my position as an administrator concerned with continuity of operations. Working with instructors to navigate technology as a colleague through the pandemic, and providing resources and support while collaborating was professional, but also personal.

I have worked at the University of Florida English Language Institute since January 2006, first as an instructor and international student recruiter, and then as a full-time administrator starting in 2010. In that transition, in addition to recruitment and Listening/Speaking Coordinator responsibilities, I took the role of new instructor and graduate teaching student supervisor. I have coordinated and learned with Listening/Speaking instructors, supervised over 80 new ELI instructors, taught Supervised Teaching (LIN6940) as needed, and created professional learning opportunities that provided collaboration with my colleagues, usually involving educational technology to support English language teaching. As a new instructor supervisor, I focused on encouraging communicative activities in all skills and subskills. In this study, I discovered instructors have varying interpretations of CLT, negotiation of meaning, and authentic materials. This issue was addressed by having an instructor outside of the IEP context as a peer coder. Identifying my own interpretation through journaling and how it may influence coding was part of the process as well.

During the COVID-19 pandemic, UF ELI created programming called Short Term English Program (STEP) online. I assisted colleagues requesting help to build courses

on Canvas, coordinated, and marketed the program. I made myself available seven days a week for impromptu or planned Zoom sessions with colleagues. I communicated with our Core Emergency Group of Administrators to discuss how to appropriately provide learning resources and support for our entire team. I checked in with our instructors to see how they were feeling and to ask how I could help. I had not expected the participants in this study to have administrative titles. They had similar supporting roles in their IEPs. I recognized my experience as an administrator could have potentially contributed to meaning based on that experience while transcribing. This was addressed through the process of member-checking, peer-coding, and reflecting specifically on this issue through journaling. To address potential researcher bias and subjectivity, reflexive journaling and meeting with my faculty advisor were strategies used to address personal assumptions and bias throughout the study.

Our UF ELI instructors were required to return to campus for F2F teaching in January 2021. I taught a Listening/Speaking class for a colleague, stepping in as an emergency instructor at mid-term. The students and I were in masks and distanced in the UF classrooms. I had to facilitate remote instruction with HyFlex technology in UF classrooms, on short notice, for students who were withheld from campus due to positive COVID-19 test results. Since we did not have enough students to make a complete section in the level, my class had students added at mid-term, making it a multi-level class.

I was learning to use technology along with my colleagues and was seeking the support from others in the profession not only as an instructor but also as an educational technology researcher. In Summer 2021 and Fall 2021 semesters, I taught

Academic Writing, a course that provides two hours of synchronous class via Zoom, and three hours of asynchronous individual and group work each week. Despite being vaccinated and careful, I fell very ill with COVID-19 while teaching and conducting interviews for this study in October 2021. Experiencing the gamut of teaching, researching, and learning to use technology under stressful conditions the instructors were also living through made me empathetic. Again, I realized the potential for assigning meaning to their statements based on this similar experience and addressed this through the process of triangulation, by having multiple people independently analyze the data collected from participant interviews through the coding process.

Summary

This chapter focused on providing a description of the qualitative research study, including the theoretical framework and design guiding the investigation to answer the research questions. In addition, methods to ensure rigorous methodology was presented in a discussion of trustworthiness in the investigation, followed by potential limitations and the subjectivity statement.

CHAPTER 4
RESULTS

The purpose of this general qualitative study was to explore how Intensive English Program (IEP) instructors facilitated Communicative Language Teaching (CLT) activities in the emergency remote teaching environment (ERTE), to discover what factors they identified as playing a role, and to examine how they learned to use technology to facilitate CLT activities in a remote teaching environment. This chapter provides a brief overview of the IEP, followed by the findings organized by the research questions, and ends with information instructors' intentions to use technology going forward. The research questions guiding the study are:

1. How did IEP instructors facilitate communicative language teaching activities in a remote teaching environment?
2. What factors played a role in facilitating communicative language teaching activities in a remote environment?
3. How did IEP instructors learn to use technology to facilitate communicative language teaching activities in a remote teaching environment?

Intensive English Program Context

Interviews with 10 instructors from UCIEP institutions were held via Zoom between September 2, and November 5, 2021. In addition to addressing the research questions, this section gives a brief overview the instructors provided regarding features of their IEP context (see Table 4-1). Their demographic information is included (see Table 4-2), along with their reported prior experience and comfort with technology. Finally, a brief description of the initial transition to remote teaching instructors experienced in March 2020.

Table 4-1. Themes and categories in the intensive English program context

Theme	Categories
IEP context	Background
	Participants
	Experience and comfort using technology
	Transition to remote instruction

Background

The institutions included in this study represented curriculum that had two types of courses: a) integrated skills, which is a course where several skills are equally developed, like Listening/Speaking, or Reading/Writing and b) discrete skills classes, in which only one skill is the focus, like Grammar. Even though they have a single focus, discrete skills courses can contain elements of the four skills (reading, writing, listening, and speaking) and subskills like grammar, vocabulary, or pronunciation in activities. Instructors reported different models, including non-credit or credit-bearing courses in the IEP, and dual-enrollment or academic bridge programs across the IEP and the host institution.

In addition to the skills courses, two of the institutions represented had offered online courses previously, and one was in the process of implementing online options in the spring semester of 2020. Two institutions delivered teacher-training courses or certificates, professional development programming, MA TESL courses, or elective courses in addition to the regular IEP full-time F2F. This creation of online elective courses was in response to falling enrollment across the United States prior to the pandemic, and the IEP used it as a method of marketing to alumni and local, non-F-1 students to bolster student enrollment.

The IEP enrollments were decreasing across the United States due to the White House Administration policies implemented between 2017 and 2020 to limit international visitors and students. IEP administrators had to make decisions about placing students with multiple proficiency levels into one section and downsizing the program by not offering electives. Seven instructors spoke about issues regarding low enrollment before the pandemic. Their colleagues had been laid off when programs downsized, and those remaining reported a sense of survivor's guilt. These issues regarding multiple-level sections and fewer instructors multiplied in March 2020 with the stark loss of student enrollment.

IEPs are required to provide at least 18 classroom contact hours each week for F-1 student visa holders. Teaching appointments for full-time instructors vary between 16 to 20 classroom contact hours per week. During the initial pivot in March 2020, instructors had a variety of appointment and schedule changes. Some IEPs reduced instructional hours by giving release time for course and material development. Class schedules were changed in some IEPs to accommodate international students in Asia who could not travel to the United States.

Participants in the Study

Ten instructors who taught in a UCIEP school during the March 2020 – April 2021 period participated in the interviews. Table 4-2 presents the demographic information instructors shared. The participants' ages ranged from 26 to 64, and they reported from three to 30 years of teaching experience in ESL classrooms. One instructor experienced a title change during the period. Three instructors identified as male and seven identified as female.

Among the 10 instructors interviewed, several held administrative titles such as skills, curriculum, or academic coordinators. Other responsibilities they had included textbook and materials coordinator, technology committee member, or campus technology office liaison. Those with administrative positions typically had release time as part of their appointment.

Table 4-2. Participants in the study

Name	Age	Years of Experience	Title Change from March 2020 – April 2021	Gender
Lori	62	21	No	Female
Andy	38	9	No	Male
Eva	40	11	No	Female
Rene	55	30	No	Female
Amy	26	3	Yes	Female
Mark	34	11	No	Male
Mae	58	6	No	Female
Kai	64	19	No	Female
Pax	41	11	No	Male
Jyn	40	13	No	Female

Experience and Comfort Level with Educational Technology

In this section, the instructors who participated in this study are introduced in order of prior experience with educational technology in the F2F or online classroom environment, from the least experienced to the most experienced.

Rene and Mae are instructors with the least experience using technology in the remote or online environment. They had not used asynchronous or synchronous technology in teaching or teacher training. Rene had extensive ESL classroom experience and used computer labs for writing courses in the F2F environment, but using remote technology was new to them. Rene likes technology, but felt they were

“not a high-tech” person, and stated the remote experience is inferior to F2F immersion classrooms for language learning.

Mae said their IEP used an LMS to support the F2F courses prior to the pandemic. Nervous at the beginning of the pivot to remote teaching, Rene and Mae credit the training they received from their IEP directors and colleagues in learning how to use the synchronous Zoom platform.

Lori and Kai are instructors who reported no prior online teaching experience, nor had they incorporated technology in their F2F classrooms before the pivot to remote instruction. Although, they both had previous experience leading online professional programming in a primarily asynchronous environment, Lori was initially apprehensive about online language teaching. Self-described as a person who was not a “techie” this instructor was grateful for the access to global colleagues in Professional Learning Networks (PLNs). Kai felt synchronous, remote language teaching was new and challenging, even though they self-described as feeling comfortable with technology. Kai did not view the LMS as a useful tool to immerse students in a communicative learning experience or as a way to facilitate communicative activities. Like Lori, they found technology useful for learning, since videoconferencing platforms provided access to international communities engaged in “massive global brainstorming” seeking the same technology solutions for remote teaching. Despite their colleagues’ positive experiences learning and brainstorming together, Kai stated that the cognitive “bandwidth” that instructors needed to learn so much so fast, tripled or quadrupled, especially in that initial, very short transition to remote instruction.

Amy is a part-time graduate teaching assistant who began teaching at the IEP in August 2020. They had been an online student as an undergraduate, and taught online before enrolling in the graduate program. Amy did not express having any difficulty with technology and only referred to the difficulty of learning to teach CLT activities as a new instructor during challenging times.

Mark and Pax are instructors with administrative coordinator titles who said their F2F classrooms were a blended environment prior to the pandemic because of the amount and kinds of technology they used to supplement their teaching. Mark self-described as “more than average tech-savvy” and said the circumstances were more difficult for their colleagues transferring CLT activities to the remote environment. Mark found tools that supported the CLT approach in the remote classroom. However, the teaching experience “was more about triage. We did not have real emotional or pedagogical bandwidth. What a great opportunity to be creative! But no, it was more like, we're trying to survive here, we're trying to find solutions.”

Pax also used technology in F2F classrooms and felt the transition to a remote environment was not a disruption due to learning to use technology, but focused on the challenges of substituting classroom materials, resources, and realia in CLT activities in an electronic format. They stated it was more of a disruption for their colleagues, who were intimidated by educational technology, but were also “just trying to survive.”

Andy, Jyn, and Eva are three instructors with administrative coordinator titles who reported having extensive prior online teaching experience and teacher-training experience. These instructors had previously facilitated workshops to guide and train their colleagues to use technology in the initial transition and during the pandemic. Andy

is a self-described “techie” who has taught online teacher-training courses (TESL), and their institution had synchronous ESL courses before March 2020. Regardless of Andy’s expertise and experience, they said technology can be challenging as a distraction for students, and that it minimizes the instructor’s role as a facilitator in CLT since more guiding and refocusing is needed in the remote environment. They felt like an effective instructor who leveraged the available technology to make language-learning feedback more personal for students.

Jyn had experience developing and teaching online ESL classes in the IEP. They reported having no difficulty transitioning to the remote environment and facilitated CLT activities to engage students in interactive group and pair work with collaborative tools in the same way as in a F2F classroom.

Eva had the most online and hybrid teaching experience. They are a self-described “tech-savvy” person, although expressed they continually seek learning experiences to improve their educational technology skills. Eva used technology successfully in communicative activities, and perceived they were able to do everything, if not better, online.

The ten instructors had a range of limited to advanced prior online and remote experiences teaching and developing ESL or TESL courses. They also described a range of differences in comfort with using technology in the remote environment. They agreed the most challenging time was the initial, short period to transition to remote instruction, in March 2020.

Transition to Remote Instruction

Instructors reported they had a short period to transition from F2F to the ERTE. Some had two days and others had up to two weeks that included spring break in some

instances. IEPs heard the news of a shutdown from their host universities in March 2020 and were told their classes would be held remotely for the rest of the semester, or perhaps until the end of the summer. The COVID-19 virus that shut down universities caused great uncertainty during those two initial weeks, especially in IEPs with an already vulnerable population of international students and instructors.

IEP administrators and instructors began working immediately to transition F2F classrooms to remote instruction. Several IEPs met in person to set up remote classes using the LMS, to experiment with technology for communicative activities, and to plan for issues that may arise. Kai remembers feeling “transported to another planet” because the online experience “is not a reference that any of us have had,” since F-1 visa students were always limited to a minimum of 18 hours of in-person classes only, the majority of the institutions had never experienced this kind of instruction. They were suddenly a part of the global discussion about how to teach CLT online effectively.

Those instructors who reported they were not as comfortable with technology credited their IEP directors, other administrators and colleagues working together to help them learn to use new tools. Some felt nervous or intimidated but stated IEP directors and colleagues with more experience using technology were generous in helping those who were not. Having engaged with students in the F2F classroom before the shutdown made interaction regarding learning technology in the remote environment more comfortable for instructors.

In reporting their difficulty with transitioning to the ERTE, instructors felt overwhelmed with heavy workloads. Where IEPs had low enrollment or multiple proficiency levels in each section, instructors stated that it was extremely hectic, and it

was difficult to plan what hardware, apps, and textbooks they needed. They questioned the effectiveness of their teaching in this new environment, along with balancing the changing skills-based curriculum to focus on more listening and speaking in the synchronous, Zoom-based classroom. Some questioned the effectiveness of the learning management systems (LMS) that is not a technology meant to immerse one in a communicative learning experience.

After this initial transition to remote instruction, some IEPs reported returning to F2F classrooms as early as Fall 2020. In the Fall 2021 semester when the interviews took place, instructors were teaching in a variety of modalities. They used terms that included online, remote, hybrid, HyFlex, dual audience, and F2F classrooms to describe their environments. Three instructors were either online or fully remote, five instructors were fully F2F, and two said their institutions were a mix of F2F and online or remote which in some cases included a HyFlex configuration. HyFlex is instruction that "presents the components of hybrid learning in a flexible course structure that gives students the option of attending sessions in the classroom, participating online, or doing both" (Blended Learning Essentials, http://ble-leeds.wikidot.com/wiki:hyflex). HyFlex was implemented due to the low enrollment of F2F students in physical IEP classrooms that had to be combined with the remote students to make a full class in terms of numbers. Instructors who taught in the HyFlex modality reported it was the most challenging technology, and they needed additional support to understand how to use it effectively for communicative activities.

Instructors reported that the CLT approach informed how they used technology and which tools and applications (apps) they chose to use in the remote environment.

How Did IEP Instructors Facilitate CLT Activities During the ERTE?

Communicative language teaching (CLT) is a student-centered approach in which instructors facilitate engaging, authentic activities for learners to improve communicative competence in a second (L2) or additional language. Regardless of their prior experience with teaching online, blended, or hybrid delivery methods, the instructors in this study indicated knowledge of the approach and how it was instrumental to their teaching and informed their practice in the emergency remote environment. Table 4-3 shows the theme and categories related to how IEP instructors facilitated CLT activities using technology in the emergency remote teaching environment.

Table 4-3.Theme and categories in using the CLT approach in the ERTE

Theme	Categories
Using the CLT approach in the ERTE	Changing instructor roles
	Pairing and grouping students
	Using authentic materials
	Encouraging negotiation of meaning
	Supporting metacognitive awareness

Using the Communicative Language Teaching Approach in the ERTE

In the interviews, instructors recalled the urgency in the initial days to plan, create and transform activities with technology using the CLT approach. Lori stated it was foundational to their teaching, and since humans learn their first languages in communities, their teaching method is to create opportunities to mirror those language-learning communities. The struggle to find technology to maintain a communicative, student-centered classroom was ongoing. Mark remembered the challenging

discussions during the pandemic about, “how to adapt to new situations, how to deliver content, how to provide feedback in more creative way, and how to leverage video and audio media, especially for CLT.”

Instructors stated that CLT activities should be present not only in listening and speaking classrooms, but in all skills including reading and writing. None explicitly mentioned grammar as a skill or subskill course where they facilitated communicative activities with technology. In expressing how they facilitated CLT activities, instructors reported changing instructor roles, pairing and grouping students, using authentic materials, encouraging interaction to promote negotiation of meaning, and supporting metacognitive awareness in the remote teaching environment.

Changing Instructor Roles in CLT Activities

Instructors explained how the facilitator role that is present in the CLT approach changed in the ERTE, and expanded to include moderator, leader, and manager of every aspect of communication in the synchronous classroom. Andy acknowledged that in F2F classroom activities, “I'm supposed to be more of a facilitator than an instructor,” but in the ERTE, they felt all communication relied on the instructor moderating and managing, since the “communicative part ended up just being a lot of repetition, feedback, and directions to read and answer questions out loud.” Despite instructors describing their expanding roles in facilitating, moderating, and managing CLT activities in the changing modality, instructors stressed the importance of reducing teacher talk to encourage students to engage more fully with their classmates in collaborative tasks.

Pairing and Grouping Students in CLT Activities

Instructors’ strategies to guide the creation of communicative lessons and activities in the ERTE included grouping or pairing students. Many instructors spoke of

leveraging the available technology to create groups or pairs to maximize student engagement in discussions and in collaborative work. The strategies they employed included grouping and pairing students with similar proficiency levels and taking into consideration the personalities of students in a multi-level classroom. Instructors reported considering cultural and religious reasons for pairing and grouping the Saudi Arabian and other female Middle Eastern students. Mark stated this was important to provide the safety and security needed for their success in a language classroom.

Due to the students' locations, the multi-level classrooms, and classes with dominant first languages, instructors questioned the changing paradigm in ESL regarding the focused debate on translanguaging. Translanguaging is the use of English and students' other languages to complete tasks in an ESL classroom. Traditionally, some IEPs encourage or enforce an English-only policy. However, in ERTE classrooms where students from a single country made up the majority in the breakout rooms, instructors questioned if negotiating meaning in languages other than English was communicative.

Using Authentic Materials in CLT Activities

When implementing authentic materials in ERTE activities, instructors expressed the need to use interesting, academic materials, including videos and articles containing current event topics. They recognized the importance of providing motivating and accessible materials for students to discuss their current circumstances like the toilet paper shortage, global weather events, and the pandemic they were experiencing together in 2020. Instructors agreed that authentic materials piqued students' interest because it sparked discussion on relatable topics.

Encouraging Negotiation of Meaning in CLT Activities

Another dimension of the CLT approach that informed instruction in the ERTE was negotiation of meaning. This is a strategy used to clarify misunderstandings and modify speech when completing a language-learning task together in pairs or groups (Long, 1996; Pica, 1996). Instructors facilitated discussion-based activities for student-student and teacher-student interaction, acting as an interdependent participant to encourage negotiation of meaning using a combination of Zoom, breakout rooms, and collaborative tools in the remote environment. Lori felt it was important for instructors to not take control of the discussion and simply create opportunities for students to "communicate with each other and get in there and grapple with the material." An example used for negotiation of meaning was an information gap activity.

Supporting Metacognitive Awareness in CLT Activities

An instructional feature of IEPs is to facilitate activities supporting metacognitive awareness. This approach helps students notice the learning process and take responsibility for their own learning. Instructors reported facilitating activities to support metacognitive awareness. They posed questions to guide students through thinking about their own learning and what it means to be engaged and to take turns speaking, especially in light of their classroom cultural differences, and having cameras turned off in Zoom. Instructors used strategies to support students' metacognitive awareness by incorporating personal journals for students to reflect, plan, and make goals to take ownership of their learning. In addition, instructors emphasized the importance of scaffolding activities using higher-order thinking skills to support the students' knowledge, and use of metalanguage to prepare them for U.S. graduate school study.

How Instructors Used Technology to Facilitate CLT in the ERTE

Instructors reported how they used tools, applications (apps), LMS, and other technology to facilitate activities in the remote classroom. They reported using a variety of Learning Management Systems (LMS) provided by their institutions, software, websites, apps, videos, and collaborative tools to facilitate CLT activities during synchronous instruction, synchronous and asynchronous instruction, and in asynchronous environments for homework (see Table 4-4).

Table 4-4.Theme, categories, and subcategories for how instructors used technology

Theme	Categories	Subcategories
How instructors used technology to facilitate CLT	Synchronous instruction	Websites
		Applications (apps)
		Informational videos
		Zoom features
	Synchronous and asynchronous instruction	Collaborative tools
		Instructional and entertaining videos
	Asynchronous environments for homework	LMS features
		Collaborative tools

Synchronous Instruction

The instructors relied primarily on the videoconferencing product Zoom and its screen share, whiteboard, and breakout room features to facilitate CLT activities for synchronous instruction. They perceived spending more time developing students' oral communication skills than in the F2F modality, especially for those instructors exclusively using Zoom throughout the pandemic. Additional technology accessed includes websites, application, and informational videos.

Websites. Instructors reported searching websites (see Table 4-5) to find ideas and materials for communicative activities. The websites provided a range of listening, reading, vocabulary and interactive presentation materials the instructors used in the synchronous Zoom environment to engage and motivate student to participate.

Table 4-5. Websites instructors used for CLT ideas and activities

Websites	Instructors' use	Site
ello	Creative social network blog	https://ello.com
Hypersay	Interactive presentation	https://hypersay.com
Jeopardy Online	Online competitive games	https://jeopardylabs.com
Randall's Lab	ESL listening practice site	https://www.esl-lab.com
ReadLang	Language practice	https://readlang.com
ReadTheory	Reading support and teaching community	https://readtheory.org
Vocabulary.com	Vocabulary practice	https://www.vocabulary.com

Applications. Instructors incorporated apps for communicative activities (see Table 4-6) that students could access on their phones. These apps are primarily game-based tools used for warm-ups, questions of the day, entrance and exit tickets, and vocabulary quizzes. The apps motivated students and engaged them in conversations. The students could receive immediate feedback when watching their scores or progress on the screen that encouraged competition and authentic language use through play.

Table 4-6. Applications instructors used for CLT activities

Applications (Apps)	Instructors' use	Site
Kahoot!	Game-based learning	https://kahoot.com
Lyrics Training	Language study with songs	https://lyricstraining.com
Picker Wheel	Selects words or images	https://pickerwheel.com
Plickers	Rapid response polling	https://get.plickers.com
Poll Everywhere	Rapid response polling	https://www.polleverywhere.com
Quizizz	Interactive quizzes	https://quizizz.com
Quizlet	Quizzes and flashcard creation	https://quizlet.com
Voice memos (personal phones)	Record audio samples	
WhatsApp	Multi-platform communication	https://web.whatsapp.com

Rene used but rejected several apps their IEP director and other experienced instructors recommended. They said that Kahoot! is not great. “It's very cute, but I wouldn't use it to review or teach vocabulary because the students who read faster are at an advantage.” Rene rejected Jamboard because students were too busy playing with the technology and not listening to each other. They stated using gamified apps “is not a real communicative activity if the listener is not communicating with their expression. You do not know if the other people are listening.” Rene relied primarily on Zoom and PowerPoint to facilitate CLT activities throughout remote teaching.

WhatsApp was used as a channel for communicating with students. Students used it to communicate with the instructor, for example if they had difficulty finding the right login or Zoom link, and students used it to comment on and share videos, memes, photos, and other media. The app is blocked in China, and instructors had to use other apps or communication channels for students located there.

Informational videos. In addition to the apps, instructors used short informational videos, primarily from YouTube, to provide context and discussion prompts for communicative activities. In the synchronous environment, instructors stated they increased oral communication practice using these videos, in place of audio recordings or textbooks, as they typically used in the F2F classroom.

Zoom features. Instructors emphasized the importance of using the Zoom screen share feature for communicative activities. They used the whiteboard while screen sharing to project etexts and PowerPoints, and they encouraged students to share their own screens and use the whiteboard to practice presenting and lead discussions in the remote environment. Instructors used the whiteboard feature similarly

to a physical whiteboard on the wall of a F2F classroom to write vocabulary and illustrate examples during discussions, in addition to using it to focus students' attention on the Zoom screen. Mae used the whiteboard "just like I would in real life" when providing visual support in the classroom to illustrate examples in discussion. Instructors frequently used the whiteboard and asked students to make comments and contribute to discussions through the Zoom chat. Some instructors projected the textbook pages for students who could not access them in countries outside of the United States. Creating and sharing daily PowerPoints to manage the classroom was a way that instructors used technology to inform students, preview the scheduled activities, and provide focus for the communicative content facilitated by the instructors.

The final feature frequently used on Zoom was the breakout rooms to pair and group students for collaboration on language tasks. Many had strategies they used to pair and group students based on motivation level, language proficiency level, cultural issues, and gender considerations. Instructors liked that they could visit breakout rooms to check on students' progress and join the conversations, however several had concerns about not being able to view all the small groups as they did in a physical classroom. Instructors emphasized the importance of giving roles and setting expectations for students before entering the Zoom breakout rooms, even though it took additional class time.

University student volunteers or interns who helped monitor and manage discussion in Zoom breakout rooms were perceived as helpful for student engagement. Breakout rooms were also a place for individual meetings with students, where instructors could privately conduct wellness check-ins and speak with the students

frequently to check how they were managing schoolwork and the pandemic. Instructors who spoke of the wellness check-ins emphasized that these conversations were communicative activities.

Synchronous and Asynchronous Instruction

Instructors relied on Zoom for synchronous instruction, but implemented several LMS products and collaborative tools for both synchronous and asynchronous activities. They highlighted how they used the LMS, collaborative tools, and videos to facilitate CLT activities in both environments.

LMS. All instructors reported that their host universities provided an LMS (see Table 4-7). Nine of the 10 instructors used Canvas. One instructor used Blackboard while teaching remotely and another stated their university was in the process of replacing Blackboard with Canvas in spring of 2020 and also provided Microsoft Office 365 products. The nine instructors using Canvas spoke about the features it provides for facilitating collaboration and interaction. The most experienced online instructor, Eva, used the LMS as an asynchronous hub to prepare students for participating in the synchronous class by previewing readings and videos. Eva understood the need to front-load well-made, authentic materials, and to provide navigational tools and videos to guide students through the LMS.

Instructors used Zoom embedded in Canvas for synchronous class time. One instructor who used this configuration appreciated the etext integration with books like Pathways (National Geographic Learning). Canvas also has an embedded media-recording feature and Canvas Studio. Kai originally used FlipGrid for student presentations but returned to the Canvas media tool since FlipGrid limited the recording time unlike the media tool. Mark used Canvas Studio to create collaborative videos and

interactive discussions on the platform, which has the capability to embed comprehension checks and quizzes.

Table 4-7. LMS and platforms instructors used for asynchronous CLT activities

LMS and university-provided platforms	Instructors' use
Blackboard	Homework and learning management
Collaborate Ultra	Interactive interface
Canvas	Homework and learning management
Design Plus	Learning with colleagues
Collaborations	Collaborate with students
Commons	Share materials across Canvas users
Studio	Interactive video tool
Media Recorder (Audio & Video)	Record instructions
Office 365	Collaboration, presentations, and communications
TEAMS	Class communication
OneNote	Collaborative hub for learning content
OneDrive	Cloud storage and sharing platform

Collaborative tools. Instructors incorporated collaborative tools to facilitate student engagement in both synchronous and asynchronous environments (see Table 4-8). Kai used Mentimeter to encourage participation in a synchronous warm-up activity where students contribute to a word splash to build a cloud of ideas. Many instructors relied on Google products like Docs, Slides, and Jamboard for collaborative activities in pair and group work. They used these for collaborative reading and writing activities and tasks students would solve through the negotiation of meaning with their classmates during synchronous class time, or posted on the LMS where students could engage with the materials outside of the synchronous class time.

Kai also used Zoom and Canvas, focusing on facilitating communicative activities in reading and writing classes. Their favorite, collaborative platforms were Google Docs, Google Slides, and Perusall for interactive reading activities. Jyn primarily relied on Google Docs for students to collaborate in pair and group work, and stated there was no difference in how they facilitated collaborative CLT activities in F2F classrooms. Again,

Eva, the most experienced instructor, used several collaborative platforms during this time. In addition to the collaborative features in Office 365 products like OneNote, they used VoiceThread and discussion boards. VoiceThread provides a platform for students to create multimedia projects together where they could comment and respond with audio or video tools throughout the project.

Table 4-8. Collaborative tools instructors used to facilitate CLT in the ERTE

Collaborative Tools	Instructors' use	Site
Google Docs	Collaborative workspace	https://www.google.com/
Google Drive	Cloud-based storage for collaborative documents and sharing	https://www.google.com/
Google Hangout	Communications	https://hangouts.google.com/
Google Jamboard	Interactive whiteboard	https://jamboard.google.com/
Google Slides	Interactive presentation	https://www.google.com/
Mentimeter	Collaborative word splash	https://www.mentimeter.com
Padlet	Interactive notice board	https://padlet.com
Pear Deck	Interactive presentation	https://www.peardeck.com
Perusall	Social reading platform	https://perusall.com
VoiceThread	Interactive presentations	https://voicethread.com
Zoom	Video conferencing platform	https://zoom.us
Zoom breakout rooms	Remote discussion space	
Zoom whiteboard	Virtual brainstorming space	

Instructional and entertaining videos. Instructors used the Canvas media-recording tool or YouTube to make videos of themselves. They embedded the instructional videos to guide students through the assignments, quizzes, and assessments they would find posted in the LMS. These instructional videos facilitated guidance through the LMS or served as informational messages for students who may have missed synchronous class time due to technology barriers or illness. Instructors also used a range of video resources (see Table 4-9) as supplemental material for topics during synchronous discussions and as prompts for asynchronous written discussion boards and collaborative assignments. They used educational videos from Prager University, NGL, and TED to provide content that satisfies the SLOs and the IEP

mission to prepare students for U.S. university academic discussions. Instructors used entertaining videos from Disney+ and YouTube to facilitate practice with informal language, including American slang, and authentic, relevant topics to capture the students' attention.

Table 4-9. Video tools instructors used for CLT activities

Video Tools	Instructors' use	Site
Disney+	Engaging video content	https://www.disneyplus.com
edpuzzle	Interactive video lessons	https://edpuzzle.com
Prager University, Five-minute video	Educational video resource	https://www.prageru.com
FlipGrid	Interactive video discussion	https://info.flipgrid.com
National Geographic Learning (NGL)	Educational videos	In NGL textbooks or YouTube
TED-Ed	Educational videos	https://ed.ted.com
TED Talks	Educational videos	https://www.ted.com/talks
YouTube	Engaging video content	https://www.youtube.com

Instructors in the synchronous and asynchronous environments used additional tools to facilitate communicative activities. Pax tried video discussion boards on Canvas, but the favored tool for engagement was NearPod, an interactive learning platform where the instructor felt they could keep students focused on tasks (see Table 4-10). Andy used the language lab software Sanako, Kaltura, and the Canvas media recorder feature to support and facilitate CLT activities in both environments.

Table 4-10. Other tools instructors used to facilitate CLT in the ERTE

Other Tools	Instructors' use	Site
Kaltura	Virtual classroom	https://corp.kaltura.com
Nearpod	Interactive learning platform	https://nearpod.com/
PowerPoint	Presentation tool	Provided by institution
Table 4-10. Continued		
Sanako	Lab software	https://multimedia-fl.com/products
Story Board	Digital storytelling	https://www.storyboardthat.com

Asynchronous Environments for Homework

In discussing homework specifically, instructors reported using the LMS and collaborative tools for communicative assignments. Instructors had challenges initially creating interactive and communicative asynchronous materials, and some relied on creating simple pair or group activities for which students contacted each other outside of class time through their preferred channels, as an extension of the synchronous class. As instructors progressed in learning how to use the technology to facilitate communicative activities, they used the features in Canvas and Blackboard to give written and video feedback to engage in individual discussion with students. They used the LMS for video and text prompts for interactive discussion board assignments. Students used LMS technology for recording and submitting or video assignments. Instructors used the media-recording feature in Canvas to record themselves to provide individual homework feedback for students.

Collaborative tools such as Google Docs and Slides were used for student homework (see Table 4-8). Instructors reported teaching students how to use Storyboard, PowerPoint, and VoiceThread for collaboration on group slides and presentations. However, several instructors emphasized using the simplest technology for homework because of barriers they had encountered. Because of technology barriers, instructors rejected FlipGrid, the interactive video tool, saying it was too complicated, and took too long to load.

Related to homework in the asynchronous environment, instructors acknowledged the challenges of cheating. Students used translating devices in written homework and even as they prepared and presented to the class orally in synchronous sessions reading directly from their screens. Mark asked, “If students write their paper

or presentation in their first language, and then run it through a translator, then run it through Grammarly, and then read it right from the screen, is this communicative?"

Overall, the instructors reported how they facilitated CLT activities in the remote environment using technology. Initially they exclusively relied on Zoom in the synchronous class time, which was, in many cases, three or four hours per day for instructors during the pandemic, and subsequently expanded their repertoire as they learned to use the features of Zoom, like screen sharing, the whiteboard, and breakout rooms. They used apps, video resources, and collaborative tools to engage students in communicative activities.

In the following section, instructors report the factors that played a role in facilitating activities while using the aforementioned technology in the remote environment.

Factors that Played a Role in Facilitating CLT in the ERTE

The 10 instructors reflected on the factors they felt played a role in facilitating CLT activities. Prior experience with technology in the ESL classroom, the usefulness of technology, the ease of use of technology, their perceived effectiveness using technology, the student feedback on classroom technology, pedagogical considerations, and the technology barriers were the factors instructors perceived in playing a role in facilitating CLT in the ERTE (see Table 4-11).

Table 4-11. Theme and categories indicating factors

Theme	Categories
Factors that played a role in facilitating CLT in the ERTE	Prior experience with educational technology
	Usefulness of technology
	Ease of use of technology
	Perception of effectiveness using technology

Table 4-11. Continued

Theme	Categories
	Student feedback using technology
	Pedagogical considerations
	Barriers in remote instruction

Prior Experience with Educational Technology

The first factor that played a role in facilitating CLT activities was the reported prior experience instructors had with educational technology in a teaching context. Those instructors that reported prior experience used more websites, apps, software, LMS, and other tools throughout the pandemic (see Table 4-12). Those with reported minimal prior experience with technology relied more on Zoom and PowerPoint in the synchronous environment.

Table 4-12. Reported prior experience with technology in the ERTE

Prior experience with technology	Minimal prior experience with technology
Used more technology in the ERTE	Relied on Zoom and PowerPoint
Perceived technology as useful for CLT	Perceived technology not always useful for CLT
Perceived ease of using a wider variety of technology	Perceived a range of ease with using technology
Perceived effectiveness teaching with technology	Perceived range of effectiveness teaching with technology
Perceived student feedback important in using technology	Perceived student feedback important in using technology

Reported prior experience with technology. Those with reported prior experience with technology include Andy, Eva, Amy, Mark, Pax, and Jyn. Some of their F2F classrooms were a blended model, in which they incorporated educational technology to support engaging activities in language learning. They reported continuing using familiar technology, in addition to integrating a high number of apps, websites,

and software. These instructors used apps and advanced tools to provide collaborative synchronous and asynchronous activities, to direct classroom management, to communicate with students, and to provide workarounds for students with limited access to materials and technology. Among them was an understanding of the instructional design components needed in the LMS, and how the LMS content needed more development, front-loading, and scaffolding for student ease of use. Since they had previous experience with collaborative platforms like VoiceThread or NearPod, they understood the challenges of the additional time needed for pre-teaching in order for students to use and engage productively with technology. When these instructors rejected software, apps, or other platforms it was because they understood the complexity and the amount of time needed for instruction to achieve full use of the product.

Reported minimal prior experience with technology. Instructors with minimal prior online teaching and technology experience included Lori, Rene, Kai, and Mae. They learned how to use apps, websites, and software to facilitate communicative activities with the help of their colleagues, their students, and Google, when required to move to the remote environment. One was familiar with Canvas because their IEP had used it prior to the pandemic and stated that they were comfortable with technology. The others indicated they had to learn to become comfortable with technology to facilitate CLT activities. They googled how to make YouTube videos, tried out lessons on the weekends with colleagues, and let students know they were learning how to use tools and felt it was important to be honest about needing help. These instructors tried but rejected platforms and apps often. The reasons they gave included students being

distracted by technology, the unfair advantage faster readers had in gamified apps, students losing face in front of their peers in gamified apps, and technology access barriers.

These instructors relied on Zoom and breakout rooms, Google Docs and Slides, and other tools they could use while sharing their own screens. They relied on technology that was familiar to students and emphasized spending class time setting classroom expectations for the use of technology.

Usefulness of Technology for Facilitating CLT Activities in the ERTE

How instructors perceived usefulness of technology was another factor that played a role in facilitating CLT activities. Instructors reported the useful attributes of technology as well as the attributes they deemed not useful for facilitating CLT activities. Those with reported prior experience with technology deemed technology more useful. Those with minimal reported prior experience with technology stated technology was not always useful for communicative activities.

Useful attributes of technology. Collectively, the useful attributes they perceived were that technology can motivate students, create social and emotional connections to improve student interaction, and provide a platform to deliver authentic and engaging materials on websites, apps, and videos for student engagement.

Student motivation was a concept that instructors mentioned frequently, related to technology being useful. Instructors used the word 20 times to describe the level or lack of motivation of their students, or how they used technology to support student motivation to participate in communicative activities. They understood the need to use authentic materials to motivate and engage students in the remote environment. Grouping students in Zoom breakout rooms involved understanding the motivation

levels of each. Mae emphasized praising students who stayed motivated despite the time zones and technology difficulties. Educational technology was reported to be useful to the majority of the instructors for facilitating communicative activities as long as students were motivated.

Those with prior technology experiences found technology was useful to engage students in the remote environment and could create connections and a dynamic class. They found technology useful for engagement with students to help them continue their language journey when they were not able to travel to the United States, and it was useful for helping students achieve Student Learning Outcomes (SLOs) in the remote environment. Jyn said that there were “no barriers as long as learners are motivated and active.”

Technology deemed not useful. Some technology was deemed not useful for CLT activities, primarily by those with minimal prior experience using technology. They reported it was due to the additional time needed to learn to use the tool and teach students how to use it for language learning that outweighed some of the usefulness. The instructors noted that their colleagues were successfully using some tools, but they considered the learning curve required for some products. Instructors also reflected on how technology is not useful, not only because of the time needed to pre-teach the tools, but it lacked the capability for authentic human communication.

Rene said their colleagues successfully implemented Padlet and Jamboard for students to present and incorporate pictures and videos, but they did not find them useful. Rene said overall, technology is “not that useful. It is better in person. We didn’t have a choice.” Rene believed that authentic communicative experience is missing in

activities because students are looking at the PowerPoint rather than their classmates' faces.

Ease of Use of Technology to Facilitate Activities in the ERTE

Another factor the instructors reported influencing how they used technology to facilitate activities was how easy they perceived it was to use the technology during this period. Overall, instructors with prior experience with technology indicated it was easier to use a wider variety of technology to facilitate CLT activities than those with minimal prior experience.

Instructors who had prior experience with technology indicated the remote environment was easier than F2F classrooms. Jyn said familiarity with technology made it easy to facilitate activities. Four others explicitly said it was easy to use technology to facilitate activities. Of the four who stated it was easy, two instructors said remote instruction is better than F2F, but underscored it was due to the difficulty of ESL assessments, issues with in-person computer labs, and the current classroom configuration where physical distancing was required. Eva said listening assessments are better online since in-person instructors usually have to put students in a circle discussion and record on a phone or other device. Eva also recalled there were technical issues that interrupted F2F classrooms as well, which instructors may not remember. Reserving a computer lab on campus, making sure the microphone and computers are working, and students not knowing their passwords made F2F activities difficult as well. One instructor, who was teaching in a F2F classroom when the interviews took place, said Plexiglas and facemasks in the physically-distanced classroom were difficult and preferred teaching in the remote environment.

Among those instructors who had minimal prior experience, there was a reported range of perceptions of ease and difficulty in using technology to facilitate CLT activities. They used the phrases “moderately easy”, “in-between easy and difficult”, and two said it was “challenging” to describe their experiences.

Mae and Rene said using technology was a challenge in the beginning but became easier and more manageable to facilitate activities. Rene was surprised they could enter breakout rooms and share their screen so everyone could see. Rene said instruction with technology was easy, “as long as I didn’t expect the same outcome.” Mae said it was moderately easy to use technology to facilitate CLT activities. Lori felt surprised at the ease because they were able to connect with students so well using technology.

Instructors’ Perception of Effectiveness Using Technology in the ERTE

Another factor that emerged from the instructors’ narratives that played a role in facilitating CLT activities was the perception of their own effectiveness in using technology. Instructors’ responses indicated that the majority of them felt effective using technology to facilitate CLT activities, but overall, those instructors with prior technology experience in a classroom felt they were more effective using technology than those with minimal prior experience.

Effectiveness using technology. Those instructors with prior experience specifically stated they were effective using technology. They reported feeling effective using technology to evaluate students, to create a motivating atmosphere, and to guide students to progress through the levels and achieving goals in academic writing. One of Eva’s students wrote, “I’m never going to forget this class because your feedback really

helps me to understand what I should be doing." Jyn said overall, there was no change, meaning that they felt they were as effective as they normally are in F2F.

Two aspects of teaching, instructors with prior experience had differing views of their effectiveness, were techniques related to giving students feedback using technology, and the time spent in the synchronous class period. Pax said that they were more effective in the remote environment because technology allowed for more types of descriptive feedback on student writing using Canvas features to highlight and comment, rather than writing on paper. Eva felt using technology was less effective for written feedback. "I feel less effective using Blackboard. If I sat down with a stack of papers, I feel like I could get through it a lot faster."

Regarding the aspect of time spent in the synchronous class, Pax stated that time management was more effective in the remote environment because quizzes were digitized and asynchronous, leaving more time for instruction "as opposed to F2F where 25% of class time could be for quizzes and tests." However, Mark observed that the frequency of effective activities decreases because instructors are trying to get through the syllabus and content in the synchronous class time with myriad technology barriers.

Change in perception of effectiveness. Several instructors with minimal experience claimed they needed time to reflect on their effectiveness since they were still in "pandemic teaching mode" at the time of interviews. The instructors noted they experienced a change of perception from not imagining successfully facilitating activities to the current feeling that they were effectively using technology to teach.

In reflecting on their experiences over this period from March 2020 to April 2021, three instructors from the four with minimal prior experience mentioned moments when

they had a change of perception in their effectiveness using technology to facilitate activities in the remote environment. They were panicked, resistant, or nervous in the initial pivot in March 2020. One stated they were expecting “utter disaster.” However, they discovered throughout the experience it was not as hard as they initially thought. Lori discovered, “you just have to give yourself over to the new modality. I ended up having some of my most stimulating, interesting teaching experiences of my long and varied career, and I never would have believed that before the pandemic.” When required to transition to the remote environment, another instructor panicked and said, “I’m not going to be able to do this. I don't know why. It is hard to teach an old dog new tricks.” This instructor credits working with IEP colleagues to practice and teach each other how to use tools in order to become a more effective remote instructor. Their institute had a week of preparation, and then a week of Spring Break before going remote. Once they started, the instructor said it was so easy, and “I can't believe I worried so much about it.” Another said they were nervous at first, “and I just jumped in, and I would say, compared to a lot of teachers my age, I have a relatively high comfort level with technology, so I feel pretty comfortable with it.”

Student Feedback Guiding Technology Use

Instructors revealed they considered student feedback as a factor in playing a role in how they facilitated CLT activities in the remote environment. They stated that how students experienced remote instruction, students’ proficiency levels, and formal and informal feedback regarding technology contributed to how instructors chose technology to facilitate CLT activities.

Student experiences. Instructors perceived students showing less interest in their classmates, and not bonding online as they do in F2F classrooms, especially when

they were not able to see each other's faces. Lori said the students "hated online, but they agreed it was still better than not doing it at all," and that feedback was a factor in the CLT activities. Students did not like their less motivated peers, and hated activities where they had to work with other students who were not speaking, "or were not pulling their weight," said Andy.

Instructors considered students' weariness of using technology, especially gamified apps like Quizlets, Kahoot!, and Quizzizz, and stated feedback from students played a role in choosing technology for CLT activities that would not overwhelm or cause undue stress. Students informed instructors when they were stressed-out or overwhelmed when technology or the internet was not working and when there were too many systems to remember.

Instructors perceived students worked well in larger groups in synchronous classroom activities. Amy said students were more comfortable because they had "time to gather their thoughts and speak with another learner before they would talk to me." Amy continued using the large group activities in Zoom since it was a way to build students' confidence. Students felt the remote environment was less intimidating when they had to speak in front of their classmates.

Student proficiency. Instructors stated students had more confidence because of their experience with technology due to generational experiences. Instructors reported students were more comfortable speaking to a camera than to their classmates and managed technology better than faculty. Lori had success with assigning video journaling homework since students shared a lot that way and were comfortable with the technology. The instructors attributed their incredible communication and

achievement with being “digital natives”, meaning the students were more comfortable with technology in general. Eva said that students were connected through new communication channels in the remote environment. Jyn and Mark expressed that students fared better than faculty in transitioning to the remote environment because of their age and generation since they have not known a time without the internet.

Formal and informal feedback. Students evaluate each class to provide insight regarding the teaching methods, materials, or activities that are most successful, what they perceive helps them to learn, and what they think could be improved. IEPs continued to formally survey students during the pandemic. Instructors reflected on those evaluations, as well as their informal discussions with students, to determine preferred activities in the remote environment. These evaluations and discussions contributed to the student feedback that played a role in instructors’ adoption or rejection of technology.

Instructors said they encouraged students to write reflections during class and after activities to receive informal feedback, which resulted in more responses. The negative response was that too many apps were used. However, students said many positive things. They said they had learned a lot, enjoyed the breakout rooms, appreciated instructors, liked the authentic texts instructors provided, loved discussions and interaction with classmates, adored having interns and volunteers in the classrooms, and they liked pronunciation practice and correction. Students told Lori that they loved doing video homework. Feedback from students on the last homework assignment was that they were sad that it was their last assignment. “I was shocked. When has any teacher heard those words before? They really enjoyed making videos

and talking to me through them. I returned videos with their feedback, so they were very conversational."

Students told instructors they enjoyed collaborative activities, as they really liked the sense of community it provided. Andy elaborated on the informal feedback discussions where the students felt valued "in how that shaped the class and made it better because I would listen to what they were saying, and I would implement their feedback."

These recollections of student feedback were predominantly positive and were a factor instructors indicated in playing a role in facilitating communicative activities in the remote environment. Additional aspects of using technology to facilitate CLT activities in the remote environment included pedagogical considerations.

Pedagogical Considerations

Instructors reported pedagogical considerations in the remote environment that played a role in facilitating CLT activities. These included teaching takes longer, assessing language proficiency, classroom management, dealing with cameras off, time zone differences affecting student performance, and decision fatigue (Table 4-13).

Table 4-13. Theme, category, and subcategories for pedagogical considerations

Theme	Category	Subcategories
Factors that played a role in facilitation CLT in the ERTE	Pedagogical considerations	Teaching taking longer
		Assessing language proficiency
		Classroom management
		Dealing with student cameras off

Table 4-13. Continued

Theme	Category	Subcategories
		Heavier workload
		Decision fatigue

Teaching Taking Longer

The process of teaching synchronously in the remote environment takes longer than in F2F language classes according to the instructors. Reasons provided by instructors included students not having the language proficiency to understand directions associated with activities or the technology involved to complete tasks. In some cases, students were sent to a Zoom breakout room to complete a collaborative activity and claimed to understand the directions but returned without completing the task because they did not understand. Additional time had to be used at the beginning of each new course to set expectations with “concrete guidelines about the technology and reviewing clearly what it means to be in a Zoom class as opposed to what it might have meant in a F2F class”, said Kai. Additional time was spent teaching netiquette, the appropriate online behaviors and classroom expectations, instructors facilitated conversations regarding what may be visible in the background when one shares their screen, not smoking, driving, and grocery shopping during the remote class. Extra time was needed to guide students to give visual feedback to the instructors and their classmates to indicate participation. Students were asked to use “thumbs up” emojis to acknowledge their presence and if they understood the material in the classroom when cameras were off.

The instructors felt their class time was too limited to cover the content and the Student Learning Outcomes (SLOs) in the syllabus. There were too many challenging

elements, including multiple levels in the sections, the additional instructional process to provide guidelines for technology use and classroom behavior expectations, online learning modules for assessments and homework on an LMS, and the unanticipated technology failures and limitations. Instructors were frustrated at times by students attending only 40 minutes of the typically 50-minute classes, and not being prepared by first exploring the assigned asynchronous content on the LMS. Another issue was instructors trying to get through the entire syllabus and content in the limited time, with the frequency of effective activities decreasing in the remote environment.

Assessing Language Proficiency

Instructors reported that technology was not effective or useful enough to assess language proficiency fairly, since it was too difficult to pair or group students in Zoom breakout rooms to observe their output in authentic, communicative language activities. It was also difficult to evaluate other receptive or productive skills, since there was no guarantee students did not cheat by having someone take the test for them. Instructors expressed that technology is advanced enough, as they saw evidence their students were dependent on sophisticated tools, since cheating and plagiarism was happening in the remote environment. Andy said that students relied on translators, dictionaries, and Google. “Google became a huge crutch for them. It's almost like we're turning into the grammar translation method, because, by default, they're just going into Google and translating almost everything that they have to do.” Another instructor agreed that students used digital assistance to write and explained that their IEP made the decision for test security purposes, and for “emotional load considerations, we had forgone the final exams for the reading and writing part of our core curriculum.”

Other assessment issues in the remote classroom included evaluating and responding to student papers. When teaching F2F in the computer lab many instructors take the opportunity to individually meet with students while the others were writing, but it is more difficult to adapt the practice to the remote environment because, as one instructor lamented, “I’m not paid for that, so I can't have a conference with each student.”

Classroom Management

Classroom management was an issue for instructors in the remote environment and especially in Zoom breakout rooms. Students had difficulty navigating multiple new systems in the new environment, and instructors felt another classroom management issue was the combination of the distraction that technology provides or causes, and the student motivation levels. Four instructors conceded that if students wanted to play video games during class, the technology was available, and the instructor could not do anything about it.

In managing motivation and distraction, instructors reflected on the necessity to explicitly instruct students how to engage with the class using technology. “Everyone is on their Zoom screens and students, feel like they are consumers of information, the way they watch movies,” said Kai.

Several agreed it was imperative to spend time setting norms since some students had difficulty managing appropriate behavior with technology. Two instructors said students accidentally turned on cameras and one was smoking, and one was lying in bed while attending class. New students to the IEP were unsure how language learning works, especially in a remote learning environment. Many of the instructors had new students in the summer semester of 2020 who were new to the IEP language

classroom and they were unfamiliar the university LMS. Instructors reported those students needed extra support on both accounts.

Dealing with Student Cameras Off

Cameras turned off during synchronous class was perceived as playing a role in facilitating communicative activities. Instructors felt frustrated with lack of non-verbal feedback when students had their cameras off. Amy felt it was difficult to gauge if anyone was listening when teaching to a black screen. Pax also said students always having their cameras off is a barrier to facilitating engaging activities, especially when, “I get five minutes into a class and sometimes say, I need to hear somebody. Can you please just say hi to me? Hello, good morning, anything?” Besides the lack of feedback and connection, instructors wanted to see faces to ensure students were understanding the content of the course.

There were bandwidth and internet issues that caused some students to have their cameras off. In addition, excessive ambient noise and movement in the students’ houses, where other family members were working or in remote school, were barriers to having the camera on and students engaging in CLT activities with classmates.

Cultural and religious differences in the Middle Eastern students were reasons for not having the camera turned on. Many mentioned they had women from the Middle East countries, primarily from Saudi Arabia, who may wear a hijab in the F2F classroom, but may not want to wear it in the home environment and therefore turned off their cameras when participating in activities. One instructor said their IEP made a policy for all students to have cameras on, because an F-1 student in F2F classes is required to be present and engage with classmates and the instructor.

They had to make exceptions for some students, including Saudi Arabian women, who were subjected to embarrassing and difficult circumstances in front of their classmates because of the policy, including one woman whose children pulled off her hijab while she was speaking during class.

Instructors vacillated on their feelings of frustrations from teaching to black screens to changing their own policy to let students leave their cameras off, since it may have caused discomfort and invaded students' privacy. Rene said they stopped requiring students to turn on their cameras, but said it was challenging to speak to a blank screen. "Other teachers were saying that you're infringing on their privacy, you're coming into their living area." Amy felt it was difficult teaching to a black screen with little emojis, and that was "difficult to know if anyone is even listening," when attempting to facilitate communicative activities. Pax also said students always having their cameras off, "is just maddening sometimes. I'm not mad at them, they can't always control that. But I'll say, I need to hear somebody! Can you please just say hi to me? Hello, good morning, anything?" Besides the lack of feedback and connection, instructors wanted to see faces to ensure students were understanding the content of the course.

Time Zone Differences

Six instructors reported another teaching consideration was the differences in time zones and schedules for many of their students. Some students went to their home countries immediately when universities began closing in March 2020, or they moved to friends or relatives' homes within the United States or other countries. IEPs had to make the decision to continue to offer synchronous class at the regularly scheduled F2F times or change to accommodate those students in Asia or the Middle East. Many instructors

listed where their students were living, and one IEP represented had students living in 19 time zones. Mae summarized the experience by saying they had a few students living in the United States who were living isolated in their rooms, but “most students were in either the Gulf region, Saudi Arabia or Kuwait, or they were in China. Their school day was basically their night.” The instructor said, “I have to salute them for toughing it out. They were essentially living on a different timeline than the rest of their family.” The time zone difference was an issue not only because of exhausted students in Asia and the Gulf region, but the lag time in asynchronous discussion threads and collaborative homework between students and groups.

Heavier Workloads

Instructors perceived preparing for and teaching classes in the remote environment as a heavier load than F2F. Because the teaching and remote course development was heavy, some institutions reduced their course loads by giving release time. Meanwhile some IEP faculty had to adapt to synchronous teaching schedules that changed in order to accommodate students in Asia. Those with prior experience were assisting their faculty colleagues who are not as comfortable with technology, and added to the already heavier teaching load. Mark spoke about the urgency for compassion and flexibility as there is a “great sense of fake it until you make it, or play it by ear, sometimes a sense of triage, whatever gets the job done.” They also said in their IEP, “we had an all hands-on deck mentality. I mean the mental health strain, not only the pandemic, but job security, you have this sense of dread.” Pax spoke of assisting colleagues as well, as “so many teachers are just trying to survive.” Kai said the pandemic was “the unspoken concern, I think, that we all are struggling with,” and the “cognitive bandwidth that teachers have or don’t have, to learn, so much so fast”

played a role in the fatigue and choices they made to adopt the easiest tools to facilitate activities.

Instructors referred to this added heavier load in learning to use new technology. Some IEPs established weekly check-ins to talk about teaching topics like online classroom management or CLT activities. They used Zoom breakout rooms, IM (instant messaging), and faculty Facebook groups to inquire how their colleagues were adapting to the remote environment, during “COVID teaching” as Amy called it.

Decision Fatigue

In addition to the heavier teaching loads, the expanded and changed roles to manage the remote classrooms, Eva addressed the technology and pedagogy decisions instructors constantly made that played a role in facilitating activities. Eva stated that flexibility was necessary to adapt to the multiple roles instructors suddenly had to fulfill in the remote environment, and that teaching and technology alone were not the most difficult aspects of remote teaching, but summarized the complex and varied issues that contributed to decision fatigue. Eva said,

> When you are the tech support, the emotional support, the academic support, the textbook support, you are everything. And that is the part that is hard. The burden for teachers is much higher online. You have to be a course designer. If your modules are not designed well, the students are confused. You have to be able to teach communicatively. You have to be good with technology. You have to be like an octopus, with a bunch of hands going at the same time when you are navigating and answering questions, while there are emails coming in saying students cannot get into the class, or the LMS or video camera is not working, or their uncle took their computer and ran over it with his car, and so now the camera does not work, or students are in class while walking and eating a sandwich. And to be doing all of them at the same time, that is what is difficult. It is not impossible, it is just the decision fatigue.

Barriers in Remote Instruction

The instructors encountered technology barriers while teaching in the remote environment. Those barriers include access and connectivity, technology failures and limitations, and multiple systems overwhelming students. These were factors that played a role in facilitating instruction in the remote environment (see Table 4-14).

Table 4-14. Theme, category, and subcategories for barriers

Theme	Category	Subcategories
Factors that played a role in facilitation CLT in the ERTE	Barriers in remote instruction	Access and connectivity
		Technology failures and limitations
		Multiple systems overwhelming students

Access and Connectivity

A barrier in teaching remotely in this context was access to robust bandwidth and fast internet in countries where the international students were living. Because of the limited bandwidth and internet, students had issues accessing data files, videos, apps, materials, and using their own video cameras. Along with those data issues, students in some countries could not access etexts, VPNs, apps like WhatsApp, use their credit cards, or obtain the software required to run Zoom or other platforms, or buy laptops the IEPs were recommending for all remote classes. The iPad and iPhone operating system will not allow access to Zoom breakout rooms. Closing the Zoom app on an iPad causes the camera to turn off. Some students had issues accessing laptops if their family members were working and studying remotely as well, and sometimes the ambient noise and background activity of the home was so loud the students could not turn on audio or video to participate in the class. Other access barriers came from

global crises affecting students' lives. One instructor had a student working as a human rights activist in a country where their only access to the internet was in a café 45 minutes away from their home. Another referred to climate issues, including wildfires and floods that occurred during the pandemic and recalled one student misplaced by a major flood in China.

Technology Failures and Limitations

Instructors and students also experienced technology failures. They stated that even in the United States, Wi-Fi speeds had to be boosted. Some instructors needed Ethernet cables since programs would freeze or they would disconnect due to connection failures and slow download speeds. Instructors had to learn to navigate technology to provide an engaging experience for students where they did not have robust bandwidth or high-speed internet. Students' audio and cameras failed, and instructors spent valuable class time trouble-shooting issues. They realized many apps like FlipGrid and Kahoot! may have never been intended for an international audience.

Instructors discovered that despite technology being useful, it had limitations. Zoom was a favorite synchronous video conferencing tool, but even though Zoom sessions were recorded, they were not entirely effective because only the person speaking was recorded. Kai stated that the LMS Canvas has limitations in its organization. "Canvas is linear, a visual barrier. It would be great if it was like more like a Padlet, where you could just see these things and click on the ones you want to see." Some referred to "Zoom delay" being the biggest barrier. This delay is the lag-time due to limited bandwidth or slow internet speeds speech was choppy, or stop-and-go, and it made discussion and pronunciation practice difficult.

Multiple Systems Overwhelming Students

Another theme that emerged from instructors' narratives involved the technology barriers that impeded student engagement in communicative language activities in the remote environment. Instructors spoke about how overwhelmed and occasionally confused students were. Instructors reflected on course design, synchronous class, and asynchronous homework they provided, and saw students being overwhelmed by too many systems, logins, passwords, products, emails, and platforms. Students were overwhelmed by multiple Zoom links and would show up in the wrong class and call the instructor the wrong name. They would text or email the instructor that they could not find the email or their password. Instructors lamented students would use the wrong links, or not receive the email to come to the correct meeting, or could not find the email. Students were navigating different LMS, textbooks, if they could access them, apps, host university systems, IEP systems, email systems, Zoom links and passwords, and social media communication platforms.

Rene saw this happening and stated that they did not want to overwhelm students with technology. "I have students with different technical skills. I don't do anything that they would need another password. We use Zoom and Canvas. I figured it's enough."

The barriers using technology to facilitate communicative activities were plentiful. Instructors stated the barriers, along with the entirety of the factors played a role in facilitating CLT activities in the ERTE. The following section includes specific ways instructors learned to use technology to facilitating communicative activities in the remote environment.

How IEP Instructors Learned to Use Technology

The 10 instructors in this study represent a range of ages and years of experience teaching ESL. At the time of interviews, the instructors were between the ages of 26 and 64 and reported their classroom teaching experience spanning from 3 to 30 years. Despite the barriers they encountered when transitioning to the remote teaching environment, this group of instructors hailing from universities located across the United States reported that learning to use technology for CLT activities was not difficult and the IEPs and host universities provided resources to them.

Table 4-15 indicates the range of perceived ease of learning to use technology to facilitate CLT activities in the remote teaching environment.

Table 4-15. Ease of learning to use technology

Prior experience with technology	Minimal prior experience with technology
Perceived range of ease of learning to use complex and immersive technology.	Perceived range of ease of learning to use remote technology.

Ease of Learning to Use Technology

The instructors reported a range of familiarity with technology in March 2020. Instructors with prior technology experience learned to adapt familiar technology to the remote environment or learned to use a wider variety of technology, including complex and immersive technology. Those instructors with minimal prior experience with technology reported an ease of learning to use technology for the emergency remote teaching environment.

Learning to Use Complex and Immersive Technology

The six instructors with prior experience indicated it was a range from "moderately easy" to "moderately difficult" to learn to use technology. However, these

instructors were describing learning about a variety of websites, collaborative and interactive software and apps, and complex and immersive technology requiring an advanced knowledge of technology and additional university support, for example the HyFlex platform for instruction.

Those who stated learning to use technology was moderately difficult mentioned it was learning the nuances of the tools. Remembering all of the parts required to make the class run smoothly while facilitating activities in the remote environment took multiple clicks, buttons, places for feedback, ways to share screens and videos, and places turn the sound on.

Learning to Use Remote Technology

Instructors with minimal prior technology experience had to learn to use new technology for communicative language activities in the remote environment. The four instructors who were not as familiar with technology prior to March 2020 also indicated a range from "moderately easy" to "moderately difficult" to learn how to use remote technology. However, these instructors were learning to use how to use remote technology, for example, Zoom features, PowerPoint, and YouTube.

One stated they learned to use new things in the classroom and was honest and used humor to ask students to give them grade on their experimental use of technology. Another, who has the most experience with ESL classroom teaching, stated that learning was definitely not easy, because "I'm 62, and definitely a digital immigrant." The instructor claimed they barely knew how to use their cell phone, but after this year of learning tools and techniques, they felt it was "rewarding enough to inspire me to want to try more." Another with minimal prior experience said the platforms like Canvas and

Zoom were continually improving over the time of remote teaching, most likely from user feedback, and any teacher could learn to use it.

Regardless of how instructors perceived their learning to use technology to facilitate CLT activities, they shared many resources they sought and received while teaching and working in the remote environment. They describe the IEPs, university technology offices, and additional resources of international communities and social media as primary resources for learning (see Table 4-16).

Table 4-16. Theme and categories for learning how to use technology

Theme	Categories
Learning how to use technology	Intensive English programs
	University technology offices
	Additional technology resources

Learning How to Use Technology

Resources include people, offices, materials, media, or systems the instructors perceived as an aid to assist them to learn about technology or to teach in a remote environment. Instructors sought guidance and education from various sources for hands-on or remote professional learning. Resource creators were the IEPs and colleagues, host university or college offices, national and international professional communities like TESOL, and social media.

Intensive English Program Technology Resources

In the initial pivot to ERTE, some institutions were able to meet in-person to provide hands-on instruction to learn about the LMS and Zoom features. Others moved to their homes immediately and administrators and colleagues started supporting each other remotely.

Instructors felt supported by their IEPs that provided hardware like laptops, document cameras, and headphones for instructors who needed them in their homes. However, instructors discussed their IEPs giving varying levels of release time in the Summer 2020 semester because of the demonstrated heavy workload, and the time needed to learn to use technology and to successfully redevelop and transition F2F materials for remote instruction. Kai expressed that “was a big one because we were still learning just how much time it takes to develop online instruction. So much front-loading has to happen.” Kai continued that, “it's still a negotiation about what the realities are of that workload. But they certainly gave us a lot of release time because there was so much that had to be done so fast.”

Several instructors gave credit to their IEP directors, supervisors, educational technology coordinators, technology committee, and more experienced colleagues with supporting their learning. One instructor said their IEP provided teacher accounts for some of the most popular gamified learning tools like Quizlet and Padlet. Instructors felt their IEP assisted by encouraging the group and sharing materials and resources. They reported feeling comfortable reaching out to the IEP administrators and colleagues when they needed help with technology.

Andy, Eva, Pax, and Jyn, were responsible for training their faculty colleagues. They are instructors with administrative roles who collectively said they figured out the technology, provided training, and made themselves available to colleagues throughout remote instruction. For example, Jyn created video instructions of Zoom and Google Drive and Google Document features.

IEPs created a variety of internal remote meeting practices and communication channels. Instructors said they held weekly meetings, in-house workshops, or faculty check-ins. They stated their colleagues met remotely for lunchtime meetings and met over weekends to practice lessons using technology to trouble-shoot before they taught the class. They used email, Facebook groups, internal remote meetings, and book clubs as places to learn about technology. Some IEP support systems included a once-a-week faculty check-in meeting where faculty could share ideas about teaching using technology. One IEP included invited guest speakers to talk about student engagement, mental health, or technology issues. There was an overall appreciation of the IEP team support, even if “sometimes the meeting would be only 20 minutes if we had nothing to say or were kind of burned out,” said Mark.

University Technology Offices

Instructors credited their university campus offices for serving as a resource for learning. Some offices and departments on campus that provided learning resources were the library, Instructional Technology (IT), distance learning, and faculty engagement programs. Some stated that these offices were a learning resource before the pandemic but became critical to the IEP faculty immediately in the pivot to remote learning. Mae said their campus has a technology resource office where they learned how to use Canvas through mini-courses. The office collaborated to meet specific needs for the IEP, “because they hadn't really thought about that before. Canvas isn't really for language instruction, so, they were helpful in redesigning.” Andy said their university office did an excellent job creating videos to use. “It helped us learn how to reformat Canvas, incorporate Kaltura, or other online videos.” Many instructors stated the campus office personnel made themselves available to instructors throughout

remote teaching and provided department training and further resources on request. Mae contributed they felt supported by their campus office staff if they had “any glitches or any questions, or was trying to learn something new, they were right there. It was really a blessing.”

Additional Technology Resources for Learning

Additional resources like product support, presenting and attending virtual workshops and conferences, self-teaching, student feedback, and social media were ways they learned to use technology in the remote environment. Instructors viewed Zoom and Canvas videos and attended workshops provided by the companies. Zoom and Canvas enhanced their features throughout the pandemic and universities expanded access for their faculty and students. Andy reported the university “provided the teachers with more access to the Commons through Canvas, so that they could get ideas from them.”

Instructors attended and presented at virtual professional development workshops or conferences provided by TESOL (Teaching English to Speakers of Other Languages), the U.S. State Department, ASU (Arizona State University) Remote Summit (https://www.theremotesummit.org/), NCTE (National Council of Teachers of English) and other international communities. They appreciated the access to these global, high-quality conferences, and the fact the organizations lowered the cost to attend. The benefit of accessing these resources remotely, by getting involved in different communities gave “tons of excellent input into what teachers around the globe were trying,” said Lori. Kai agreed and “really valued accessing professional learning communities, global professional learning communities, either university-wide or professionally, like TESOL.”

Instructors demonstrated autonomy through their willingness to be open-minded about their own learning. Pax said they learned and added some new apps because a lot of them “were very motivating and engaging, so I learned them.” Mark summarized the instructors’ mind-set of acceptance, “This is no time to say, well, this is how I’ve always done it.”

In addition, articles, books, and podcasts were sought out by individuals to educate themselves. Two books used by Keith Folse and Doug Fisher were mentioned as being very useful. Folse (2020) published the timely, Teaching with Zoom: A Guide for Complete Beginners in June. And, The Distance Learning Playbook, Grades K-12: Teaching for Engagement and Impact in Any Setting (Fisher et al., 2020) was published in July.

Websites and social media were also used as learning resources. Eva, the most experienced instructor with educational technology, reported accessing the most resources. They accessed K-12 resources on several channels like YouTube, Facebook, and Instagram. Some other resources used: TESOL intersection groups, Edutopia, TargetTeacher, CreativeTeach, and Teacher2Teacher. They followed several hashtags for teaching ideas: #Iteachtoo, #instagramteachers, #teachertribe, #AmericanTeacherState, #teachertoteacher, and #teachersfollowteacher.

Instructors accessed and created many opportunities to learn to use technology in the remote environment. They experienced positive interactions with their IEP administrators and teaching colleagues, and their host university support personnel. They perceived having adequate resources to learn about tools, apps, and technology that would help them facilitate engaging activities in a remote environment. The

instructors helped each other in various meetings, weekend Zoom practice sessions, and ongoing discussions locally and globally to increase their proficiency with remote instruction.

Instructors' Intentions to Use Technology in F2F Environments

In addition to the research questions, instructors reflected on their intentions to use technology going forward, when they return to the immersive, Intensive English Program F2F classrooms. They emphasized continuing using digital resources instead of paper handouts, projecting the computer screen in the classroom to keep students focused, and continuing to use the LMS. One instructor highlighted continuing to use the LMS for assessments as they had done in the remote environment in order to provide more classroom time for instruction. Other issues instructors focused on were the need to reduce the stigma of students having and using phones, tablets, or laptops in the F2F classroom, and addressing accessibility for our IEP students.

Addressing how students with disabilities viewed the language-learning experience in the remote environment and how IEPs can use technology to serve this population of international students in our F2F classrooms was an important topic to consider going forward.

Those instructors in the F2F classroom at the time of the interviews already missed the online flexibility and the capability to record classes with Zoom for students to access later. Instructors who were still teaching in the remote environment looked forward to returning to the F2F classroom to be with their international students. Jyn expressed how they enjoyed teaching in the remote environment and claimed that this experience with technology has created new possibilities for IEPs. They stated that for language learning, F2F is better, "but if this pandemic has taught teachers, especially

older teachers, anything it is that the technology is there, where we can have just an equally effective course online as we do in person." Jyn went on to say that instructors and students appreciated the flexibility and would choose online and remote if given the chance, and that remote learning should be considered as, "it's critical for IEPs, if we want to remain relevant and competitive." As Kai reflected, "you know that things will never be the same again."

Conclusion

This chapter described the experiences of 10 UCIEP instructors working in the emergency remote environment from March 2020 to April 2021. The results illustrate how they facilitated activities with technology, what factors they identified in playing a role in facilitating activities, and how they learned to use technology to facilitate communicative language activities.

The factors IEP instructors perceived in playing a role in facilitating CLT activities in the ERTE included their prior experience using technology, the perceived usefulness of technology, the perceived ease of using of technology, instructors' perceptions of their effectiveness facilitating activities, student feedback regarding technology, pedagogical considerations, and technology barriers in remote instruction.

The results provide an understanding of their experiences facilitating communicative language teaching activities in an emergency remote teaching environment.

CHAPTER 5
DISCUSSION AND IMPLICATIONS

This chapter discusses the findings in the context of the research questions that guided this study in relation to the literature. Implications for Intensive English Programs follow. The chapter concludes with limitations and recommendations for future research.

Summary of Study

The purpose of this study was to discover how IEP instructors used educational technology to facilitate CLT activities, to explore their perceptions of which factors played a role in their use of technology to facilitate activities, and to understand the learning experiences instructors sought to develop competencies using technology in communicative language teaching activities in the remote environment. The emergency remote teaching environment is the temporary mode of instruction with the understanding that F2F will return when the emergency has passed (Gacs et al., 2020; Hodges et al., 2020).

The following research questions were addressed:

1. How did IEP instructors facilitate communicative language teaching activities in a remote teaching environment?
2. What factors played a role in facilitating communicative language teaching activities in a remote environment?
3. How did IEP instructors learn to use technology to facilitate communicative language teaching activities in a remote teaching environment?

This study used the general qualitative approach (Merriam & Tisdell, 2016). Personal interviews were conducted to gain insight of instructors' experiences of using technology to facilitate CLT activities in the remote environment. Interview questions were created using the UTAUT model (Venkatesh et al., 2003). Data were collected through semi-structured interviews with 10 UCIEP instructors between September and

November 2021. Data were analyzed through initial coding and subsequent thematic analysis, with the goal of capturing salient categories to describe their experiences (Saldaña, 2013).

Discussion of Findings

In the already rapidly changing educational technology environment in U.S. higher education, the COVID-19 pandemic accelerated the need for IEPs "to help make sense of the intensively interactive and linguistically rich environments afforded by technology" (Chapelle, 2009, p. 741). IEP instructors in this study experienced several major changes in the move from F2F to remote instruction, and those are also reflected in the Open Doors Report (Institute of International Education, 2022) that presents data collected from over 600 U.S. intensive English programs at higher education institutions from Summer 2020 to Fall 2021. The instructors in this study perceived combining different proficiency levels of students in one section as impacting teaching in the remote environment. The Open Doors Report (Institute of International Education, 2022) data indicates the occurrence of the combined classroom levels of language proficiency impacted 69% of the IEPs surveyed in 2021, up from 66% in 2020. Other changes instructors in this study experienced included furloughs or layoffs for staff and instructors as a result of decreased enrollments, which was also highlighted as impacting the U.S. IEPs in the survey. Finally, supporting the instructors' experience in the study, the Open Doors survey indicated that despite reported budget cuts in IEPs between 2020-2021, there was an increased investment in technology to accommodate instructors and students in the emergency remote environment.

Although instructors in this study may not have been prepared for the emergency transition to the remote environment, they appreciated the flexibility of online teaching,

and the interactive capabilities technology afforded them in facilitating communicative activities in a linguistically-rich environment. Even as technology outpaces advances or changes in language learning methods (Chapelle, 2009), instructors discovered they were able to create an interactive environment for students to communicate using technology (Garrett, 2009).

This study provides insight into how the UCIEP instructors facilitated CLT activities, what factors played a role, and how they learned to use technology while working and teaching in the remote environment. The instructors' CLT approach influenced their technology choices and their prior technology experience was found to play a large role in their technology adoption. This was especially true of how they facilitated activities, instructors' perceptions of their ease of using technology, their effectiveness using technology, and the ease of learning to use technology. Another factor in IEP instructors' use of technology was student feedback. Finally, release time was influential in learning to use technology for facilitating CLT activities. These findings are discussed below by research question.

How Did IEP Instructors Facilitate CLT Activities in the ERTE?

The CLT approach was instrumental in facilitating activities in the remote environment in this study. The CLT approach embodies the idea that language, language learning, and teaching are interconnected (Brown, 2000) and the emphasis is on meaning of language and increased communicative competence to use and understand language (Halliday, 1975; Hymes, 1972; Richards, 2006). Instructors considered the CLT approach when choosing technology to facilitate listening, speaking, reading, and writing activities.

Changes Resulting from the Use of Technology for CLT

Two areas of changes related to using CLT to facilitate communicative activities using technology emerged in this study. Instructors' perceptions of their roles expanded beyond that of a facilitator in the remote environment, and they questioned the communicative dimension of translanguaging.

Change in IEP Instructor Roles in the ERTE

The IEP instructors acknowledged understanding their role as facilitator in the student-centered CLT classroom but discovered this role had changed in the emergency remote environment. They found themselves fronting teacher-centered, synchronous, Zoom classrooms by leading, monitoring, managing, and moderating all communication. Prior experience and training to teach online, and an introduction to the multiple roles instructors need to occupy online were lacking. Instructors may have been prepared with technical or software training or use, but other skills were challenging "such as facilitating online socializing and community building" (Compton, 2009, p. 95). Prior research indicates that instructors must be prepared to hold pedagogical, administrative or managerial, technical, evaluation, active learning facilitator, and instructional designer roles in online teaching (Magruder & Kumar, 2018). Additional roles instructors occupy are subject-matter experts and mentors in the online environment (Martin et al., 2019).

In CLT activities, the role of facilitator is two-fold. First, instructors guide students to use strategies to interact with materials and classmates to increase language acquisition (Popescu & Cohen-Vida, 2013; Rubin, 1987). Second, facilitating means joining in the activities and conversations as an interdependent participant to model constructing knowledge by negotiating meaning using authentic materials (Breen &

Candlin, 1980). There was difficulty facilitating and participating in student learning to gauge and assess language production when instructors would drop into Zoom breakout rooms and disrupt the flow of conversation (Ng, 2020) whereas in F2F classrooms they can move between groups and join or redirect conversations without being a distraction.

Related to the increased management of communication and additional roles they suddenly held, instructors lamented the overuse of teacher talk. Because of leading and directing more, they missed participating in activities as a way to get to know students and join in their learning. The increased use of teacher talk may have been "partly explained by the difficulty in eliciting responses from students" (Moorhouse et al., 2021, p. 10) and managing the additional time needed to direct students, checking assignments, and speaking too much to encourage participation, in addition to checking student understanding (Todd, 2020). Instructors found themselves initially unprepared to use technology to facilitate CLT activities in the expanded roles they suddenly occupied.

Questioning Translanguaging in the ERTE

When instructors were focusing on how to use technology to facilitate CLT remotely, they questioned the English-only policy common in IEPs. Instructors grappled with the notion and the changing paradigm in remote instruction where entire classes of Chinese students were expected to speak English at all times in Zoom breakout rooms and on collaborative tasks. In this study, there were students who spoke English and Chinese in breakout rooms when negotiating meaning on collaborative writing tasks. Translanguaging is the term for multilingual students accessing all linguistic resources to do classwork (Canagarajah, 2011) and a "process by which students and teachers

engage in complex discursive practices that include all the language practices or students in order to develop new language practices and sustain old ones" (Garcia, 2014, p. 3). Frequently researched in K-12 schools, translanguaging is rarely considered in the IEP context. Few studies are available on IEP translanguaging, due to the multilingual nature of classrooms usually found in the immersion model. However, Broomhead (2013) researched code-switching, the practice of moving between languages, in the adult, multicultural and multilingual IEP context, in response to English-only policies many encourage or enforce. Translanguaging "differs from code-switching in that it is not merely switching in and out of two separate monolingual codes but combines two languages as a unity to achieve effective communication" (Cahyani et al., 2018, p. 466). The English-only policy embraces the CLT approach, wherein English is the language of instruction and the goal of learning. Translanguaging is an equity issue in a classroom where students from non-dominant language groups will feel excluded. However, this position lacks published research that addresses the merits of the policy (Broomhead, 2013). In the current study, instructors were questioning if students were building English proficiency and communicative competence when combining languages to negotiate meaning in the remote environment.

How IEP Instructors Used Technology

The move to remote instruction was mandatory, so instructors had no other option but to adapt and create tasks to guide and monitor student interaction and learn to use appropriate apps and technology (Kern, 2006). Instructors in this study chose their preferred technologies, but prior technology experience influenced how instructors facilitated communicative activities in the remote environment.

Prior Educational Technology Experience Influences Use

Instructors perceived an increase in oral communication practice related to their initial reliance on Zoom in the transition to remote instruction. Students who were on F-1 visas were required to continue attending synchronous classes at least 18 hours per week. To continue instruction for four or five hours per day for the students, instructors immediately transferred language learning activities to the Zoom environment in March 2020, and relied on it until they were able to understand the barriers associated with technology (Bailey, 2022; Lee, 2021) and how to incorporate collaborative tools.

In learning how to integrate Zoom features like whiteboards, screen sharing, chat, and breakout rooms, those instructors with prior educational technology experience incorporated more websites, apps, asynchronous LMS activities, and video tools. They had prior experience that translated to understanding immersive technologies in complex learning environments (Han, 2020) such as NearPod, VoiceThread, and StoryBoard to facilitate CLT activities. Instructors with minimal prior experience using technology, learned to use, and then more frequently, rejected tools and continued relying on Zoom and its features throughout the pandemic. They primarily used Zoom, Canvas, PowerPoint, Perusall, and YouTube throughout the pandemic.

Emerging research about instructors' use of Zoom and its features during the global pandemic indicates how the tool "continues to transform how educators interact with and teach their students" (Stefanile, 2020, p. 34). Zoom features like the whiteboard, screen sharing, chat, and breakout rooms were used in ESL and EFL synchronous classroom environments (Cheung, 2021; Kohnke & Moorhouse, 2020; Ng, 2020; Thumvichit et al., 2021; Wong, 2020;). Studies in Computer-Assisted Language

Learning (CALL) indicate instructors can facilitate CLT lessons using Zoom effectively, regardless of the challenges of managing large numbers of students, and small video images, or no videos of participants (Ng, 2020). Conversely, other findings using Zoom suggest a connection between an instructor's limited knowledge of technology may determine the level of interactive activities delivered in an online synchronous environment (Cheung, 2021). One instructor, with minimal prior experience, stated they used whiteboards in Zoom that felt like a whiteboard in a "real life" classroom. This may indicate they were "simply repackaging the same content and activities from the classroom" (Todd, 2020, p. 15) in the remote environment, rather than entirely understanding the technology affordances to incorporate more fully into the language learning process (Warschauer & Healey, 1998).

Collaborative Technologies and Video Use

Instructors in this study highlighted their use of collaborative tools and videos in both synchronous and asynchronous environments. In the synchronous portion of the class, they facilitated collaborative activities using a variety of tools while sharing their screens, or directed students to collaborate in student pairs and groups in the Zoom breakout rooms. Google products like Docs, Slides, and Jamboard were used most often for collaborative activities and provide opportunity for students to negotiate meaning and co-create texts in pairs and groups (Kohnke & Moorhouse, 2020).

In the asynchronous environment, instructors used Google products and video tools, as well as entertaining Disney+ and educational TED Talks, to launch engaging written discussion post threads to support learning and connection (Lowenthal et al., 2020). In addition to using videos, instructors embraced video tools to facilitate virtual conversation with students to build community (Lowenthal et al., 2020; Martin et al.,

2022) much like a writing journal is frequently used in F2F IEP classes to create an emotional connection. Media recording tools were used to give individual video "feedback while also communicating visually their affective support" (Lowenthal et al., 2020, p. 387) to students needing that important connection.

Overall, those instructors with a wider range of prior technology experience used a wider range of technology, including collaborative and video tools embedded in asynchronous LMS. Those with minimal prior technology experience continued to rely on Zoom and PowerPoint after the initial transition to remote, where they used collaborative and video tools.

What Factors Played a Role in Facilitating Communicative Language Teaching Activities in a Remote Environment?

Instructors in this study indicated there were several factors that played a role in facilitating CLT activities in the remote environment. These factors are discussed against the constructs and moderators of the theoretical framework for this study, the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003).

The four constructs are performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC) (see Table 4-17). Within PE, the factors in this study were instructors' perceptions of the usefulness of technology, effectiveness in facilitating activities, pedagogical considerations, and the technology barriers they experienced. Within EE, the factors were the instructors' prior technology experience and the perceived ease of using technology. In SI the factors that played a role included IEP directors and colleagues, as well as student feedback regarding technology. In the final FC construct, available and perceived technical and leadership

support played a role in their using technology to facilitate activities. These factors are also discussed in the context of instructors' prior experience with technology in an ESL classroom environment. Four instructors reported having minimal prior experience, and six reported having a range of prior technology experience.

Performance Expectancy (PE)

The strongest indicator of instructors' behavior intention to accept and use technology (Venkatesh et al., 2003) was the perceived usefulness of a technology to accomplish the goal of successfully facilitating CLT. Instructors reflected on the usefulness of technologies, their perceived effectiveness of facilitating activities, the pedagogical considerations, and the technology barriers that contributed to determining how useful technology was in the remote environment. Those with prior experience using educational technology perceived technology being more useful in the remote environment, and also perceived themselves as being effective using technology. Those with minimal prior experience perceived technology as not being consistently useful. They reported a wider range of their perceived effectiveness in using technology to facilitate activities in the remote environment.

Usefulness of Technology

Instructors found Zoom, and other tools, useful for making social connections and motivating the students. Zoom has been determined to be a platform where people can potentially make interpersonal connections (Archibald et al., 2019; Lowenthal et al., 2020) similar to in-person interactions. However, it has also been reported instructors struggled with the lack of non-verbal communication if cameras were off in the Zoom class during the global pandemic (Gordon, 2020). Students had problems adapting to synchronous Zoom classes and struggled with relationships in the remote environment

(Gordon, 2020; Hartshorn & McMurray, 2020). In this study, one instructor said Zoom was not useful since the authentic communicative experience is missing in activities, because everyone is looking at the PowerPoint slides. This authentic communication includes physical and social interaction in the F2F environment that includes non-verbal gestures and raised hands (Gordon, 2020; Hartshorn & McMurray, 2020).

Perceived Effectiveness of Teaching with Technology

Instructors expressed their own perceived effectiveness was a factor in how useful technology was in facilitating activities. Instructors gauged effectiveness on how well they evaluated students with technology, created a motivating atmosphere, and guided students to progress through the levels and achieving goals in academic writing. Instructors and administrators were concerned with their effectiveness with technology to produce high-quality materials and activities to engage students (Todd, 2020), especially when justifying to students and their parents that the tuition costs remained the same as F2F. They had to find technology to perform their jobs at an even higher quality, in order for students to not feel as if they were being sent to “watch a bunch of videos online”, as Andy said.

Pedagogical Considerations in the ERTE

Although instructors found technology useful, additional pedagogical considerations emerged in the ERTE that they were not expecting. Considerations included teaching netiquette, assigning roles to students before entering breakout rooms, teaching students how to use technology, and covering SLOs in the limited time they had. Other pedagogical considerations they had make when adopting technology was assessing language fairly, managing classrooms, facilitating activities with cameras off, and navigating a heavier workload while experiencing decision fatigue. The heavier

workload “decision fatigue” that overwhelmed many instructors during this time was recognized as the additional work hours and “stress of decision making” (Hartshorn & McMurry, 2020, p. 150) that played a role in technology acceptance and use in the remote environment. Emerging literature provides the conversations about “lessons learned” or “going forward” when acknowledging instructors’ difficulty with technology in the short period they had to transition to a synchronous, Zoom class with four or five hours a day of teacher-fronted instruction. The lessons learned included the “push for the use of technologies that are well established at your institution” (Ross & DiSalvo, 2020, p. 8), and “encourage instructors to make judicious use of synchronous videoconferencing” (p. 8), which has entered our lexicon as “Zoom fatigue”.

Technology Barriers

Reported technology barriers in this study were similar to those experienced globally during the pandemic, and included access and connectivity issues, limitations with technology, and multiple systems overwhelming students (Cheung, 2021; Hartshorn & McMurry, 2020; Trust & Whalen, 2021). Bandwidth and internet connections in many countries, including the United States, caused disruption in using video cameras, playing and downloading videos and large files. Students were confused and overwhelmed by the number of systems they had to learn with different logins and passwords, too many Zoom links, and materials they could not access from their countries. Hartshorn & McMurry (2020) found students had difficulties with wifi in their apartments, being online for many classes, and “learning how to use video conferencing and how to interact online” (p. 147). Overall, regardless of the heavier workload, decision fatigue, and barriers related to facilitating CLT activities, the majority

of instructors perceived that technology was useful and they were effective in the remote teaching environment.

Effort Expectancy (EE)

Perceived ease of use, or effort expectancy, is a positive indicator that individuals will be more likely to accept and use the educational technology (Khechine et al., 2020; Venkatesh et al., 2016). The interrelated findings pertaining to this construct were that prior technology experience was a factor and using technology was easier than instructors had expected.

All instructors reported agreeing with current research that the initial transition to remote instruction in March 2020 was the most difficult (Hartshorn & McMurry, 2020). As the months progressed, it became easier to use technology to facilitate activities. As instructors shared how they facilitated communicative activities with technology, a range of prior technology experiences emerged. Overall, those with more prior educational technology experience indicated that it was easy for them to transform activities to remote instruction and perceived an ease of using a wider variety of technology to facilitate CLT activities.

Those with minimal prior technology experience were surprised teaching with technology became easier than they had expected. Despite their trepidation and the technology barriers they faced in the initial transition, they managed to solve many issues and accomplish a remarkable turnaround to successfully navigate the remote environment (Major, 2020; Todd, 2020). Overall, these four perceived a wider range from initial difficult to subsequent ease of using technology to facilitate CLT activities in the remote environment.

Social Influence (SI)

Social influence is a prominent factor in predicting use and intention to use technology in mandatory implementation (Venkatesh et al., 2003). Several groups of people influenced the adoption and use of technology to facilitate communicative activities in this study, such as IEP directors, colleagues with coordinator titles, and other faculty colleagues. The instructors with prior experience using and teaching with educational technology were perceived as influential to their colleagues in adopting and using technology. Those with minimal prior experience perceived the IEP directors and colleagues influential in adopting and using technology. However, a surprising finding was the majority of the instructors perceiving the students' influence on their own adoption and use of technology.

Student Feedback

How students experienced activities during remote learning influenced the instructors' adoption and use of technology. Instructors considered student feedback valuable and asked them directly for informal feedback in addition to the required classroom evaluations. Students reported to instructors that they did not like working with less motivated classmates and were weary of gamified apps. Instructors listened to students' suggestions to make classes as enjoyable and productive as they could, based on this feedback.

Facilitating Conditions (FC)

In forming the UTAUT model, Venkatesh et al. (2003) determined when PE and EE constructs are present, an individual's perceptions of facilitating conditions do not have a direct influence on behavior intention. Perceptions that leadership and technical support exists has a direct influence on use behavior.

Instructors perceived this “human, organizational and technical support” (Khechine et al., 2020, p. 2310) to be present. They accessed personnel and training materials in the IEP and university campus offices to support learning how to use technology. The IEPs and campus offices were generous with software and hardware to support teaching in the remote environment. Instructors felt comfortable contacting their directors, colleagues, and campus technology or faculty development offices to trouble-shoot technology issues. Due to this support, instructors perceived learning to use technology to be easy.

Table 5-1 UTAUT constructs and reported prior technology experience

UTAUT Constructs	Prior technology experience	Minimal prior technology experience	Commonalities
Performance Expectancy (EE)	Perceived technology being more useful. Perceived being more effective using technology.	Perceived technology not being as useful. Perceived having a wider range of effectiveness using technology.	Perceived pedagogical considerations and technology barriers as playing a role when determining usefulness of technology.
Effort Expectancy (EE)	Perceived ease of using wider variety of technology.	Perceived range of ease of using technology.	Perceived to be easier with continued use.
Social Influence (SI)	Perceived as influential for colleagues’ adoption and use of technology.	Perceived their directors and colleagues as influential in adoption and use of technology.	Perceived student feedback as playing a role in adoption and use of technology.
Facilitating Conditions (FC)	Perceived technical and leadership support in place to use technology.	Perceived technical and leadership support in place to use technology.	Perceived technical and leadership support in place to use technology.

Moderators in the UTAUT

The UTAUT (Venkatesh et al., 2003) includes four moderators of gender, age, experience, and voluntariness of use, which are not direct determinant factors but

impact the independent variables of PE, EE, SI, and FC in predicting an individual's behavioral intention and use behavior of technology (see Figure 5-1). In the model, represented with arrows, demographic and experiential information contributes to behavioral intention and use behavior.

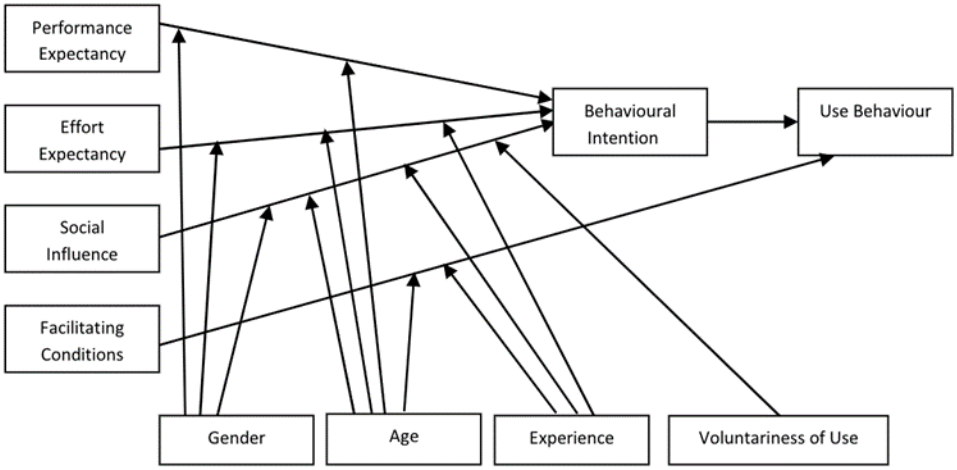

Figure 5-1.The Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003)

In this study, voluntariness of use of technology was not a factor in use behavior, as the transition to the remote environment was mandatory. Instructors had autonomy in choosing technology to facilitate CLT activities.

The instructors reported their ages ranging from 26–64 years at the time of interviews. Three identified as men, and seven identified as women. Age and gender were not a direct factor in behavioral intention or use behavior. However, the instructors' prior experience using technology was the most influential in the effort expectancy (EE), social influence (SI), and facilitating conditions (FC), as discussed above.

In the demographic survey, the instructors were asked to report how many years they had taught in an ESL classroom. The instructors reported a range from 6-30 years in ESL teaching. In the interviews, the focus shifted from classroom experience to their

familiarity and experience with technology prior to teaching in the emergency remote environment.

The instructors with prior experience integrated a variety of technology in a more robust way than those with minimal prior experience and perceived that it was easy to do so. These instructors had prior knowledge “to consider technology affordances to support language learning in order to determine if they will be effective in the classroom” (Chun et al., 2016, p. 77). Their advanced use of authentic language tasks incorporated technology “more fully into the language learning process” (Warschauer & Healey, 1998, p. 58). These instructors were perceived as influential in their roles to assist others to adopt and use technology. When they were called on to learn how to use new technology, they shared their knowledge. These instructors also perceived the facilitating conditions of the human and technical systems in place to teach in the remote environment.

Those instructors with minimal prior educational technology experience immediately learned how to use apps, websites, and software to facilitate communicative activities in the ERTE. They implemented fewer tools in the ERTE, rejected more tools citing misalignment with student learning and technology barriers.

Overall, during the mandatory shift to remote instruction, the impact on performance expectancy, effort expectancy, social influence, and facilitating conditions showed that prior experience with educational technology did play a role on the individuals’ behavioral intention and use behavior of remote technology to facilitate instruction.

How Did IEP Instructors Learn to Facilitate CLT Activities in the ERTE?

Instructors perceived that resources from the IEPs and campus offices to learn how to use technology were readily available and helpful. The most impactful learning resource that emerged was the release time given to instructors by the IEP.

IEPs and Campus Support

Learning support was provided by the university campus offices offering on-demand training using specific tools and guidance on accessibility and instructional design for course development. Developing faculty instructional design skills for student-centered, interactive and engaging learning indicates benefits for online or remote teaching (Lavoie & Rosman, 2007). Prior research shows evidence of success in teaching faculty fundamentals of online learning by a campus department where faculty working with instructional designers "can provide that learning environment by integrating student learning, course delivery, and technology" (Lieberman & Guskin, 2003, p. 265). Additionally, peer-based learning about instructional design approaches is seen as beneficial (Belt & Lowenthal, 2020; Thompson & Trigwell, 2018).

Instructors perceived being supported through encouragement from their IEP colleagues, and expressed gratitude for the generous sharing of materials, resources, and knowledge. More experienced instructors provided training, materials, and led their colleagues to valuable learning resources. Research has shown collaboration between novice and expert instructors in learning is supported by Vygotsky's sociocultural theory, considering that the "relevant factors essential for teacher development including cognitive, affective, social, and contextual" (Shabani, 2016, p. 9) are present in the interaction in social learning. Internal faculty development models in which instructors of all levels work together to engage in learning "poses the greatest potential for

developing faculty in the most meaningful ways and mentorship amongst more experienced faculty and early-career faculty may have the most sustained impact over time" (Belt & Lowenthal, 2020, p. 251).

Instructors acknowledged they intend to continue using technology, even in the F2F classrooms, to support language learning because they are aware that these resources are available to continue learning about how to use technology.

Release Time

The initial transition to remote instruction in March 2020 was the most difficult since instructors moved their full-time teaching loads, which for some could be between 16–20 hours per week, to synchronous Zoom classes. In the subsequent semester in the summer of 2020, instructors reported some IEPs provided release time.

Release time is rarely granted to instructors. The instructors appreciated this time to develop their technology skills, transform materials, and seek guidance on instructional design for asynchronous LMS platforms for remote instruction. They understood it was a rare gift that was still being negotiated at the time of interviews. IEPs rarely grant release time except for administrative positions. Research data from 124 instructor and administrator interviews, which included participants from all three IEP models, showed 41.1% of the respondents indicated release time was available for research or professional development activities. In the study, 66.1% were from a university-affiliated IEP, and 69.4% identified themselves as full-time instructors (Szasz, 2010). In the COVID-19 pandemic, suddenly they were faced with granting release time even in fiscally tenuous circumstances.

Implications

This study provided insight into factors that played a role in facilitating CLT activities in the remote environment. The following section describes the implications related to the findings for my professional practice as an IEP administrator and implications for the wider IEP profession.

Implications for Professional Practice

IEPs will remain in-person, rather than move to online instruction due to the immersion mission, but as findings show, instructors adopted to the emergency remote environment and discovered they were effective using technology to facilitate CLT activities.

Throughout the pandemic, my professional context, the UF English Language Institute created Short Term English Program (STEP) online courses, in addition to the remote IEP classes. We also transitioned our Scholarly Writing course for UF graduate students and postdocs to the online environment in the summer of 2020. During this time, international universities increased their requests for partnerships for online programming. Currently, UF graduate school departments have realized the potential for partnerships with international universities to increase student enrollment and have included us when applying for grants. Non-governmental organizations (NGOs) and U.S. State Department initiatives are seeking institutions to provide global opportunities through online teacher-training and English language instruction.

In my role as international recruiter, I have increased our special program proposals to include online and hybrid instruction. Since instructors perceived themselves to be effective facilitating activities and indicated interest in a flexible and technology-rich language-learning environment, we have created proposals to include

initial remote instruction before students arrive in Florida for in-person immersion courses. We are marketing a variety of modalities for institutions and organizations. Combining CALL research, concrete examples regarding the technology used in synchronous and asynchronous environments and an increase in available infrastructure in universities and organizations internationally, we can increase our enrollment through this kind of marketing.

This innovative and market-driven environment shows there is a continued demand for instructors to not only build technology skills but to be given training and resources to be proficient in the competencies needed for the online instructor roles they must occupy in these environments.

Competencies for Online Instructor Roles

The findings showed instructors were unprepared for competencies required for the multiple, expanded roles they occupied in the remote environment. Providing professional development to prepare IEP instructors for those competencies and expanded roles is imperative to make special programs and potential online, remote, or hybrid partnerships successful. In my role, this program management and professional development to prepare instructors will include providing the support to understand the competencies and roles they must occupy. The findings in this study, including how instructors used technology to facilitate CLT activities, combined with the changing roles they experienced have determined the content for the online professional development modules in our UF ELI Canvas course. The course will include links to our faculty development office at UF, the Center for Instructional Technology and Training (CITT).

Technology Training

Due to decreased enrollment caused by White House policies starting in 2017, and the ensuing pandemic, UF ELI ceased hiring new instructors and student-instructors. However, the hiatus, and the study findings, provided impetus to reconsider the online orientation materials and ongoing learning resources available on a Canvas course for all UF ELI instructors and administrators. In my role of supervising new instructors and student-instructors, it is my responsibility to plan appropriate ongoing learning opportunities for them. This study provided topics regarding the tools instructors found useful, not useful, and what barriers were present in facilitating CLT activities in the remote environment. Administrators need to ensure there is suitable infrastructure available for learning opportunities in the program, especially with changing expectations for knowledge of educational technology in IEP environments (Bailey et al., 2001).

According to the research results, addressing how to use technology to facilitate productive, student-centered activities and reduce teacher-talk is a key topic. Additionally, another topic regarding technology is that instructors incorporated collaborative tools in synchronous and asynchronous modalities once they had learned to use them effectively. In potential online or remote programming, instructors need support and training by IEP and global peers to continue the discussion in Professional Learning Networks (PLNs). Appropriate training within the IEP, campus offices, and PLNs can be created to facilitate activities with collaborative tools like Google products and the LMS features. Discussion and training topics should include best practices in how to teach international students appropriate netiquette, teach students how to use

technology, and how to assign student roles for collaborative activities, according to the results of this study.

Implications for Intensive English Programs

Implications from this study's findings provide actionable outcomes for IEP administrators and instructors going forward after the COVID-19 pandemic. These implications include ways IEP administrators and TESOL professionals should support instructors' intentions to continue using technology going forward in a blended learning environment, and instructors' development in learning to teach using technology to support language learning in that environment. Another item IEP administrators need to consider, in light of TESOL Technology Standards (2008), is the student experiences and feedback regarding the use of technology in the IEP classroom.

Blended Learning

IEPs will not change from the in-person, immersion programs to an exclusively online environment, but universities and the IEPs have improved the conditions for continued local and international opportunities for learning technology skills (Anthony & Noel, 2021; Martin et al., 2022). Reflecting on the past COVID-19 experience, and considering how IEPs will go forward is a task for the educational technology and CALL arenas that includes improving the conditions in institutions to build more agile and flexible systems (Moore et al., 2021) and a more robust infrastructure to help instructors and learners (Anthony & Noel, 2021; Martin et al., 2022). The results of the study indicate instructors intend to continue using technology in their IEP classrooms in some capacity, creating a blended learning environment. While enrollments are slowly recovering because of consulate and embassy visa interview schedules and other country-specific factors, IEPs can reflect on the experience and implement appropriate

learning opportunities to afford instructors the kinds of training required to perform their roles of the online instructor, and technology training to serve students in an integrated and linguistically rich, blended environment.

Insights from research shows language instructors plan to continue using technology because of the increased confidence they had in teaching in the emergency remote environment (Jin et al., 2021). Instructors said they continue to integrate gamified apps, and not vilify student phone use in class as they had previously. They stated they will miss recording the class in Zoom for students to re-watch later, and were considering how to continue using that tool in the F2F class to support repetition and input needed in language-learning classes. These are signs that implementing technology appears to be an inevitable direction in intensive English language education (Garrett, 2009; Warschauer & Healey, 1998; Warschauer, 2000). Blending technology into the F2F classroom, going forward, may be the solution for IEPs. Blended learning approaches in language learning has been shown to be effective for developing ESL listening, speaking, reading, and writing skills (Albiladi & Alshareef, 2019).

The instructors in this study reported their preference for the hybrid model of blended instruction because it provided the option to use language-learning technology to supplement in-person engagement that is deemed necessary in language learning activities (Minasyan et al., 2018). Blended learning is the “combination of F2F and computer-assisted learning in a single teaching and learning environment” (Neumeier, 2005, p. 164). The potential interaction, flexibility, and retention of the hybrid model of learning is appreciated by instructors globally (van Tonder & Steyn, 2018). Instructors

offering blended learning instruction can integrate the communicative language teaching approach (Neumeier, 2005). Integrating the LMS in a hybrid model has shown positive results in practicing listening and speaking skills in a technology-enhanced blended-learning IEP study (Grgurović, 2011).

Using the LMS as a learning hub, instructors in this study plan to continue using digital resources rather than print, and to project all instructional materials onto a screen in the physical room for classroom management. The LMS will be used as a place to store classroom materials for student access and for the asynchronous extension of unfinished classroom activities, and despite lamenting test security in online assessments, they vowed to continue using the LMS for quizzes and assessments in order to free up more time for classroom instruction. The affordances provided by the LMS tool or others, within appropriately designed courses, is a critical discussion in language learning regarding serving students with disabilities. Accessibility tools are available, and using instructional technology to support learning is highlighted in Universal Design Learning (UDL) guidelines. Providing multiple means of representation, action and expression, and engagement (CAST, 2018; Rao & Torres, 2017) with digital technologies to “minimize barriers to learning” (Rao & Torres, 2017, p. 464) must be considered even in F2F environments.

The instructors’ use of technology in this study for collaborative student learning, coupled with the intention to continue using technology to support language learning in the F2F environment supports the implementation of blended learning. This blended learning model ““is capable of promoting and developing the group cohesion and collaborative learning” (Alam et al., 2022). The skills and knowledge the instructors

developed throughout the pandemic to choose technology to facilitate CLT activities in the remote environment can continue to be developed through ongoing professional development in the IEP.

Instructor Development

To support instructors' skills and knowledge to integrate LMS tools, accessibility features, to use UDL guidelines, instructional design foundations (ID) are essential in faculty development to create a blended learning environment. Instructional design is a process "based on learning theories, information technology, systematic analysis, educational research, and management methods" (Morrison et al., 2013, p. 6). Developing faculty instructional design skills for student-centered, interactive and engaging learning, gets them actively involved in improving teaching (Lavoie & Rosman, 2007). This current environment, where instructors have reflected on the technology they perceived to be useful, and intend to continue using, is ideal for ongoing learning opportunities to identify the competencies and roles they need in facilitating activities using technology.

Instructors need to build competencies in instructional design practices. Also, to use technology to motivate and focus students, and implement accessible tools to integrate existing pedagogy with technology (Karamifar et al., 2019; Magruder & Kumar, 2018; Martin et al., 2019; Moorhouse et al., 2021). Ongoing professional learning is needed to understand how technology, pedagogy, and content are interconnected (Koehler et al., 2007) to influence student outcomes (Giles, 2018). In the sudden shift to the remote environment, instructors lacked the knowledge of the roles they would need to fill. Recommendations from educational technology research supports developing competencies related to technical skills. Those skills include the willingness to learn,

knowledge of how people learn, translating their content expertise to be accessible online, designing courses, and assessing student learning in the online environment, in order to be successful in pedagogical, administrative/managerial, technical, evaluation, active learning facilitator, and instructional designer, subject-matter expert, and mentor roles (Magruder & Kumar, 2018; Martin et al., 2019).

Despite instructors' intentions to continue using technology in F2F classrooms, they did not specify their preferred way to learn how to use technology to support language learning. Educational technology research recommends faculty develop programs to be online for the authentic learning element (Magruder & Kumar, 2018, Martin et al., 2019). Although, institutions will be called on to support faculty development to build competencies in online instruction, by providing technology support, administrative and academic support, and rewards and incentives to do so (Pedro & Kumar, 2020).

The TESOL Technology Standards (2008) focus on guiding IEPs to give technical and learning support for instructors to learn to use technology in their classrooms. The Standards (2008) also guide IEP instructors in their efforts to learn to integrate technology and pedagogy. "Good teaching will benefit from appropriate use of technology to help learners achieve their goals" (p. 17). Learning how to teach online can also be found outside the IEP or university. Professional organizations such as the Computer-Assisted Language Instruction Consortium (CALICO) or the International Association for Language Learning Technology (IALLT) (Gacs et al., 2020) facilitate innovative, collaborative communities dedicated to learning to teach with technology. Peer-based professional learning using collaborative online environments, based on

constructivist approaches to teaching and learning, shows evidence that peer learning was found to be present and enjoyable (Chitanana, 2012) while teachers gained "technical skills, obtained information and resources, as well as pedagogical knowledge through their interaction with their peers" (p. 34).

TESOL professionals and IEP administrators must update the TESOL Technology Standards (2008) to include the developments using technology-rich environments for language learning, where even CALL experts may be "surprised by the dramatic potential for using technology in truly innovative and transformative ways" (Kessler, 2021, p. xiv).

Student Experience and Feedback

The result regarding taking student experiences and feedback into consideration necessitates discussion. Going forward, IEPs must consider the student experience, including the level of proficiency and preferences in using technology in F2F language learning. Required mid-term and final classroom evaluations should include items regarding student perceptions of usefulness of the asynchronous portion of the class, if applicable. Instructors' initial classroom needs assessments must include digital literacy. In the study, an instructor confirmed students were familiar with the LMS structure of modules and discussion posts when they entered the host university, but following up with enrolled students would determine IEPs' roles in preparing them for digital literacy needed.

Limitations in the Study

Several limitations were identified in this study, including sample size and representation, the timing of the study, self-reported data in a qualitative study, minimal sources of data, along with lacking interrater reliability procedures.

The sample size and representation are limitations. Ten instructors volunteered to participate from 72 UCIEP member schools. There were two pairs of instructors from the same institutions. Nine of the instructors held faculty titles and remained employed in their institution during a time when adjuncts and other colleagues were not being rehired. These nine represent a group of administrators and instructors who may have experienced remote instruction, resources, support, and assistance more positively than others who were invited to interview.

Regarding the timing of the study, all instructors from the UCIEP member schools, regardless of rank, who taught remotely between March 2020 and April 2021 were invited to interview. In 2022, IEPs continue to feel the effects of the global COVID-19 pandemic causing travel limitations affecting international students' access to university-based IEPs in the United States. In the 2020 – 2021 school year, IEP enrollment decreased an additional 63.1% from the 13.1% decline in the 2019 – 2020 school year (Institute of International Education, 2020; 2021). In response to the decline in enrollment, IEPs reduced the number of instructors, which may have contributed to a small number of respondents for the study.

A limitation of qualitative interviews can be the nature of self-reported data (Merriam & Tisdell, 2016). To address this, instructors were asked if they would share artifacts showing lesson plans or activities they facilitated with communicative activities in the synchronous or asynchronous environments. While they were generous to provide the kinds of technology they used, and how they used the tools to facilitate activities, none provided documents or materials for examination.

Interview questions and a short demographic poll were the primary sources of data. Established practices to ensure trustworthiness were followed throughout the study to increase reliability (Creswell, 2013). For example, peer coding during data analysis included coding with a peer and multiple discussions with the peer and my dissertation chair. The goal of peer coding was mainly to reduce the possibility of bias due to my embeddedness in the IEP context, therefore interrater reliability was not calculated during the peer coding, which is a limitation in this study.

Recommendations for Future Research

The current study focused on exploring how IEP instructors facilitated CLT activities in the emergency remote teaching environment (ERTE), the factors they perceived in playing a role in facilitating activities, and how they learned while teaching and working in a remote environment. Based on the results and limitations, future research topics include an extended study of IEP instructors' needs and preferences for learning how to use available technology to teach in blended learning environments, and addressing classroom accessibility solutions technology can provide a wider population of students requiring accommodations.

Ongoing Professional Development for Blended Learning

Instructors reported they intended to continue using technology in the F2F classroom. However, they did not reveal the modality and content they prefer to continue learning how to use technology. The modality and content instructors prefer for future professional development needs to be more specifically investigated. Based on the limitations of the sample size in this study, future research could include instructors from other Intensive English program models. Therefore, studies focusing on teaching with technology for mandatory and voluntary learning opportunities provided by

international organizations and consortia, UCIEP, and individual IEPs is imperative for going forward in a more flexible online or remote environment.

Current research topics in the Computer Assisted Language Instruction Consortium (CALICO) include teaching with virtual reality, using technology to teach vocabulary, social reading, discovery learning, virtual exchange, and teaching languages with video games (https://calico.org/infobytes). The most recent CALICO Journal issue (Vol. 39, No.1, 2022) presents four articles examining the use of technology in the emergency remote teaching environment in a variety of contexts, including blended learning. The EnglishUSA site (https://www.englishusa.org) for members shows recent virtual webinar topics including Emerging Technologies of VR, and an introduction to Collaborative Online International Learning (COIL) programming. The TESOL discussion boards have threads from researchers, administrators, and instructors reaching out to colleagues regarding technology questions, upcoming publications and webinars to address our past experiences and looking toward the future of global online language instruction. The discussions around teaching ESL in complex and immersive environments, such as VR and video games, highlights the findings in this study that indicate IEP instructors, especially with prior technology experience, are interested in continuing to learn to use and implement technology in the F2F classroom. That discussion boards, webinars, journal articles, and conferences are places for those instructors to continue learning and being involved in training colleagues in the global environment.

Innovative Accessibility in F2F Classrooms

Another topic requiring further investigation is related to using technologies more effectively to provide equitable access to language learning students with disabilities in

blended learning environments. While there are discussions on social justice and equity issues in language learning (Kessler, 2021) as well as Universal Design for Learning (UDL) (Shastri & Clark, 2021), further access for students with physical limitations are important. That an instructor highlighted ableist language in teaching materials and questioned how we should serve students who need accommodations, to provide them agency and autonomy, shows we are missing the opportunity to use technology to teach a valuable population. Further critical research topics include using innovative and accessible tools to provide a blended learning environment to support student autonomy as instructors facilitate communicative language activities in a F2F classroom.

Conclusion

Through interviewing IEP instructors, findings indicated how they facilitated CLT activities, the factors they perceived in playing a role in facilitating activities, and how they learned to facilitate activities in the remote environment. There were a range of prior experiences with educational technology, and a variety of tools instructors used to facilitate activities while teaching in the remote environment. Instructors indicated intent to continue using technology to support student learning in a blended environment. There was agreement that having global access to free or reduced cost virtual professional development opportunities was a benefit resulting from the pandemic. Findings show campus and IEP support is in place for training in how to teach using technology in an online or remote environment. However, instructors did not express specific intentions or preferences regarding the modality they prefer, or content they consider valuable in ongoing professional learning to learn how to use tools for language learning.

Emerging literature suggests we continue to prepare for unpredictable changes in the environment, conflicts, and other natural disasters (Bozkurt & Sharma, 2020; Gacs et al., 2020; Hodges et al., 2020; Whittle et al., 2020) that may affect international student access to U.S. Intensive English Programs. Guidance from TESOL Technology Standards (2008) for IEP administrators suggests providing an environment to encourage instructors to integrate technology in their teaching, as well as consider a plan to implement technology in our institutions. Regardless of instructors' lack of specific mention of intentions or preferences for professional learning going forward, the increased availability of international grants for remote and blended programming through non-governmental organizations (NGOs) and graduate school special programs indicates a demand for competent online English instructors.

APPENDIX A
DEMOGRAPHIC POLL QUESTIONS

Criteria	Questions
Position	What was your academic position or affiliation in March 2020?
Employment	Did your academic position or affiliation change between 3/20 – 4/21?
Current	What is your current academic position or affiliation?
Experience	How long have you been an ESL/EFL instructor?
Age	What is your age?
Gender	How do you identify?

APPENDIX B
INTERVIEW QUESTIONS

The purpose of this study is to identify how Intensive English Program (IEP) instructors are currently using technology to facilitate Communicative Language Teaching (CLT) activities, to explore their perceptions of which factors played a role in their use of technology to facilitate CLT activities, and to understand the nature of the learning experiences instructors sought to develop competencies using technology in CLT activities while in an emergency remote teaching environment (ERTE). Your input will inform IEP leadership regarding guidance in pedagogy and educational technology, instructional design, and emergency remote teaching environments.

Emergency remote teaching (Hodges et al., 2020), launched in the March 2020 – April 2021 global pandemic, is the temporary shift from an in-person classroom to using educational technologies to facilitate instruction.

As stated in the informed consent, your responses will be reported confidentially.

1. Can you tell me about your experiences teaching communicative language activities remotely during the pandemic?
2. How did you facilitate communicative language activities in the remote teaching environment?
    a. Would you be willing to share examples with me of your activities showing how you used technology where students were engaged in communicative activities?
3. How and why did you chose to facilitate communicative language teaching activities in that manner?
4. What kinds of technology did you use when teaching communicative language activities remotely?
5. How effective do you think you were as an instructor during the pandemic in a remote teaching environment?
6. What kind of student feedback did you receive about your communicative language activities during that time?
7. Can you tell me more about why you chose to use those technologies for communicative language teaching activities at that time?
8. How useful did you find those technologies to be for facilitating communicative language activities?
9. How difficult or easy was it for you to facilitate communicative activities in a remote teaching environment?
10. What kinds of barriers were present during your facilitation of communicative language activities in the remote teaching environment?
11. Can you tell me how you learned to use technologies for communicative language activities?
12. How difficult or easy was it for you to learn to use those technologies for communicative language activities?
13. What resources did you use to learn about remote teaching?
14. In what ways did your Intensive English Program administration or host institution support your use of technology for remote communicative language teaching?

15. What kinds of assistance did you receive at your Intensive English Program or host institution for learning to teach remotely?

APPENDIX C
RESEARCH QUESTIONS

Research Question	Interview Question
RQ1: How did IEP instructors facilitating communicative language teaching activities in a remote teaching environment?	Can you tell me about your experiences teaching communicative language activities remotely during the pandemic? How did you facilitate communicative language activities in the remote teaching environment? ·Would you be willing to share examples with me of your activities showing how you used technology where students were engaged in communicative activities? How and why did you chose to facilitate communicative language teaching activities in that manner? What kinds of technology did you use when teaching communicative language activities remotely?
RQ2: What factors played a role in facilitating communicative language teaching activities in a remote environment?	How effective do you think you were as an instructor during the pandemic in a remote teaching environment? What kind of student feedback did you receive about your communicative language activities during that time? Can you tell me more about why you chose to use those technologies for communicative language teaching activities at that time? How useful did you find those technologies to be for facilitating communicative language activities? How difficult or easy was it for you to facilitate communicative activities in a remote teaching environment? What kinds of barriers were present during your facilitation of communicative language activities in the remote teaching environment?

RQ3: How did IEP instructors learn to use educational technology to facilitate communicative language teaching activities in a remote teaching environment?	Can you tell me how you learned to use technologies for communicative language activities? How difficult or easy was it for you to learn to use those technologies for communicative language activities? What resources did you use to learn about remote teaching? In what ways did your Intensive English Program administration or host institution support your use of technology for remote communicative language teaching? What kinds of assistance did you receive at your Intensive English Program or host institution for learning to teach remotely?

APPENDIX D
DOCUMENTED CHANGES IN RESEARCH QUESTIONS AFTER THINK-ALOUD

Research Question	Original Interview Question	Amendments
RQ1: How are IEP instructors facilitating communicative language teaching activities in a remote teaching environment?	What were your experiences teaching CLT activities remotely during the pandemic?	Can you tell me about your experiences teaching communicative language activities remotely during the pandemic?
	How did you facilitate CLT activities in the remote teaching environment?	How did you facilitate communicative language activities in the remote teaching environment?
	Would you be willing to share examples of your activities showing how you used technology where students were engaged in communicative activities?	Would you be willing to share examples with me of your activities showing how you used technology where students were engaged in communicative activities?
	How and why did you chose to facilitate CLT activities in that manner?	How and why did you chose to facilitate communicative language teaching activities in that manner?
	What kinds of technology did you use when teaching CLT activities remotely?	What kinds of technology did you use when teaching communicative language activities remotely?
RQ2**:** What factors played a role in facilitating communicative language teaching activities in a remote environment?	How effective do you think you were as an instructor during the pandemic in a remote teaching environment?	How effective do you think you were as an instructor during the pandemic in a remote teaching environment?

	What kind of student feedback did you receive about your CLT activities during that time? Can you tell me more about why you chose to use those technologies for CLT activities at that time? How useful did you find those technologies to be for facilitating CLT activities? How difficult or easy was it for you to facilitate CLT activities in a remote teaching environment? What kinds of barriers were present during your facilitation of CLT in the remote teaching environment?	What kind of student feedback did you receive about your communicative language activities during that time? Can you tell me more about why you chose to use those technologies for communicative language teaching activities at that time? How useful did you find those technologies to be for facilitating communicative language activities? How difficult or easy was it for you to facilitate communicative activities in a remote teaching environment? What kinds of barriers were present during your facilitation of communicative language activities in the remote teaching environment?
RQ3: How did IEP instructors learn to use educational technology to facilitate communicative language teaching activities in a remote teaching environment?	How did you learn to use those technologies for CLT activities? How difficult or easy was it for you to learn to use those technologies for CLT activities?	Can you tell me how you learned to use technologies for communicative language activities? How difficult or easy was it for you to learn to use those technologies for

		communicative language activities?
	What resources did you use to learn about remote teaching?	What resources did you use to learn about remote teaching?
	In what ways did your administration or institution support your use of technology for remote CLT?	In what ways did your Intensive English Program administration or host institution support your use of technology for remote communicative language teaching?
	What kinds of assistance did you receive at your institution for learning to teach remotely?	What kinds of assistance did you receive at your Intensive English Program or host institution for learning to teach remotely?

APPENDIX E
EMAIL TO INSTRUCTORS REQUESTING PARTICIPATION

Invitation to participate:

Dear, UCIEP directors,
Could you kindly forward this email invitation to the instructors employed in your Intensive English Program who experienced the shift to an emergency remote teaching environment between March 2020 and April 2021?

Dear, IEP instructors,
My name is Lia Brenneman. I am a doctoral student at University of Florida College of Education. I am also a faculty member at UF English Language Institute. I am inviting you to participate in a research study titled: Factors IEP Instructors Perceive as Playing a Role in Facilitating Communicative Language Teaching Activities in an Emergency Remote Teaching Environment that consists of 1) a 5 minute, six-question demographic poll on Qualtrics, and 2) a 45-minute interview on Zoom video conferencing platform.

The purpose of this study is to identify how IEP instructors are currently using technology to facilitate CLT activities, to explore their perceptions of which factors played a role in their use of technology to facilitate CLT activities, and to understand the nature of the learning experiences instructors sought to develop competencies using technology in CLT activities while in an emergency remote teaching environment (ERTE). Your input will inform IEP leadership regarding guidance in pedagogy and educational technology, instructional design, and emergency remote teaching environments.

Participation is voluntary and you may withdraw from the study at any time. Your data is confidential. An informed consent will provide additional details.

If you would like to participate in the study, please contact me. I will schedule an interview time with you, then I will send you a Qualtrics link to the informed consent and six short demographic questions.

Your participation is greatly appreciated. Please contact me directly for questions.

Lia Brenneman
lia@ufl.edu

APPENDIX F
INFORMED CONSENT FORM

I am interested in understanding how Intensive English Program instructors are currently using technology to facilitate communicative language activities, as well as perceptions of which factors played a role in the use of technology to facilitate communicative activities, and the learning experiences sought out to develop competencies using technology in communicative activities in an emergency remote teaching environment (ERTE) between March 2020 and April 2021. You will be asked to answer six short demographic questions on this Qualtrics poll. Then, you will be asked questions regarding using technology to facilitate communicative language activities in an emergency remote teaching environment during an interview using Zoom.

Your identity will be kept confidential to the extent provided by the law. Poll responses will be assigned an alias, and associated with self-reported information from the interview. Storage of all data and media will be held in computers with security passwords. There are minimal risks to participants.

The poll should take you around 5 minutes to complete. The interview will take around 45 minutes to complete. Your participation in this research is voluntary. Your contribution to the study will benefit the Intensive English Program field through understanding instructors' learning experiences with educational technology. You have the right to withdraw at any point during the study. The Principal Investigator of this study, Lia Brenneman, can be contacted at lia@ufl.edu.

By clicking the button below, you acknowledge:
o I consent, begin the study
o I do not consent, I do not wish to participate

LIST OF REFERENCES

Abu-Al-Aish, A., & Love, S. (2013). Factors influencing students' acceptance of M-Learning: An investigation in higher education. *International Review of Research in Open and Distributed Learning, 14*(5), 82–107. DOI:10.19173/irrodl.v14i5.1631

Alam, S., Albozeidi, H. F., Al-Hawamdeh, B. O. S., & Ahmad, F. (2022). Practice and principle of blended learning in ESL/EFL pedagogy: Strategies, techniques and challenges. *iJET, 17*(11), 225–241. DOI: https://doi.org/10.3991/ijet.v17i11.29901

Al-Anezi, Y. H., & Alajmi, S. M. (2021). Factors that influence English teachers' acceptance and use of e-learning technologies. *International Education Studies*, *14*(9), 15–27. doi:10.5539/ies.v14n9p15

Alberola, J. M. (2021, April). *U.S. Intensive English programs: Short-term volatility or long-term decline?* Bridge Universe. https://bridge.edu

Albiladi, W., & Alshareef, K. (2019). Blended learning in English teaching and learning: A review of the current literature. *Journal of Language Teaching and Research, 10*(2), 232-238. http://dx.doi.org/10.17507/jltr.1002.0

Anthony, B., & Noel, S. (2021). Examining the adoption of emergency remote teaching and virtual learning during and after COVID-19 pandemic. *International Journal of Educational Management, 35*(6), 1136-1150. DOI 10.1108/IJEM-08-2020-0370

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211.

Altheide, D. L., & Johnson, J. M. (2011). Reflections on interpretive adequacy in qualitative research. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research* (pp. 581–594). SAGE.

Archibald, M. M., Ambagtsheer, R. C., Casey, M. G., & Lawless, M. (2019). Using Zoom videoconferencing for qualitative data collection: Perceptions and experiences of researchers and participants. *International Journal of Qualitative Methods, 18*, 1–8. https://doi.org/10.1177/1609406919874596

Bailey, D. (2022). Interactivity during Covid-19: Mediation of learner interactions on social presence and expected learning outcome within videoconference EFL courses. *Journal of Computers in Education, 9***,** 291–313. https://doi.org/10.1007/s40692-021-00204-w

Bailey, K., Curtis, A., & Nunan, D. (2001). *Pursuing professional development: The self as source*. Heinle & Heinle.

Bandura, A. (1977). *Social learning theory*. Prentice Hall.

Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), Annals of Child Development, 6. *Six theories of child development* (pp. 1–60). JAI Press.

Baran, E., Correia, A., & Thompson, A. (2011). Transforming online teaching practice: critical analysis of the literature on the roles and competencies of online teachers, *Distance Education, 32*(3), 421–439. DOI: 10.1080/01587919.2011.610293

Beatty, K. (2010). *Teaching and researching computer-assisted language learning* (2nd ed.). Pearson Education Limited.

Belt, E., & Lowenthal, P. (2020). Developing faculty to teach with technology: Themes from the literature. *TechTrends, 64*(2), 248-259.doi 10.1007/s11528-019-00447-6

Black, G. L. (2015). Developing teacher candidates' self-efficacy through reflection and supervising teacher support. *In Education, 21*(1), 78–98.

Blake, R. J. (2009). The use of technology for second language distance learning. *The Modern Language Journal*, *93*, 822–835. http://www.jstor.org/stable/25612277

Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to CoronaVirus pandemic. *Asian Journal of Distance Education, 15(*1), i–vi. https://doi.org/10.5281/zenodo.3778083

Breen, M. P., & Candlin, C. N. (1980). The essentials of a communicative curriculum in language teaching. *Applied Linguistics, (I)*2, 89–112. https://doi.org/10.1093/applin/I.2.89

Broomhead, A. (2013). *Transitioning to English-only in a university intensive English program: A phenomenological study* [Doctoral dissertation, Northeastern University). Retrieved from ProQuest Dissertations & Theses Global. (1446716309).

Brown, H. D. (2000). *Principles of language learning and teaching* (4th ed.). Longman.

Buendgens-Kosten, J. (2020). The monolingual problem of computer-assisted language learning. *ReCALL, 32*(3), 307–322. https://doi.org/10.1017/S095834402000004X

Cahyani, H., de Courcy, M., & Barnett, J. (2018). Teachers' code-switching in bilingual classrooms: Exploring pedagogical and sociocultural functions. *International Journal of Bilingual Education and Bilingualism, 21*(4), 465–479. DOI: 10.1080/13670050.2016.1189509

Canagarajah, S. (2011). Codemeshing in academic writing: Identifying teachable strategies of translanguaging. *The Modern Language Journal, 95*(3), 401–417. https://doi.org/10.1111/j.1540-4781.2011.01207.x

Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics, 1*(1), 1–47. https://doi.org/10.1093/applin/I.1.1

Carkin, S. (1997). Language program leadership as intercultural management. In M. A. Christison & F. L. Stoller (Eds.), *A handbook for language program administrators* (pp. 49–60). Alta Book Center Publishers.

CAST. (2018). Universal Design for Learning Guidelines version 2.2. Retrieved from http: //udlguidelines.cast.org

Cavus, N., & Ibrahim, D. (2009). M-Learning: An experiment in using SMS to support learning new English language words. *British Journal of Educational Technology, 40*(1), 78–91. 10.1111/j.1467-8535.2007.00801.x

Celce-Murcia, M. (2001). Language teaching approaches: An overview. In M. Celce-Murcia (Ed.) *Teaching English as a second or foreign language* (3rd ed., pp. 3–11). Heinle & Heinle.

Chapelle, C. (1989). Using intelligent computer-assisted language learning. *Computers and the Humanities, 23,* 59–70.

Chapelle, C. (2009). The relationship between second language acquisition theory and computer-assisted language learning. *The Modern Language Journal, 93*, 741–753.

Chapelle, C., & Jamieson, J. (1986). Computer-assisted language learning as a predictor of success in acquiring English as a second language. *TESOL Quarterly, 20*(1), 27–46. https://www.jstor.org/stable/3586387

Cheung, A. (2021). Language teaching during a pandemic: A case study of Zoom use by a secondary ESL teacher in Hong Kong. *RELC Journal, 52*(1), 1–16.

Chitanana, L. (2012). A constructivist approach to the design and delivery of an online professional development course: A case of the iEARN online course. *International Journal of Instruction, 5,* 1308–1470.

Chun, D., Kern, R., & Smith, B. (2016). Technology in language use, language teaching, and language learning. *The Modern Language Journal, 100*(S1), 64–80. https://doi.org/10.1111/modl.12302

Commission on English Language Program Accreditation. (2019). *CEA standards for English language programs and institutions*. https://cea-accredit.org/about-cea/standards

Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly*, 189–211.

Compton, L. K. L. (2009). Preparing language teachers to teach language online: A look at the skills, roles, and responsibilities. *Computer Assisted Language Learning, 22*(1), 73–99. DOI: 10.1080/09588220802613831

Cotterall, S., & Murray, G. (2009). Enhancing metacognitive knowledge: Structure, affordances and self. *System, 37*(1), 34–45. https://doi.org/10.1016/j.system.2008.08.003.

Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). SAGE.

Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE.

Dao, P. (2020). Effect of interaction strategy instruction on learner engagement in peer interaction. *System, 91*, 1–13. https://doi.org/10.1016/j.system.2020.102244

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–33.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace. *Journal of Applied Social Psychology, 22*(14), 1111–1132. http://dx.doi.org/10.1111/j.1559-1816.1992.tb00945.x

Desimone, L. M., & Le Floch, K. C. (2004). Are we asking the right questions? Using cognitive interviews to improve surveys in education research. *Educational Evaluation and Policy Analysis, 26*(1), 1–22.

Department of Homeland Security (2021a). *English language training*. Retrieved December 12, 2020 from https://studyinthestates.dhs.gov/students/get-started/english-language-training

Department of Homeland Security (2021b). *The Accreditation of English Language Training Programs Act.* Retrieved April 30, 2021 from https://www.ice.gov/sevis/accreditation-act

Dina, A. T., & Ciornei, S. I. (2013). The advantages and disadvantages of computer-assisted language learning and teaching for foreign languages. *Procedia Social and Behavioral Sciences, 76,* 248–252.

Dooly, M. (2015). It takes research to build a community: Ongoing challenges for scholars in digitally-supported communicative language teaching. *CALICO, 32*(1), 172–194. doi:10.1558/calico.v32i1.25664

Dwivedi, Y. K., Rana, N. R., Jeyaraj, A., Clement, M., & Williams, M. D. (2019). Re-examining the Unified Theory of Acceptance and Use of Technology (UTAUT): towards a revised theoretical model. *Information Systems Frontiers, 21*(3), 116. DOI: 10.1007/s10796-017-9774-y

Ellis, R. (1991, April 22–28). *The interaction hypothesis: A critical evaluation* [Paper presented]. Regional Language Centre Seminar, Singapore.

Eskey, D. E. (1997). The IEP as a nontraditional entity. In M. A. Christison, & F. L. Stoller, (Eds.), *A handbook for language program administrators* (pp. 21–31). Alta Book Center Publishers.

Fishbein, M., & Ajzen, I. (1974). Attitudes towards objects as predictors of single and multiple behavioral criteria. *Psychological Review, 81*(1), 59–74. https://doi.org/10.1037/h0035872

Forbes, M. J. (2012). *Establishing an accepted skill set and knowledge base for directors of university and college intensive English programs*. [Doctoral dissertation, University of Florida]. UF Institutional Repository. https://ufdc.ufl.edu/UFE0045032/00001

Foster, P., & Ohta, A. (2005). Negotiation for meaning and peer assistance in second language classrooms. *Applied Linguistics, 26*, 402–430.

Fuji, A., Ziegler, N., & Mackey, A. (2016). Peer interaction and metacognitive instruction in the EFL classroom. In M. Sato & S. Ballinger (Eds.), *Peer interaction and second language learning: Pedagogical potential and research agenda* (pp. 63–90). John Benjamins.

Gacs, A., Goertler, S., & Spasova, S. (2020). Planned online language education versus crisis-prompted online language teaching: Lessons for the future. *Foreign Language Annals, 53*(2), 380–392. https://doi.org/10.1111/flan.12460

Garcia, O. (2014). TESOL translanguaged in NYS: Alternative perspectives. *NYS TESOL Journal, 1*(1), 2–10.

Garrett, N. (2009). Technology in the service of language learning: Update on Garrett (1991) trends and issues. *The Modern Language Journal, 93,* 697–718.

Gass, S. (1997). *Input, interaction, and the second language learner*. Erlbaum.

Giles, A. (2018). Navigating the contradictions: An ESL teacher's professional self-development in collaborative activity. *TESL Canada Journal, 35*(2), 104–127. https://doi.org/10.18806/tesl.v35i2.1292

Gillespie, J. (2020). CALL research: Where are we now? *ReCALL, 32*(2), 127–144. doi:10.1017/S0958344020000051

Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: A review of technology types and their effectiveness. *Computer-Assisted Language Learning, 27*(1), 70–105. DOI:10.1080/09588221.2012.700315

Gordon, M. (2020). Synchronous teaching and learning: On-ground versus Zoom. *International Journal of Education and Human Developments, 6*(3), 11–19.

Grgurović, M. (2011). Blended learning in an ESL class: A case study. *CALICO Journal, 29*(1), 100–117. https://www.jstor.org/stable/10.2307/calicojournal.29.1.100

Halliday, M. A. K. (1975). *Learning how to mean: Explorations in the development of language*. Edward Arnold.

Hampel, R., & Stickler, U. (2012). The use of videoconferencing to support multimodal interaction in an online language classroom. *ReCALL, 24(*2), 116–137.

Han, Y. (2020). Connecting the past to the future of computer-assisted language learning: Theory, practice, and research. *Issues and Trends in Learning Technologies, 8*(1), 1–13. doi: https://doi.org/10.2458/azu_itlt_v8i1_han

Hartshorn, K. J., & McMurry, B. L. (2020). The effects of the COVID-19 pandemic on ESL learners and TESOL practitioners in the United States. *International Journal of TESOL Studies, 2*(2), 140–156. https://doi.org/10.46451/ijts.2020.09.11

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. Educause Review. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remoteteaching-and-online-learning

Hoi, V. N. (2020). Understanding higher education learners' acceptance and use of mobile devices for language learning: A Rasch-based path modeling approach. *Computers and Education, 146,* 1–15. https://doi.org/10.1016/j.compedu.2019.103761

Hymes, D. H. (1972). On communicative competence. In J. B. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp. 269–293). Penguin.

Im, I., Hong, S., & Kang, M. S. (2011). An international comparison of technology adoption: Testing the UTAUT model. *Information & Management, 48*(1), 1–8. https://doi.org/10.1016/j.im.2010.09.001.

Institute of International Education. (2022). *Intensive English program impacts due to COVID-19.* Open Doors Report on International Educational Exchange. Retrieved from https://opendoorsdata.org/.

Institute of International Education. (2021). *International Student and U.S. Higher Education Enrollment, 1948/49–2020/21*. Open Doors Report on International Educational Exchange. Retrieved from https://opendoorsdata.org/.

Institute of International Education. (2020). *International student enrollment trends, 1948/49–2019/2020*. Open Doors Report on International Educational Exchange. Retrieved from https://www.opendoorsdata.org.

Jin, L., Deifell, E., & Angus, K. (2022). Emergency remote language teaching and learning in disruptive times. *CALICO, 39*(1), i–x. https://doi.org/10.1558/cj.20858

Jin, L., Xu, Y., Deifell, E., & Angus, K. (2021). Emergency remote language teaching and U.S.-based college-level world language educators' intention to adopt online teaching in postpandemic times. *The Modern Language Journal, 105*(2), 412–434. DOI: 10.1111/modl.12712

Johns, A. M., & Price-Machado, D. (2001). English for Specific Purposes: Tailoring courses to student needs – and to the outside world. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (3rd ed, pp. 43-54). Heinle & Heinle.

Kaplan, R. B. (1997). An IEP is a many-splendored thing. In M. A. Christison & F. L. Stoller (Eds.), *A handbook for language program administrators* (pp. 3–20). Alta Book Center Publishers.

Karamifar, B., Germain-Rutherford, A., Heiser, S., Emke, M., Ernest, P., Stickler, U., & Hampel, R. (2019). Language teachers and their trajectories across technology-enhanced language teaching: Needs and beliefs of ESL/EFL teachers. *TESL Canada, 36*(3), 55–81.https://doi.org/10.18806/tesl.v36i3.1321

Kern, R. (2006). Perspectives on technology in learning and teaching languages. *TESOL Quarterly, 40*(1), 183–210.

Kessler, G. (2021). Current realities and future challenges for CALL teacher preparation. *CALICO Journal*, *38*(3), i–xx. https://doi.org/10.1558/cj.21231

Khechine, H., Raymond, B., & Augier, M. (2020). The adoption of a social learning system: Intrinsic value in the UTAUT model. *British Journal of Educational Technology, 51*(6), 2306–2325. DOI: 10.1111/bjet.12905

Kim, Y., & McDonough, K. (2011). Using pretask modelling to encourage collaborative learning opportunities. *Language Teaching Research, 14,* 183–199.

King, K. (2002). Educational technology professional development as transformative learning opportunities. *Computers & Education, 39*(3), 283-297.

Koehler, M. J., Mishra, P., & Yahya, K. (2007). Tracing the development of teacher knowledge in a design seminar: Integrating content, pedagogy and technology. *Computers & Education, 49*(3), 740–762. doi: 10.1016/j.compedu.2005.11.012

Kohnke, L., & Moorhouse, B. L. (2020). Facilitating synchronous online language learning through Zoom. *RELC Journal*, 1–6. doi:10.1177/0033688220937235

Krashen, S. D. (1981). *Second language acquisition and second language learning*. Pergamon Press.

Krashen, S. D. (1982). *Principles and practice in second language acquisition.* Pergamon.

Krashen, S. D. (1985).*The input hypothesis.* Longman.

Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing* (2nd ed.). SAGE.

Lavoie, D., & Rosman, A. J. (2007). Using active student-centered learning-based instructional design to develop faculty and improve course design, delivery, and evaluation. *Issues in Accounting Education, 22*(1), 105–118.

Lazaraton, A. (2001). Teaching oral skills. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (3rd ed, pp. 103–115). Heinle & Heinle.

Lee, A. R. (2021). Breaking through digital barriers: Exploring EFL students' views of Zoom breakout room experiences. *Korean Journal of English Language and Linguistics, 21,* 510–524. DOI: 10.15738/kjell.21.202106.510

Lieberman, D. A., & Guskin, A. E. (2003). The essential role of faculty development in new higher education models. *To Improve the Academy, 21*, 257–272.

Lin, C. P., & Bhattacherjee, A. (2008). Learning online social support: An investigation of network information technology based on UTAUT. *CyberPsychology & Behavior, 11*(3), 268–272.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.

Loh, J. (2013). Inquiry into issues of trustworthiness and quality in narrative studies: A perspective. *The Qualitative Report, 18*(65), 1–15.

Long, M. H. (1981). Input, interaction, and second-language acquisition. *Annals of the New York Academy of Sciences, 379*, 259–278. https://doi.org/10.1111/j.1749-6632.1981.tb42014.x

Long, M. H. (1985). Input and second language acquisition theory. In S. Gass and C. Madden (eds.), *Input and second language acquisition* (pp. 377–93). Newbury House.

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of research on Language Acquisition: Second language acquisition* (Vol. 2, pp. 413–68). Academic Press.

Lowenthal, P., Shreaves, D., Gooding, M., & Kepka, J. (2019). Learning to teach online: An exploration of how universities with large online programs train and develop faculty to teach online. *The Quarterly Review of Distance Education, 20*(2), 1–11.

Lowenthal, P., Borup, J., West, R. E., & Archambault, L. (2020). Thinking beyond Zoom: Using asynchronous video to maintain connection and engagement during the COVID-19 pandemic. *Journal of Technology and Teacher Education, 28*(2), 383–391.

Ma, M., Chen, J., Zheng, P., & Wu, Y. (2019). Factors affecting EFL teachers' affordance transfer of ICT resources in China. *Interactive Learning Environments*. 1–16. DOI: 10.1080/10494820.2019.1709210

Magruder, O., & Kumar, S. (2018). e-Learning instruction: Identifying and developing the competencies of online instructors. In A. Piña, V. Lowell, V, & B. Harris, B. (Eds.) *Leading and Managing e-Learning* (pp. 221–233). Springer. https://doi.org/10.1007/978-3-319-61780-0_16

Major, C. (2020). Innovations in teaching and learning during a time of crisis. *Innovative higher education*, *45*(4), 265–266. https://doi.org/10.1007/s10755-020-09514-w

Marckwardt, A. H. (1968). Charles C. Fries. *Language, 44*(1), 205–210. https://www.jstor.org/stable/411491

Martin, F., Budhrani, K., Kumar, S., & Ritzhaupt, A. (2019). Award-winning faculty online teaching practices: Roles and competencies. *Online Learning, 23*(1), 184–205. doi:10.24059/olj.v23i1.1329

Martin, F., Xie, K., & Bolliger, D. (2022). Engaging learners in the emergency transition to online learning during the COVID-19 pandemic. *Journal of Research on Technology in Education, 54(*Sup1), S1–S13. DOI:10.1080/15391523.2021.1991703

McAndrew, P., Foubister, S. P., & Mayes, T. (1996). Videoconferencing in a language learning application. *Interacting with Computers, 8*(2), 207–217.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.

Minasyan, E., Grigoryan, A., & Kuznetsova, Y. (2018). Hybrid ESP courses as a tool to improve students' informal learning and educators' academic mobility. *SHS Web of Conferences, 50*. https://doi.org/10.1051/shsconf/20185001110

Morchid, N. (2019). The determinants of use and acceptance of mobile assisted language learning: The case of EFL students in Morocco. *Arab World English Journal, 5*, 76–97. 10.24093/awej/call5.7

Morrison, G. R., Ross, S. M., Kemp, J. E., & Kalman, H. (2013). *Designing effective instruction* (7th ed.). Wiley & Sons.

Moorhouse, B. L., Li, Y., & Walsh, S. (2021). E-classroom interactional competencies: Mediating and assisting language learning during synchronous online lessons. *RELC Journal*, 1-15. DOI: 10.1177/0033688220985274

Moore, S., Trust, T., Lockee, B., Bond, A., & Hodges, C. (2021). One year later…and counting: Reflections on emergency remote teaching and online learning. *EDUCAUSE Review*. https://er.educause.edu/articles/2021/11/one-year-later-and-counting-reflections-on-emergency-remote-teaching-and-online-learning

Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research, 2*(3), 192–222.

Morely, J. (2001). Aural comprehension instruction: Principles and practices. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (3rd ed, pp. 69–85). Heinle & Heinle.

Nami, F., Marandi, S. S., & Sotoudehnama, E. (2016). CALL teacher professional growth through lesson study practice: An investigation into EFL teachers' perceptions. *Computer-Assisted Language Learning, 29*(4), 658–682. DOI:10.1080/09588221.2015.1016439

Neumeier, P. (2005). A closer look at blended learning: Parameters for designing a blended learning environment for language teaching and learning. *ReCALL, 17,* 163–178. https://doi.org/10.1017/S0958344005000224

Newby, D. (2006). Communicative language teaching. In A. Fenner & D. Newby (Eds.), *Coherence of principles, cohesion of competences: Exploring theories and designing materials for teacher education* (pp. 17–26). European Centre for Modern Languages.

Ng, C. H. (2020). Communicative language teaching (CLT) through synchronous online teaching in English language preservice teacher education. *International Journal of TESOL Studies, 2*(2), 62–73. https://doi.org/10.46451/ijts.2020.09.06

Oxford, R. (2001). Language learning styles and strategies. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (3rd ed., pp. 359–366). Heinle & Heinle.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). SAGE.

Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). SAGE.

Pedro, N. S., & Kumar, S. (2020). Institutional support for online teaching in quality assurance frameworks. *Online Learning, 24*(3), 50–66. https://doi.org/10.24059/olj.v24i3.2309

Pennington, M., & Hoekje, B. (2010). Language program as ecology: A perspective for leadership. *RELC Journal, 41*(3), 213–228.

Pica, T. (1994). Questions from the language classroom: Research perspectives. *TESOL Quarterly, 28*(1), 49–79. https://doi.org/10.2307/3587198

Pica, T. (1996). The essential role of negotiation in the communicative classroom. *JALT Journal, 18*, 241–268.

Pica, T., Young R., & Doughty, C. (1987). The impact of interaction on comprehension. *TESOL Quarterly, 21*(4), 737–758.

Plonsky, L., & Ziegler, N. (2016). The CALL-SLA interface: Insights from a second-order synthesis, *Language Learning & Technology, 20*(20), 17–37. http://llt.msu.edu/issues/june2016/plonskyziegler.pdf

Popescu, A., & Cohen-Vida, M. (2013). Communication strategies for developing the learner's autonomy. *Procedia - Social and Behavioral Sciences, 116,* 3489–3493. doi: 10.1016/j.sbspro.2014.01.789

Presser, S., Couper, M. O., Lessler, J. T., Martin, E., Martin, J., Rothgeb, J.M., & Singer, E. (2004). Methods for testing and evaluating survey questions. *Public Opinion Quarterly, 68*(1), 109–130. https://doi.org/10.1093/poq/nfh008

Pynoo, B., Devolder, P., Tondeur, J., van Braak, J., Duyck, W., & Duyck, P. (2011). Predicting secondary school teachers' acceptance and use of a digital learning environment: a cross-sectional study. *Computers in Human Behavior, 27*(1), 568–575.

Rao, K., & Torres, C. (2017). Supporting academic and affective learning processes for English language learners with universal design for learning. *TESOL Quarterly, 51*(2), 460–472. https://www.jstor.org/stable/44984766

Richards, J. (2006). *Communicative language teaching today*. Cambridge University Press.

Richards, J. C., & Rodgers, T. S. (1986). *Approaches and methods in language teaching.* Cambridge University Press.

Richards, J. C., & Rodgers, T. S. (2001). *Approaches and methods in language teaching.* Cambridge University Press.

Rilling, S., Dahlman, A., Dodson, S., Boyles, C., & Pazvant, O. (2005). Connecting CALL theory and practice in preservice teacher education and beyond: Processes and products. *CALICO Journal*, *22*(2), 213–235. https://doi.org/10.1558/cj.v22i2.213-235

Rogers, E. M. (1962). *Diffusion of innovations*. Free Press.

Rogers, E. M. (1983). *Diffusion of innovations* (4th ed.). Free Press, 1995.

Rogers, E. (2003). *Diffusion of innovations* (5th ed.). Free Press.

Ross, A. F., & DiSalvo, M. L. (2020). Negotiating displacement, regaining community: The Harvard Language Center's response to the COVID-19 crisis. *Foreign Language Annals,* 1–9. https://doi.org/10.1111/flan.12463

Rubin, J. (1987). Learner strategies: Theoretical assumptions, research history and typology. In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 15–30). Prentice/Hall International.

Salaberry, M. (2001). The use of technology for second language learning and teaching: A retrospective. *Modern Language Journal, 85*(1), 39–56. doi:10.1111/0026-7902.00096

Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed). SAGE.

Savignon, S. J. (2017). Communicative competence. In J. I. Liontas, T. International Association, & M. DelliCarpini (Eds.), *The TESOL Encyclopedia of English Language* Teaching (pp. 1–7). Wiley & Sons. https://doi.org/10.1002/9781118784235.eelt0047

Savignon, S. J. (2001). Communicative language teaching for the twenty-first century. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (3rd ed., pp. 13–28). Heinle & Heinle.

Savignon, S. J. (1991). Communicative language teaching state of the art. *TESOL Quarterly, 25*, 261–275. http://dx.doi.org/10.2307/3587463

Scotland, J. (2012). Exploring the philosophical underpinning of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching, 5*(9), 9–16. doi:10.5539/elt.v5n9p

Shabani, K. (2016). Applications of Vygotsky's sociocultural approach for teachers' professional development. *Cogent Education, 3*, 1–10.

Shastri, M., & Clark, L. (2021). English language teaching and COVID-19: Combining universal design for learning and community of inquiry. *International Journal of TESOL Studies*, *3*(1), 116–133. https://doi.org/10.46451/ijts.2021.03.02

Stefanile, A. (2020). The transition from classroom to Zoom and how it has changed education. *Journal of Social Science Research, 16,* 33–40. https://doi.org/10.24297/JSSR.V16I.8789

Stoller, F. L. (1997). The catalyst for change and innovation. In M. A. Christison & F. L. Stoller (Eds.), *A handbook for language program administrators* (pp. 33–48). Alta Book Center Publishers.

Szasz, P. (2010). State of the profession: Intensive English programs. *The CATESOL Journal, 21*(10), 194–201.

Taiwo, A. A., & Downe, A. G. (2013). The theory of user acceptance and use of technology (UTAUT): A meta-analytic review of empirical findings. *Journal of Theoretical and Applied Information Technology, 10(*1), 48–58.

Tafazoli, D., & Golshan, N. S. (2014). Review of computer-assisted language learning: History, merits & barriers. *International Journal of Language and Linguistics, 2*(1), 32–38. doi:10.11648/j.ijll.s.2014020501.15

Tan, P. J. B. (2013). Applying the UTAUT to understanding factors affecting the use of English e-learning websites in Taiwan. *SAGE Open, 3*(4), 1–12.

Taylor, S., & Todd, P. (1995). Understanding information technology usage: A test of competing models*. Information Systems Research, 6*(2), 144–176. http://www.jstor.org/stable/23011007

TESOL. (2008). *TESOL technology standards framework.* www.tesol.org/docs/default-source/books/bk_technologystandards_framework_721.pdf

Thompson, A. (2013). Intensive English programs in the United States: An overview of structure and mentoring. *TESOL Journal, 4*(2), 211–232.

Thompson, K. E., & Trigwell, K. R. (2018). The role of informal conversations in developing university teaching? *Studies in Higher Education, 43*(9), 1536–1547. 10.1080/03075079.2016.1265498

Thompson, R. L., Higgins, C. A., & Howell, J. M. (1991). Personal computing: Toward a conceptual model of utilization*. MIS Quarterly, 15*(1), 124–143.

Thumvichit, A., Varaporn, S., & Tuvachit, V. (2021). Language Education in Emergencies: A Systematic Review. *Journal of Language and Education, 7*(4), 183–197. https://doi.org/10.17323/jle.2021.12462

Todd, R. W. (2020). Teachers' perceptions of the shift from the classroom to online teaching. *International Journal of TESOL Studies, 2*(2) 4–16. https://doi.org/10.46451/ijts.2020.09.02

Tommerdahl, J. M., Dragonflame, C. S., & Olsen, A. A. (2022). A systematic review examining the efficacy of commercially available foreign language learning mobile apps. *Computer-Assisted Language Learning*, 1–31. DOI: 10.1080/09588221.2022.2035401

Trust, T., & Whalen, J. (2021). K-12 teachers' experiences and challenges with using technology for Emergency Remote Teaching during the Covid-19 pandemic. *Italian Journal of Educational Technology, 29*(2), 10–25. doi: 10.17471/2499-4324/1192

UCIEP. (2017). *UCIEP Bylaws*. https://uciep.org/docs/UCIEP_Bylaws_2017.pdf

UCIEP. (2017). *UCIEP Guidelines*. https://uciep.org/docs/UCIEP_Guidelines_2017.pdf

van Raaij, E. M., & Schepers, J. J. L. (2008). The acceptance and use of a virtual learning environment in China. *Computers & Education, 50*, 838–852. doi:10.1016/j.compedu.2006.09.001

van Tonder, S., & Steyn, G. M. (2018). Exploring role players' experiences of learning in higher education through a hybrid study approach: A case study. *Pertanika Journal of Social Science & Humanities, 26*(4), 2179–2194.

Varonis, E. M., & Gass, S. M. (1985). Non-native/non-native conversation: A model for negotiation of meaning. *Applied Linguistics, 6,* 71–90. doi:10.1093/applin/6.1.71

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly, 27*(3), 425–478. https://doi.org/10.2307/30036540

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly, 36*(1), 157–178.

Venkatesh, V., Thong, J., & Xu, X. (2016). Unified theory of acceptance and use of technology: A synthesis and the road ahead. *Journal of the Association for Information Systems, 17*(5), 328–376.

Wallace, W. M. (2003). *Factors affecting the size and growth of enrollment in university-governed intensive English programs in the United States*. Dissertation Abstracts International, (UMI No. 3101780).

Wang, Y. S., Wu, M. C., & Wang, H. Y. (2009). Investigating the determinants and age and gender differences in the acceptance of mobile learning. *British Journal of Educational Technology, 40*(1), 92–118. doi:10.1111/j.1467-8535.2007.00809.x

Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching, 31*, 57–71.

Warschauer, M. (2002). A developmental perspective on technology in language education. *TESOL Quarterly*, *36*(3), 453–475. https://doi.org/10.2307/3588421

Warschauer, M. (2000). The changing global economy and the future of English teaching. *TESOL Quarterly, 34*(3), 511–535. https://www.jstor.org/stable/3587741

Wedlock, B., & Trahan, M. P. (2019). Revisiting the unified theory of acceptance and the use of technology (UTAUT) model and scale: An empirical evolution of educational technology. *Research Issues in Contemporary Education, 4*(1), 6–20.

Whittle, C., Tiwari, S., Yan, S., & Williams, J. (2020). Emergency remote teaching environment: A conceptual framework for responsive online teaching in crises. *Information and Learning Sciences, 121*(5/6), 311–319. DOI 10.1108/ILS-04-2020-0099

Williams, M. D., Rana, N. P., & Dwivedi, Y. K. (2015). The unified theory of acceptance and use of technology (UTAUT): A literature review. *Journal of Enterprise Information Management, 28*(3), 443–488. http://dx.doi.org/10.1108/JEIM-09-2014-008

Wong, J. (2020). A pandemic in 2020, Zoom and the arrival of the online educator. *International Journal of TESOL Studies, 2*(3), 82–99. https://doi.org/10.46451/ijts.2020.09.19

Yoo, S. J., Han, S., & Huang, W. (2012). The roles of intrinsic motivators and extrinsic motivators in promoting e-learning in the workplace: A case from South Korea. *Computers in Human Behavior, 28*(3), 942–950. https://doi.org/10.1016/j.chb.2011.12.015

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