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HBCU Students' Experience With Remote and Blended Learning Amid Covid-19

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Abstract

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by

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MS, Walden University, 2020

BS, St. Mary's College of California, 1997

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

General Teaching Psychology

Walden University

May 2023

Abstract

Little peer-reviewed literature existed on how the transition from face-to-face instruction to emergency remote teaching (ERT), online learning, and blended learning impacted the education of historically Black college and university (HBCU) students amid the Covid-19 pandemic. The gap in the literature was significant given the longstanding challenges HBCUs faced, which threatened their existence, and the disproportionate effect Covid-19 had on minority populations. This interpretive descriptive qualitative study explored the experiences of 10 HBCU students from six HBCUs across the United States using Garrison et al.'s community of inquiry framework to understand the participants' perceptions of the teaching, social, and cognitive presences required to support ERT, online learning, and blended learning objectives. Four themes emerged: (a) the evidence of advancement from the early stages of ERT to a more stable online and blended learning environment; (b) the evolving perceptions of teaching, social, and cognitive presences in current online and blended learning; (c) the benefits and challenges of online and blended learning; and (d) the need for additional instructor training to maximize student learning and promote a sustainable teaching presence required for meaningful learning. Implications for social change include recommendations to help create a sustainable HBCU model through targeted faculty training to increase the teaching, social, and cognitive presences to boost student satisfaction and retention rates, attract a post millennial tech-savvy generation, and promote HBCU survivability in an unprecedented and highly competitive 21st-century post pandemic higher education recruitment era.

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Dedication

I dedicate this body of work to you—the participants—as you prepare to embark on a lifelong learning journey to change the world for good. Thank you for unselfishly giving your time and sharing your perceptions of your learning experiences during the Covid-19 pandemic. Consequently, this study is available to inform HBCU decision makers, educators, course developers, and other stakeholders committed to educational excellence. Further, your suggestions may be invaluable in helping to create a more sustainable model for HBCUs to survive when confronted with future threats to education in an unprecedented and highly competitive 21st-century post pandemic higher education recruitment era.

Best wishes to each of you.

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I am eternally grateful to my family—my wife, best friend, and confidant—thank you for your love, inspiration, prayers, and faith; I couldn't have done it without you being at my side. To my sister, who taught me to stand up for what's right and to be compassionate to others. To my four children, seven grandchildren, and my friends—thank you for your role in making my dream a reality. To my grandparents, one of whom was T.A. Marryshow, *Father of the West Indies Federation*; to my father, mother, and mother-in-law: trailblazers, loving and fiercely independent immigrants who sacrificed much to provide better opportunities for their children. You gave rise to a multigenerational family legacy committed to leaving this world a far better place than we inherited. We honor you and thank God for you. Rest in eternal peace.

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Chapter 1: Introduction to the Study

This interpretive descriptive qualitative study explored historically Black college and university (HBCU) students' experiences with emergency remote teaching (ERT), online learning, and blended learning amid the Covid-19 pandemic. I explored the phenomenon using Garrison et al.'s (2000) community of inquiry (CoI) theoretical framework to understand the participants' perceptions of the teaching, social, and cognitive presences required to support online and blended learning objectives. Although researchers had examined the issue in higher education, there was little or no peer-reviewed literature on how the transition impacted HBCU students. This gap in the literature was significant given the historical challenges HBCUs face and the disproportionate impact Covid-19 had on minority populations. Consequently, the investigation may have noteworthy implications for social change. This study focused on HBCU students who initially switched from traditional face-to-face instruction to ERT to contain the virus's spread and subsequently enrolled in online or blended education as HBCUs adapted pedagogies to safely co-exist with the virus. HBCU students who were enrolled in online or blended programs before Covid-19 were excluded from participation. Through the study's design, theoretical and conceptual frameworks, data collection, and analysis, the findings will add to the literature on the topic of HBCU students' experiences with ERT, online learning, and blended learning amid the Covid-19 pandemic. The student voices were central to the discussion, and exploring their experiences was essential to understanding the phenomenon from their perspectives. This introduction chapter provides an overview of the study's background, problem statement,

purpose statement, research and interview questions, framework, research design, significance, and the possible implications of the study.

Background

The first wave of the coronavirus (Covid-19) pandemic significantly impacted education globally, affecting 181 countries and more than 1.5 billion students (Lynch, 2020; McLear, 2021; United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2020a). A comprehensive literature review identified near-universal challenges impacting institutions' readiness to deliver 100% emergency remote education. Obstacles included a lack of instructor training (Anderson, 2020), students' unfamiliarity with e-learning systems (Alqahtani & Rajkhan, 2020), budget constraints affecting the procurement of computers and laptops, poor to no internet access, and a lack of emotional support (Alqahtani & Rajkhan, 2020). Sandoval-Lucero and Brownlee (2020) discussed the challenges confronting HBCUs and how administrators could avoid stagnation or failure by focusing on being student centered and helping students achieve their educational goals. Thomas and Spencer (2020) applied the five high-touch personal needs (i.e., challenge, commitment, control, creativity, and caring) and the constructivist emotionally orientated (CEO) model of web-based instruction to reflect on current practices and help administrators forge a path forward to meet students' needs. O'Keefe et al. (2021) took a holistic approach, gathering national stakeholders in a symposium to identify the threats and challenges confronting HBCUs amid the Covid-19 crisis. The researchers identified three themes—*student support*, *funding*, and *operations*—and developed a call to action to meet each.

However, there was scant literature on HBCU student experiences during the Covid-19 pandemic, which created an opportunity to explore the students' experiences with ERT, online learning, and blended instruction amid the pandemic. Using a broader search strategy provided a more in-depth review. To further understand the phenomenon from the HBCU students' perspective, I employed Garrison et al.'s (2000) CoI framework to explore their experiences and answer the research question. Researchers widely use CoI to investigate design adequacy and instructional delivery to support online and blended learning objectives. The study was necessary to illuminate HBCU students' educational experiences as their institutions adapted instructional delivery systems to avert virus spread. Further, the findings may have social change implications for HBCUs in the delivery of online instructional methodologies—particularly in times of environmental threats to education (Bozkurt & Sharma, 2020).

Problem Statement

The Covid-19 pandemic forced decision makers globally to suddenly close schools—abandoning traditional face-to-face instruction in favor of ERT to help contain the spread of the virus (Bozkurt & Sharma, 2020; Lynch, 2020; McLear, 2021; UNESCO, 2020a/b). However, many schools were ill equipped for the sudden transition because of the lack of internet access, teacher training, and transition plans. For example, higher education institutions (HEIs) were unprepared to help teachers develop and deliver online learning curricula to students remotely (Lynch, 2020). Further, students in rural areas could not access the internet (Baloran, 2020; Lynch, 2020; Sandvik, 2020), while others in urban and rural communities experienced financial hardship in obtaining

devices such as laptops (Alvarez, 2020). Students found the internet speed too slow to complete assignments, putting their educational goals at risk (Alvarez, 2020). Although Sandoval-Lucero and Brownlee (2020) discussed how one HBCU met students' needs during Covid-19, according to Smith (2020), most HBCUs did not have the resources to manage risks and build resilient systems, which may have placed students at even greater risk. Alexander (2020) acknowledged the unique challenges confronting HBCU students during the pandemic—as did Thomas and Spencer (2020)—and they offered strategies to mitigate them. However, researchers knew little about HBCU students' experiences with ERT, online learning, or blended learning amid the Covid-19 pandemic. For example, how did HBCU undergraduate students experience the mandated transition from face-to-face instruction to ERT? How did the students experience the further transition to online or blended instruction as HBCUs adapted pedagogies in response to the lingering virus? An aim of this study, therefore, was to examine this gap to achieve a fuller understanding of HBCU students' learning experiences amid the Covid-19 pandemic.

Purpose Statement

The purpose of this interpretive descriptive qualitative study was to explore HBCU students' experiences with ERT, online learning, and blended learning amid the Covid-19 pandemic using Garrison et al.'s CoI theoretical framework to understand the participants' perceptions of the teaching, social, and cognitive presences required for meaningful learning. The study applied to HBCU students who had to switch from face-to-face instruction to ERT during the pandemic to minimize virus spread and who subsequently enrolled in online or blended courses as HBCUs adapted pedagogies to

avert the virus's spread. Students who were enrolled in online or blended programs before Covid-19 were excluded from participation. The student voices were central to the discussion, and exploring their experiences was essential to understanding the phenomenon (Sandoval-Lucero & Brownlee, 2020; Smith, 2020).

Research Question

RQ. What are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive presences amid the Covid-19 pandemic?

Interview Questions

See Appendix A.

Framework

Theoretical Framework

This study used the CoI framework (Garrison et al., 2000) as its theoretical foundation to examine how HBCU undergraduate students who were enrolled in face-to-face instruction pre-Covid-19 experienced the mandated switch to ERT and the subsequent transition to online and blended learning amid the pandemic (McLear, 2021). The CoI framework is a *process* model of learning, grounded in a social-constructivist epistemology that assumes effective learning requires the development of a community of learners that supports meaningful inquiry (Garrison et al., 2000). The CoI theory focuses on creating deep and meaningful online learning experiences through three interdependent and overlapping presences: a *social presence* (SP), a *cognitive presence*, and a *teaching presence* (Decker, 2016a, 2016b, 2016c, 2016d; Garrison et al., 2000;

McLear, 2021). I used the CoI survey instrument to develop interview questions—allowing participants to answer the research question. The research question, interview questions, and CoI framework were aligned to allow robust inquiry.

Conceptual Framework

I viewed the phenomenon through a qualitative interpretive description contextual lens developed by Thorne et al. (1997) as an iterative process to improve clinical practice through pragmatic research to explore and integrate findings in the nursing field. Researchers have since adapted the concept to other practice settings, including the field of education (Kahlke, 2014). Investigators use interpretive description to develop research questions from the practice setting, and through sound methodological designs, they provide findings for use within the pertinent practice (Kahlke, 2014). The contextual lens allows researchers to make sense of data using thematic analysis after identifying codes, categories, and themes (Patton, 2015; Saldaña, 2021). In Chapter 2, I discuss the theoretical and conceptual frameworks in detail.

Nature of the Study

An interpretive descriptive qualitative design guided the study. In this methodology, knowledge is not absolute; it is a social construct with a common meaning shared between the participant and the researcher (Kahlke, 2014; McLear, 2021). The design does not "articulate a consistent set of theoretical assumptions" (Kahlke, 2014, p. 42). Instead, it guides the participant to the disciplinary and theoretical location (Kahlke, 2014; Thorne, 2016). For example, in this study, I developed interview questions grounded in CoI theory and qualitative interpretive description that would allow

participants to share their experiences with ERT, online learning, and blended learning amid the Covid-19 pandemic. The study's design gave me the flexibility to select the theoretical and conceptual frameworks that made sense given the research question and how best to explore it (Kahlke, 2014). The interview questions supported the overarching research question, which was as follows: What are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive presences in ERT, online learning, and blended learning amid the COVID-19 pandemic?

The study's design included a purposeful sampling of 10 undergraduate HBCU students based on data saturation, which created the opportunity for maximum variability in gender, discipline, and the number of years of college or university experience to generate thick, rich data (Kahlke, 2014; Saldaña, 2021). Although the sample size appeared small, interviews generated a fair amount of data (Rubin & Rubin, 2012). Therefore, data were analyzed using the Quirkos software program.

Eligible HBCU students were recruited for interviews through HBCU social media groups. The semi structured interview and open-ended interview questions highlighted their experiences with the phenomenon. The design included the informed consent agreement, in-depth interviews, field and interview notes, additional information offered by participants, transcription of recorded interviews, and validation of member-checking protocols (Patton, 2015; Saldaña, 2021). Appendix A lists the interview questions, and Appendix B contains the interview guide. All interviews were recorded and transcribed verbatim for accuracy and data tracking (Patton, 2015; Rubin & Rubin, 2012; Saldaña, 2021). To ensure no harm to participants, I explained the project's scope, available

options should participants feel harmed by the process, and the freedom to withdraw from the study—at any time, for any reason—without fear of consequences (American Psychological Association [APA], 2017). To protect participants' identities and confidentiality, participant identifiers were used from the onset of the investigation. All data were locked and secured as outlined in the *Ethical Principles of Psychologists and Code of Conduct* (APA, 2017).

In his seminal work, Crotty (1998) proposed four congruent and interlinked elements of a well-designed research framework: "(a) epistemology, or broad assumptions about the nature of knowledge; (b) theoretical framework, or philosophical stance; (c) methodology, or the broad research strategy; and (d) methods, or the particular techniques or procedures used to gather and analyze data." (p. 3)

This study's design incorporated the elements proposed by Crotty (1998) to ensure a vigorous and valid inquiry. First, I sought to explore, discover, and understand the phenomenon as experienced by the participants' socially constructed knowledge (Caelli et al., 2003). Staying close to the data, member checking helped to ensure my interpretation was valid and accurate. Further, my epistemology was that of a constructivist whose broad assumptions about the nature of knowledge were in alignment with the use of an interpretive descriptive qualitative design. Second, the study was grounded in both a theoretical (CoI) and a conceptual (interpretive descriptive qualitative) framework. Further, the interview questions were in alignment with the research question, purpose, and data points to robustly explore the phenomenon (see Table 1, Chapter 2). Third, the broad research strategy got at the core research question

based on the participants' experiences—grounded in CoI theory and interpretive descriptive qualitative design. Fourth, the techniques of data collection and analysis were constant and iterative—making sense of the data as told by participants in their own words, which were consistent with the best practices in qualitative research (Caelli et al., 2003; Kahlke, 2014; Saldaña, 2021; Sandelowski, 2000).

Definitions

It may be beneficial to define the following terms and concepts used in this study: *emergency remote teaching*, *historically Black colleges and universities*, *fully online learning*, *blended learning*, *community of inquiry framework*, *social presence*, *cognitive presence*, *teaching presence*, and *experience*.

Emergency remote teaching (ERT): ERT "is a temporary solution to an immediate problem" (Bozkurt & Sharma, 2020, p. ii), characteristic of an unplanned and immediate shift to ERT in response to interruptions such as wars, natural disasters, or pandemics. For example, ERT involved uploading educational content to teach remotely as schools were forced to stop in-person teaching to help contain the spread of the Covid-19 virus. ERT is not the same as *online learning*—the latter incorporating theories, purposeful planning, and designs to achieve educational outcomes.

Historically Black colleges and universities (HBCUs): HBCUs are institutions of higher learning established by former slaves in the 1860s to help overcome the institutional racism that prevented Blacks from attending predominately White schools (PWIs) (Bracey, 2017).

Fully online learning: Fully online learning is synonymous with *online* or *100% online learning*, which involves more than simply uploading educational content; rather, it is a learning process that provides learners autonomy, agency, responsibility, flexibility, and choice. “It is a complex process that requires careful planning, designing and determination of aims to create an effective learning ecology” (Bozkurt & Sharma, 2020, p. ii). Fully online learning uses web-based and social technology to deliver synchronous and asynchronous instruction through instructor-led or self-paced education programs (Moore et al., 2011).

Blended learning: Blended learning is a hybrid instructional model that incorporates elements of online and face-to-face instruction, combining these pedagogies to produce “an assimilation of new knowledge” (Tshabalala et al., 2014, pp. 102–103).

Community of inquiry (CoI) framework: The CoI framework involves the development of an intentional online learning community that incorporates three interdependent and overlapping presences (social, cognitive, and teaching) that work together to nurture the construction of knowledge (Garrison et al., 2000; Shea & Bidjerano, 2009).

Social presence (SP): The SP is the feeling of projecting oneself as a "real" person—and the degree to which one feels socially and emotionally connected to others in an online learning environment to forge a community of trust, open communication, interpersonal relationship development, and group cohesion (Decker, 2016b; Garrison et al., 2000). Open communication can occur freely between instructors and students or among cohorts. It can involve online discussions, group projects, and collaboration

activities. Influences such as emotions, feelings, and the degree of comfort in the learning environment may affect one's perception of the SP (Garrison et al., 2000). Therefore, projecting one's personality is a characteristic of SP (Garrison et al., 2000; Oh et al., 2018). The SP includes affective expression, open communication, and group cohesion.

Cognitive presence (CP): The CP is "the extent to which learners can construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry" (Garrison et al., 2000, p. 5). CP considers how students move through the learning process—how they approach new problems, grow in understanding, and convey it to their learning community (Decker, 2016c; Garrison et al., 2000). Categories include a triggering event, exploration, integration, and resolution. The goal of a CP is for students to experience a triggering event that leads to a deeper understanding and application of new knowledge to the learning process (Decker, 2016c; Garrison et al., 2000). The focus of CP is to help students develop the means to move beyond the early stages of learning—to the stage where learning has meaning and where they can understand and apply new concepts (Decker, 2016c; Garrison et al., 2000).

Teaching presence (TP): The TP is learner assessments of instructor actions to introduce, facilitate, and direct instruction to effect meaningful learning outcomes (Garrison et al., 2000; Shea & Bidjerano, 2009). Garrison et al. (2000) made a distinction between a "teacher presence" and a "teaching presence"—with the latter being the mechanism for establishing and stabilizing a community of shared responsibility and control. The TP represents the shifting role of the instructor who uses the technology to its fullest capability to engage the students in the learning activity through exploration by

introducing, facilitating, and directing instruction to effect educationally meaningful learning outcomes. (Decker, 2016d; Garrison et al., 2000). The three major categories under TP are instructional design and organization, facilitation, and direct instruction. Establishing TP means creating a learning experience for students to progress through the learning objectives and achieve outcomes with instructor facilitation, support, and guidance (Decker, 2016d; Garrison et al., 2000). Online instructors must be able to actively guide students through course materials, reinforce key concepts, and foster student engagement (Decker, 2016d; Garrison et al., 2000).

Experience: Experience is defined as "a representation and understanding of a researcher's or research subject's human experiences, choices, and options and how those factors influence one's perception of knowledge" (Given, 2008, p. 4).

Assumptions, Limitations, and Delimitations

Assumptions

In research, an assumption is the belief that presented information is true or plausible to peers and readers (Theofanidis & Fountouki, 2018). Assumptions associated with this study included the following:

- participants' truthful and honest response to interview questions.
- participants' agreement to complete the study.
- participants' eligibility for inclusion (see Chapter 3, Procedures for Recruitment, Participation, and Data Collection).
- a purposive sampling of 10 HBCU undergraduate students based on data saturation.

- the study's design, methodology, data collection, and analysis are appropriate to the investigation.
- the study is unbiased, relevant, and will add to the body of literature.

Assumptions were necessary to conduct a meaningful investigation and reach credible conclusions (Theofanidis & Fountouki, 2018). Confidentiality was preserved with the use of participant identifiers, and all data were password protected and locked in a file cabinet as outlined by the APA (2017). Such safeguards, along with participants' understanding that they could withdraw at any time without fear of consequences, may have helped them to answer questions truthfully and remain in the study (Simon, 2011).

Delimitations

Delimitations set limits or boundaries on research to keep studies from becoming unmanageable and are arguably within the researcher's control (Theofanidis & Fountouki, 2018). A major delimitation of this study was the selection of HBCU students who had to switch from face-to-face instruction to an ERT, online, and blended learning environment during the pandemic. A further delimitation was the exclusion of HBCU students who were already involved in an online or blended program before the Covid-19 pandemic. The reason for these delimitations was to define the target population based on the research question: What are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive presences amid the Covid-19 pandemic? The delimitations provided an opportunity for variability within the target population based on the participants' age, gender, field of study, and years of college or

university experience to narrow the scope of the investigation based on the research question while generating thick, rich data (Patton, 2015; Saldaña, 2021).

Limitations

Limitations are potential weaknesses in a study that are mostly outside the investigator's control (Theofanidis & Fountouki, 2018). Examples of common limitations are time, research design, statistical model constraints, and funding. As it applies to this study, a potential limitation was accessing participants in a Covid-19 environment as many students were completing higher education courses online in their homes because of schools' closure. To overcome this potential limitation, I recruited eligible participants through an invitation advertised on HBCU social media groups. Another potential limitation was that participants may have been unable to accurately recollect their online learning experiences because of the elapsed time between the event and the interview as changes in the economy, response to Covid-19, education delivery systems, and social trends could have reshaped the participants' memories. However, clearly worded interview questions and prompts may have served to delineate the learning experiences along a continuum from the initial transition to the most recent reality, providing a detailed trail of the learning experience over time. For example, the interview guide in Appendix B allowed participants to reflect on their experiences with ERT and the perceived transition to online or blended learning as applicable. Further, the interview questions allowed probing for each of the CoI presences in the participants' current online or blended learning experiences. To help meet the time constraints for the dissertation, recruitment efforts ended after attaining data saturation with 10 eligible

participants. Another potential limitation was that of participants' exhibition of self-reporting and researcher bias by answering the interview questions based on what they perceived that I wanted to hear or in ways they perceived as being socially desirable (Bergen & Labonté, 2020). I overcame these social desirability biases by ensuring privacy during the interview, taking time to explain the purpose of the study, confirming the participants' eligibility and the significance of their authentic experiences, stressing their confidentiality, and building rapport (Bergen & Labonté, 2020). Finally, the results may not have been transferable among HBCUs given the differences in pedagogy, instructional delivery design, and students' experiences with these systems. However, in qualitative research, the reader determines transferability based on their perception of the study's trustworthiness and the relatable conditions within their practice setting (Castleberry & Nolen, 2018). Therefore, readers can extract pertinent information for inclusion in their individual practice, as appropriate.

Significance

The purpose of this generic qualitative study was to explore HBCU students' experiences with ERT, online learning, and blended learning amid the Covid-19 pandemic using Garrison et al.'s CoI theoretical framework viewed through Thorne et al.'s (1997) conceptual lens of qualitative interpretive description to understand the participants' perceptions of the teaching, social, and cognitive presences required for meaningful learning. While the literature addressed the experiences of students in higher education, there was little research on the pandemic's effect on HBCU students. Alexander (2020) explored the unique challenges that HBCU students faced after

returning home from campus life (e.g., taking care of sick siblings or relatives, dealing with unresolved familial stress and trauma in the household, examining the intersection of Covid-19 and racial unrest, food insecurity, and health and economic disparities that can place a heavy burden on students of color). However, Alexander stopped short of the pandemic's effect on the participants' learning experience in an ERT or online learning environment. To understand the effect more broadly, it was necessary to expand the literature research beyond that on HBCU students, which generated the following observations:

1. Alqahtani and Rajkhan (2020) determined that the most critical success factors for online learning during Covid-19 were technology management, management support, students' knowledge and ability to use the systems, and a high degree of information technology (IT) from users and providers (i.e., instructors, students, IT support, and institutions) in delivering online education.
2. Alvarez (2020) focused on the experiences of learners who found themselves suddenly immersed in a fully online learning environment because of the threat of Covid-19. Alvarez uncovered four central themes: (a) poor to no internet access, (b) financial constraints, (c) a lack of technological devices, and (d) little affective or emotional support. Further, the author concluded that the students' desire for financial stability and affective support contributed significantly to interrupted learning engagement.

3. Lynch (2020) investigated HEIs with experience in online teaching and found that most were not ready to move from an existing 25% online developed curriculum to the 100% standard required in a fully online environment. The author cited a lack of preparedness—being caught off-guard without having the training and technology necessary for success either as an online learner or as an instructor suddenly responsible for delivering content remotely. While these studies illuminated some of the conditions at HEIs and the students' learning experiences amid Covid-19, researchers knew little about how the pandemic impacted HBCU students' learning specifically.

Lynch's study is significant in that it could have profound implications for HBCU students, educators, course designers, and other stakeholders responsible for the teaching, learning, and delivery of higher education online courses amid the Covid-19 pandemic (Alexander, 2020; Thomas & Spencer, 2020). Therefore, exploring the students' experiences in fully online and blended classrooms was critical to understanding the problem's ongoing scope, positive gains, and insight into future research (Baloran, 2020; McLear, 2021; Torun, 2020). Because HBCU students were central to the discussion, their experiences may contribute to social change by helping decision makers prepare better to confront traditional learning threats caused by wars, natural disasters, and pandemics (Bozkurt & Sharma, 2020; Dhawan, 2020).

Summary

From a global perspective, the Covid-19 pandemic affected 181 countries and more than 1.5 billion students (Lynch, 2020; UNESCO, 2020a, 2020b). While the

existing literature addressed the impact of the pandemic on higher education, very little peer-reviewed research existed on how the shift from face-to-face instruction to ERT, online learning, and blended instruction affected HBCU students. The aim of this study, therefore, was to uncover the experiences of this underserved population and contribute to the body of literature. I employed an interpretive descriptive qualitative design using Garrison et al.'s (2000) CoI theory to answer the research question: What are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive presences amid the COVID-19 pandemic? The study is significant in that it may have profound implications for social change by helping HBCU decision makers, teachers, and students prepare better to confront future threats to learning caused by wars, natural disasters, and pandemics (Bozkurt & Sharma, 2020; Dhawan, 2020).

In Chapter 2, my discussion will include, but will not be limited to, the literature search strategy used, the selected theoretical foundation and conceptual frameworks employed, and an exhaustive review of the literature as it applied to the phenomenon, challenges confronting HBCUs, and the strengths and weaknesses of how other researchers approached the topic.

Chapter 2: Literature Review

The first wave of the coronavirus (Covid-19) pandemic significantly impacted the field of education globally. Affecting 181 countries and more than 1.5 billion students, the pandemic suddenly forced all schools to abandon traditional face-to-face instruction in favor of ERT to help contain the virus's spread (Lynch, 2020; McLear, 2021; UNESCO, 2020a, 2020b). Although researchers examined the impact of the transition on higher education, there was little peer-reviewed literature on how the change impacted HBCU students. The purpose of this generic qualitative study was to explore HBCU students' experiences with ERT, online learning, and blended learning amid the Covid-19 pandemic using Garrison et al.'s CoI theoretical framework viewed through Thorne et al.'s (1997) conceptual lens of qualitative interpretive description to understand the participants' perceptions of the teaching, social, and cognitive presences required for meaningful learning. The overarching research question was the following: What are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive presences amid the COVID-19 pandemic? Excluded from the study were students who were enrolled in online or blended courses pre-Covid-19. The student voices were central to the discussion, and exploring their experiences was essential to understanding the phenomenon (Sandoval-Lucero & Brownlee, 2020; Smith, 2020).

Because the focus of this study was to explore HBCU students' experiences with ERT, online learning, and blended learning amid Covid-19, a significant gap existed in relation to this demographic, which allowed a fuller examination of the phenomenon

(Adedoyin & Soykan, 2020; Sandoval-Lucero & Brownlee, 2020). Consequently, in preparation for the study, immersion in the literature was necessary to understand the phenomenon more generally before uncovering the HBCU students' learning experiences amid the pandemic.

Literature Search Strategy

I conducted a thorough review of the literature using the following databases and search engines: Thoreau (education, ethnic and cultural studies, politics and government, psychology, social science and humanities, and technology), Educational Resources Information Center (ERIC), PsycINFO, Google Scholar, and ProQuest Dissertations and Theses. Direct access to these databases was through Walden University's online library. Garrison et al.'s (2000) CoI provided the theoretical framework for the investigation. Key search terms and phrases included *COVID-19 or coronavirus or 2019-ncov* AND *education or school or classroom or education system*; *HBCUs* AND *Covid-19* AND *emergency remote teaching or online learning or blended learning*; *student experiences or perceptions or perspectives* AND *online education* AND *Covid-19*; and *student learning* AND *e-learning or online learning or blended learning* AND *community of inquiry*. Relevant articles provided resources for additional reviews. The Covid-19-related review included sources from 2019 to 2022, given the study's topic. However, reports about HBCU background and the CoI framework were limited to those published within the past 5 years. Because there were few reports of how Covid-19 impacted HBCU students' learning, I expanded the search terms to allow a broader understanding of the phenomenon within higher education. Nonetheless, the literature review provided

deep insight into the history of HBCUs and the challenges confronting their delivery of educational systems—including online education.

Organization of the Literature Review

The literature review begins with the conditions that led to the immediate transition from traditional face-to-face instruction to ERT, which necessitated schools' closure to avoid spreading the Covid-19 virus. The review continues with the challenges, opportunities, and recommendations associated with the transition to allow HEIs to pivot to a planned and sustainable fully online learning environment to combat interruptions to learning caused by environmental threats. I then examine the unique challenges confronting HBCUs, which disproportionally affected students of color during the pandemic—and the HBCUs' national call to action to overcome these challenges. A discussion on Garrison et al.'s (2000) CoI theoretical framework used in this study follows, along with a review of articles that examined the phenomenon through this framework published within the past 5 years. I then conclude with a chapter summary.

Conditions That Necessitated the Transition to Emergency Remote Teaching

Well before the protocols of vaccines, boosters, mask-wearing, frequent handwashing, social distancing, and remote learning—in Spring 2020, stories began to emerge about a deadly illness overseas called Covid-19 (Dorsey-Elson et al., 2021). However, by mid-March 2020, the pandemic affected 181 countries and more than 1.5 billion students globally, suddenly forcing all schools to abandon traditional face-to-face instruction in favor of ERT to help contain the virus's' spread (Bozkurt & Sharma, 2020; Lynch, 2020; McLear, 2021). ERT is "a temporary solution to an immediate problem"

(Bozkurt & Sharma, 2020, p. ii), characteristic of an unplanned and immediate shift to ERT in response to interruptions caused by environmental threats such as wars, natural disasters, or pandemics. The transition impacted 5,300 colleges and universities in America (Dorsey-Elson et al., 2021; McLear, 2021), including 107 HBCUs and over 228,000 HBCU-attending students (McLear, 2021; U.S. Department of Education [DoE], 2021). However, the shortage of literature about how the transition affected HBCU students prompted the need to explore the phenomenon more comprehensively, given the challenges that confront HBCUs (see Challenges Confronting HBCUs, this chapter, for discussion).

Challenges, Opportunities, and Recommendations Associated With the Emergency Remote Teaching Transition

The response to the pandemic—believed to be the largest disruption to schooling in history (UNESCO, 2020a, 2020b)—created substantial pressure for policymakers, education administrators, instructors, staff, students, and parents. Most did not have experience with online education and had minimal support in transitioning to ERT (Hussain et al., 2020). Hodges et al. (2020) made a significant distinction between ERT and online education. Whereas online education is the culmination of decades of adequate planning, designs, theories, and models, the researchers argued that ERT was a crisis response to an immediate environmental threat that does not lend itself to employing the principles of online education. Therefore, the migration processes some HEIs used may have been questionable as they may have been limited to media delivery without incorporating instructional theory or other practices associated with online

education (Adedoyin & Soykan, 2020). Consequently, researchers argued that ERT should be viewed for what it is—an emergency teaching platform—and should not be confused with online education (Bozkurt & Sharma, 2020).

Common themes that emerged during the transition to ERT included poor to no internet access, financial constraints, and lack of technological devices—the cumulative effect of which led to a digital divide for students of lower socioeconomic status, some of whom needed affective or emotional support (Alvarez, 2020; Baloran, 2020; Ojo & Onwuegbuzie, 2020). Further, there was a need for a high level of IT from instructors, students, and universities (Alqahtani & Rajkhan, 2020), as many HEIs were unprepared to handle the transition (Apostol, 2020; Lynch, 2020). In another study, Alvarez (2020) concluded that students' psychological stress about finances and a lack of affective support contributed to interrupted learning engagement—and the lack of teacher presence because of missing materials and instructor-student interface also contributed to students' concerns (Bartz, 2020). Therefore, students' well-being also emerged as a common theme (Adedoyin & Soykan, 2020; Clabaugh et al., 2021). Clabaugh et al.'s (2021) investigation revealed the students' stress and concern about how the pandemic and the disruption to their learning would affect their academic futures—and students of color reported higher stress and uncertainty levels than Whites. Although the literature pointed to the challenges and inequities in education caused by the pandemic (e.g., digital divide, socioeconomic status, and lack of emotional support), more research was needed to determine the extent to which such conditions affected the quality of HBCU students' online and blended education. Therefore, while literature supported inherent strengths, a

research gap existed that this study was conducted to fill. Consequently, in this qualitative study, I aimed to explore HBCU students' experiences with ERT, online learning, and blended instruction amid the pandemic.

Schools employed different ERT measures to adopt the motto #Learning Never Stops to preserve the education system (UNESCO, 2020a, 2020b). However, not all HEIs were prepared for the immediate transition. In an analysis conducted by Lynch (2020), the researcher focused on HEIs with experience in online teaching in a Covid-19 environment. Lynch found that the institutions were unprepared to teach remotely because of insufficiently trained teachers who lacked the technological resources required to be successful in an online learning environment. Researchers documented near-universal problems associated with the sudden transition to ERT, including the most critical success factors for online learning during COVID-19: technology management, institutional support, and student and instructor competence with online learning systems (Alqahtani & Rajkhan, 2020). Further, institutions struggled with online curriculum development and the lack of internet and laptops outside of classrooms (Ray, 2020). Baloran's (2020) investigation revealed similar student concerns about their schools' implementation of online learning because of slow internet and financial constraints.

Moreover, Apostol (2020) examined the impact of the pandemic crisis on the learning process among students during the early phase of Covid-19 and found that while most students agreed with reducing the spread of the coronavirus, two out of three students believed the educational system was not prepared to transfer teaching activities online. Consequently, several challenges existed, including panic-related anxiety, racial

and economic differences in access to resources, and many untrained instructors responsible for delivering high-quality online education (Adedoyin & Soykan, 2020). Challenges often reveal opportunities for improvement, and the pandemic forced change-resistant HEIs to accept modern technology (Dhawan, 2020). When administrators asked instructors to make the transition within a week (with little or no guidance), teachers looked to each other using social media for answers. Creating #RemoteTeaching and #RemoteLearning, the instructors generated a wealth of information and ideas to facilitate the transition (Carpenter et al., 2020). Researchers also made several recommendations to help HEIs move to a more stable and sustainable model. Suggestions included partnering with telecommunication companies to provide free or affordable internet to students and faculty and investing in technology and instructor training (Adedoyin & Soykan, 2020). Further, Toquero (2020) recommended collaborating with shareholders to develop best practices, while Anderson (2020) stressed creating a student-teacher presence and a sense of community. For long-term sustainment, Adedoyin and Soykan (2020) suggested mining the emerging literature for novel ideas to design online models that promoted student learning and reduced instructor workload. Dhawan (2020) examined the strengths, weaknesses, opportunities, and challenges (SWOC) analysis of ERT modes during the height of the Covid-19 outbreak and suggested using scenarios of "all the critical and challenging situations which may occur" (p. 17) to eliminate obstacles to learning through practice.

Further, Dhawan encouraged HEIs to develop critical student skills such as problem solving, critical thinking, and resilience to help students and HEIs survive in a

crisis. Lynch (2020) provided suggestions for rapid response and iterative course design options to overcome challenges; however, researchers recommended that HEIs balance technology procurement with educational processes and maintenance costs to ensure affordability for all students (Dhawan, 2020). On the other hand, Ray (2020) examined the challenges and adaptations of higher education in a post-Covid-19 world. He found emerging trends in online learning that could facilitate learning through smartphones, tablets, and laptops. However, internet access for students in rural areas remains a problem that governments must solve. Therefore, the investigation was warranted to examine how the Covid-19 pandemic impacted the quality of HBCU students' online or blended learning. The research question was as follows: What are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive presences amid the COVID-19 pandemic? The question allowed the unearthing of the participants' experiences and enabled them to tell their stories in their own words (Saldaña, 2021). For example, the in-depth interview questions (Appendix A) allowed me to elicit thick, rich data from participants during the exploration of their experiences with ERT, online learning, and blended instruction. The data supported each of the CoI presences, which can be used to inform the education setting (Kahlke, 2014). To help HEIs successfully transition from face-to-face instruction to ERT, Illanes et al. (2020) suggested adopting a flexible, multidisciplinary approach to meet fast-changing conditions. The concept consisted of four strategies:

- *Discover* by forming an accurate view of the situation and how it is changing, while integrating the latest epidemiological, economic, and political

information. Seek input from senior leaders, students, faculty, staff, parents, alumni, and other stakeholders.

- *Decide* what to do, quickly, while ensuring adequate stress-testing of hypotheses and adherence to university and community values. Do not wait until all the facts are in to act; they may never be known completely. In a crisis, good now is better than perfect later.
- *Design* a portfolio of actions, immediate and strategic, that minimizes false optimism, maximizes speed, and installs a pragmatic operating model. Be ready to change timelines and budgets as circumstances change.
- *Deliver* solutions in a disciplined, efficient way. Remember that small failures can lead to bigger ones, so stay flexible. (Illanes et al., 2020, pp. 2–3)

The goal, the authors argued, was to focus on keeping safety and essential operations going, while planning more effective and strategic long-term decision-making systems.

Hussain et al. (2020) also recommended that during ERT, instructors should not overwhelm students with excessive coursework, assignments, and assessments to avoid adding stress caused by the disruption. Instead, instructors should place top priority on the students' well-being. Focusing on developing students' autonomy and time management skills by fostering values of commitment, adaptation, integrity, and self-reliance was another goal, as these skills are necessary for navigating any online learning experience (Hussain et al., 2020). Further, instructors were encouraged to create student-instructor and student-student communication channels to help alleviate students' feelings of isolation and improve their participation and confidence about the emergency

remote learning experience. Despite the challenges, HEIs transitioned to ERT by partnering with telecommunication companies to provide internet service to students and faculty, obtained laptops and other devices to access classrooms remotely, and collaborated to develop best practices for successful academic outcomes (Carpenter et al., 2020; Durak & Çankaya, 2020).

Transitioning From Emergency Remote Teaching to Online Education

As stated previously, ERT and online education were not synonymous. A significant difference between the two types of instruction hinged on their purpose, duration, and quality of education. ERT was a crisis response to an immediate environmental threat. However, the longer the disruption, the greater the movement to a more sustainable online learning environment along the same continuum. Adedoyin and Soykan (2020) put it this way: "Educators need to take advantage and engage major stakeholders in education to create a novel market for instructional delivery, and the longer the pandemic lasts, the more likely online learning becomes a generally acceptable mode of teaching and learning" (p. 6). The lingering coronavirus (e.g., Alpha, Delta, and Omicron variants) highlighted this need. Before the pandemic, online education was believed to be an alternative path for a group of learners who were older and had more work and family responsibilities than on-campus students (Hussein et al., 2020). However, in a matter of weeks, ERT became the sole global solution to providing uninterrupted education. As the coronavirus continued to impact face-to-face instruction, many HEIs became more competent in operating along a continuum toward an online or blended environment (Schultz et al., 2020; Zuo et al., 2021).

Challenges Confronting HBCUs

Background

After the Civil War, the Morrill Act of 1890 paved the way for creating HBCUs in the Southern states. The Act required the Southern states (Alabama, Florida, Georgia, Louisiana, Mississippi, South Carolina, Texas, Arkansas, North Carolina, Tennessee, and Virginia) that seceded from the union and formed a separate government to provide a land-grant institution for Black students (US DoE, 2021). The Act was necessary because the Southern states prohibited Blacks from attending White schools. Established by a network of Black churches, the Freedman's Bureau, missionaries, and philanthropists, most HBCUs emerged during the Reconstruction Era (Smith et al. 2020). However, the practice of not allowing Blacks' enrollment in Predominately White Institutions (PWIs) (other than sports scholarships) continued well into the 1970s (US DoE, 2021). Therefore, given its mission, HBCUs enrolls a higher number of underrepresented students, including low-income, first-generation, and academically underprepared individuals (O'Keefe, 2021). Because HBCUs provide a safer and more welcoming learning environment for Blacks than PWIs, they earned reports of greater student satisfaction, faculty and social support, positive self-images, great racial pride, and better psychosocial adjustment (Smith et al., 2020).

Throughout its history, HBCUs continued to be at the center of the Black struggle for equality and dignity—producing doctors, dentists, military officers, and science, technology, engineering, and mathematics (STEM) graduates in proportionately higher numbers than Black graduates at non-HBCUs. For example, Broady et al. (2017) reported

a 39 percent increase in bachelor's degrees at HBCUs compared to 33 percent for all schools; and a 67 percent increase at the doctoral level compared to 14 percent for all schools. However, despite its successes, HBCUs continued to struggle because of a long-standing history of undermining their mission through ongoing efforts to close or merge the institutions using political tactics like underfunding, which negatively impacted HBCUs' ability to maintain accreditation and operate as intended (Broady et al., 2017). The funding for HBCUs and PWIs was never equal or fair (Broady et al., 2017), manifested in most HBCUs as having poorer facilities and significantly reduced budgets compared with traditionally White institutions (US DoE, 2021). Today, decision-makers fund HBCUs based on their institutional outcomes like accreditation, enrollment, and assessment (Crawford, 2017). Therefore, HBCUs' reduced budgets place them at greater risk for closure or merger with PWIs (Bracey, 2017; Broady et al., 2017; US DoE, 2021). Reduced budgets and understaffed faculty also limited HBCUs' ability to offer as many online courses as their counterpart PWIs and keep pace with ever advancing changes in "technology infrastructure, training, equipment, and support" (Smith et al., 2020, p. 18). Further, the HBCU characteristic of being welcoming, nurturing, and high touch may have hampered their need to delve into the digital age because of a perception that online learning was more impersonal and emotionally disconnected (Smith et al., 2020). Consequently, PWIs with state-of-the-art technology targeted HBCU student populations for recruitment, further reducing their eligible applicant pool. These complex challenges made this study timely and significant in exploring HBCU students’ experiences with

ERT, online, and blended education following an unexpected mandate to immediately transition from traditional face-to-face instruction amid the Covid-19 pandemic.

Despite the challenges confronting HBCUs (lower average admission requirements, less funding for institutional scholarships, limited technological resources, and smaller operating budgets), HBCUs continued to fight for survival with financial contributions from fundraising, alumni, and philanthropists. HBCU budgets provided higher educational opportunities not only for African Americans but for students of all races (Broady et al., 2017; Sandoval-Lucero & Brownlee, 2020). For example, Bluefield State College, an HBCU in West Virginia, had a 90 percent White student population and a White president (Bracey, 2017). In contrast, St. Philip's College in Texas was the nation's only HBCU and Hispanic Serving Institution (HSI), with 60 percent Latinx students, 29 percent White, and 12 percent African American or Black (Sandoval-Lucero & Brownlee, 2020; Morris, 2017). How some HBCUs responded to the added challenges created by Covid-19 are discussed in the next section.

HBCUs' Response to Covid-19

Sandoval-Lucero and Brownlee (2020) discussed the challenges confronting St. Phillip's College in San Antonio, Texas. The main challenge was overcoming the ravages of poverty. For example, the digital divide—crystalized due to poverty and the lack of internet and technology—prevented completion of coursework. Consequently, the school instituted policies to eliminate academic costs which helped retention and student success. For example, they stopped all test assessment fees, awarded free credit hours if making satisfactory progress, and erased student debt of $500 or less.

Thomas and Spencer (2020) applied the five high-touch personal needs (i.e., challenge, commitment, control, creativity, and caring) and the CEO Model of Web-Based Instruction to reflect on current practices. Their research helped administrators forge a path forward by providing rules on netiquette, collaborative assignments, timely and specific feedback, humor, and fun activities which reduced fear and anger, and increased feelings of safety and control.

Given the long-standing challenges confronting HBCUs, the Covid-19 pandemic represented a significant risk to their mission. It also presented opportunities for unparalleled introspection and innovation (O'Keefe, 2021). For example, a panel of national stakeholders (including HBCU presidents, leaders from the community, business, government, and representatives from philanthropic and accrediting organizations) participated in an HBCU Action Nation Town Hall. The purpose was to identify the potential threats and challenges facing the institutions caused by the pandemic and discuss strategies to promote HBCU long-term sustainability (O'Keefe et al., 2021). The panelists identified three themes—*student support*, *funding*, and *operations*—and developed a call to action to meet each.

Intensified by Covid-19 and the social unrest, student support emerged as an even more serious concern. The communication plan required faculty to stay in touch with students to assess their safety and well-being, determine their financial and physical ability to attend classes, pinpoint equitable access to technology, and promote the rich cultural and experiential opportunities students expected (O'Keefe et al., 2021). Access to technology represented a significant threat to students and faculty. To meet the

technological challenges, HBCUs partnered with government, businesses, and philanthropists to secure laptops for students and faculty and provided hotspots to rural areas. The panelists also explored long-term sustainability operations, including an appeal to broader domestic and international student populations.

Smith et al. (2020) conducted an exploratory study of how one department at Morgan State University (MSU), the largest HBCU in Maryland, pivoted from face-to-face instruction to ERT during Covid-19. Before the pandemic, the department conducted a student input survey and began implementing a more competent online presence based on the feedback. For example, they hired a social media and digital spaces expert to help guide the transition. When Covid-19 forced the school's closure, it created the opportunity for the department to accelerate faculty training—emphasizing retention, active learning, and online collaboration to ERT. Four lessons emerged from Smith et al.'s investigation. First, it was critical to establish a sense of community early by creating an online identity and presence to meet students' academic, social, and well-being (Garrison et al., 2000). There was no need to create a 'new' online identity; instead, instructors should capitalize on transferring the high touch qualities, characteristics of HBCUs to an online presence to foster a virtual connectedness among faculty, staff, and students. Second, show compassion by teaching to the whole person. Instruction was more than covering lecture material. It was listening, understanding, and responding to students' experiences that could affect their motivation and emotional well-being. Third, community engagement and community-based participation were critical to co-create creative ideas before, during, and after each course. It gave students agency, flexibility,

and responsibility over their learning. Fourth, HBCUs should keep growing digitally by regularly attending virtual workshops and webinars to stay abreast of changes in technology and the impact on online education.

As one faculty member commented: "Emergency remote teaching provided a space for students and faculty to learn and explore new ways of education beyond the traditional constraints of space and time." (Smith et al., 2020, p. 27). Smith et al.'s study provided a framework for other HBCUs to consider——suggesting other HBCUs may not have had the tools, expertise, or technology to overcome challenges associated with the transition to 100 percent online education. Such unpreparedness could have negatively impacted the quality of the students' education (Adedoyin & Soykan, 2020; Alvarez, 2020; Hussain et al., 2020). Nonetheless, Smith et al. (2020) demonstrated how to overcome challenges like embracing technology to meet students' needs without compromising the traditional characteristics that make HBCUs appealing to African Americans and other minority students. Despite the strength of these inquiries, a significant gap existed since there was little or no peer-reviewed literature on how these strategies affected the quality of HBCU students' education during the pandemic. Since this study aimed to explore HBUC undergraduate students' experiences with ERT, online, and blended learning amid the Covid-19 pandemic, it provided an opportunity for students to elaborate on the quality of their educational experiences—addressing the gap and adding to the literature. In the next section, I discuss Garrison et al.'s (2000) CoI theoretical framework, along with a review of recent articles that examined online education through the CoI framework.

Theoretical Foundation

I used Garrison et al.'s (2000) CoI framework as the theoretical foundation to examine how HBCU undergraduate students enrolled in face-to-face- instruction pre-Covid-19 experienced the mandated switch—initially to ERT—and subsequently to fully online and blended learning amid the pandemic (McLear, 2021). CoI theory began with the goal of establishing a theoretical framework for Canada's first graduate level distance learning (DL) courses in Communications and Technology using teleconferencing—a novel platform (Garrison et al., 2010). Before that time, DL focused on individual learning through correspondence courses and did not encompass collaboration. Therefore, DL was not considered as effective as face-to-face instruction; and the new course required validation and accreditation (Garrison et al., 2010). While emerging technology offered an opportunity to construct a distance learning theory—the concept had to be parsimonious—given the complexity of the task (Anderson & Dron, 2011). Further, the theory had to compliment the course content, teaching, and technology support to "connect the human issues around online, text-based communication, the teaching issues associated with the use of this mode of education, and the overall cognitive goals of this (and any) graduate program." (Garrison et al., 2010, p.5). In formulating the theory, Anderson et al. (2000) borrowed the phrase "community of inquiry from Lipman (1991)" (Garrison et al., 2010, p. 5) who was theoretically aligned with Dewey's belief that inquiry was a social activity with a CP. Lev Vygotsky also shared a similar philosophy (Anderson & Dron, 2011). Dewey theorized that a CP must exist to have a worthwhile education (Swan et al., 2009). Therefore, designing

collaboration into the CoI framework was crucial. The definitions of the social, cognitive, and teaching presences are briefly restated below:

1. *Social presence* (SP): The feeling of projecting oneself as a "real" person in an online learning environment in which learners can identify with each other in a community of trust, open communication, interpersonal relationship development, and group cohesion. Projecting one's personality is a characteristic of social presence. (Garrison et al., 2000; Oh, et al., 2018).
2. *Cognitive presence* (CP): "The extent to which learners can construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry" (Garrison et al., 2000, p. 5).
3. *Teaching presence* (TP): Learner assessments of instructor actions to introduce, facilitate, and direct instruction to effect meaningful learning outcomes. (Decker, 2016d; Garrison et al., 2000; Shea & Bidjerano, 2009). Garrison et al. (2000) made a distinction between a “teacher presence” and a “teaching presence”—with the latter being the mechanism for establishing and stabilizing a community of shared responsibility and control. The TP represented the shifting role of the instructor who used the technology to its fullest capability to engage the students in the learning activity through exploration.

The greater the presence, the greater the fidelity as the three presences work together to support each other, making the overall learning experience more meaningful. The SP was believed to be a mediator between cognitive and teaching presence (DeNoyelles et al.,

2014; Whiteside et al., 2017). The CP was most associated with student satisfaction and success (Hosler & Arend, 2012; Yang et al., 2016), and the TP was believed to be the most significant value to students (Hodges & Cowan, 2012; Preisman, 2014).

Anderson and Dron (2011) traced the evolution of CoI since its conception and noted that pedagogical approaches grew in tandem with theory (i.e., cognitive-behaviorist, social-constructivist, and connectivism) and the evolution of technology. For example, early DL correspondence programs delivered by mail were based on text and cognitive-behaviorist theory. As new technologies came into existence, pedagogical approaches and theories also evolved (e.g., computing conferencing and social constructivism) to address advancements in psychology and technology. However, Anderson and Dron conceded that the theories built upon—not replaced each other—as each had inherent strengths and weaknesses depending on its application.

Although Archibald (2013) and other researchers confirmed the CoI construct validity, Garrison (2017) advocated for "continual development and refinement of both the framework and its associated instrument" (Dempsey & Zhang, 2019, p. 62) to bring more clarity and rigor to the model. As it currently stands, CoI continues to evolve and remains one of the most widely used models in the design and study of online learning environments (Halverson et al., 2014; Garrison, 2017). A Google Scholar search of the community of inquiry framework resulted in about 2,7400,000 results, and researchers used it extensively in qualitative, quantitative, and mixed methods methodologies across several online and blended instructional domains (Chang-Tik, 2020; Lim & Richardson,

2021). Therefore, the CoI theoretical framework was ideally suited to investigate the phenomenon and answer the research question.

Conceptual Framework

The conceptual framework of the study was based in qualitative interpretive description which was developed by Thorne et al. (1997) as an iterative process to improve clinical practice through pragmatic research to explore and integrate findings in the nursing field. Researchers have since adapted the concept to other practice settings including the field of education (Kahlke, 2014). Qualitative investigators used interpretive description to develop research questions from the practice setting—and through sound methodological designs—provided findings for use within the pertinent practice (Kahlke, 2014). By definition, a generic qualitative approach is not guided by explicit theory, assumptions, or methodologies (Caelli et al. 2003). Further, generic qualitative studies can stand alone (Kahlke, 2014). However, to achieve the rigor proposed by Lincoln and Guba (1985), Thorne et al. (2004) outlined three tenets that must exist:

1. There are multiple constructed realities that can be studied only holistically. Thus, reality is complex, contextual, constructed, and ultimately subjective.
2. The inquirer and the "object" of inquiry interact to influence one another; indeed, the knower and known are inseparable.
3. No *a priori* theory could possibly encompass the multiple realities that are likely to be encountered; rather, theory must emerge or be grounded in the data. (p. 3).

The following examples of research using a generic qualitative approach embodies these principles. Atkinson (2019) conducted a study using generic qualitative inquiry to understand how urban parents of children diagnosed with ADHD internalized an online training program to educate them on handling the disorder. Through individual and shared realties, the investigator analyzed the data using thematic analysis and found that parents were more supportive of their children's learning. The findings had significant social change implications for training urban parents of ADHD children to be more involved in education. In another study, Makoelle (2020) employed a generic qualitative approach to explore the transition of Kazakhstan schools toward a more diverse student population. The researcher used semi structured interviews to collect data from administrators and parents—and through Ainscow's levers of change theoretical lens—determined that the concept of inclusive education is yet to be realized. Makoelle's study had significant implications for the Department of Education and other stakeholders responsible for providing inclusive education for all students. Other generic qualitative research included the exploration of social workers' capacity to build camaraderie and collaboration in a community of learning (Brake & Kelly, 2019) and the efficacy of online education for pre-service teachers (Gómez-Galán et al. 2020).

Similarly, this study benefited from the selected semi structured interview questions, grounded in CoI theoretical and generic qualitative conceptual frameworks, to guide the inquiry (see Table 1). Appendix A contains 10 interview questions based on the CoI theoretical framework to probe each of the three presences—*teaching*, *social,* and *cognitive* and explored HBCU students' experiences with the phenomenon related to the

education setting (Kahlke, 2014). The researcher developed the first three questions to frame the participants' experiences in the context of the phenomenon by instructional methodology. The last three questions—also researcher-developed based on the literature review—allowed collective thematic analysis to answer the research question and pinpoint the most current salient participants' online learning experiences (positive and negative) with the potential for them to inform online delivery methods (Garrison et al., 2000; Kahlke, 2014; Thorne et al., 1997). The researcher created the questions to allow students to demonstrate the development of their critical skills like problem-solving, critical thinking, and evaluation—helping them and their HBCUs to survive in a crisis (Dhawan, 2020). The interview questions also reflected the participants' learning experiences with ERT, online, and blended instruction—which helped to triangulate their encounters within the context of the overlapping CoI presences. Appendix B contained the Interview Guide and Table 1 illustrated the research design alignment for the study.

Table 1

Research Design Alignment

Research problem, purpose, and framework	Research question (RQ), method, and design	Data collection tool	Data points/interview questions	Data sources
Problem: HBCU students' experiences with emergency teaching, online learning, and blended learning amidst the ongoing pandemic are largely unknown. Purpose: To explore HBCU students' experiences with emergency teaching, online learning, and blended learning amidst the Covid-19 pandemic. Frameworks: Theoretical: Community of inquiry (Garrison et al., 2000). Conceptual: Interpretative description (Kahlke, 2014; Thorne et al., 1997).	RQ: What are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive presences amid the Covid-19 pandemic? Method: Generic qualitative Design: Interpretative description (Kahlke, 2014; Thorne et al., 1997)	Interpretative description CoI—*Teaching presence* CoI—*Social presence*	1. Did you experience the mandatory shift from *in-person* classroom instruction to *emergency remote teaching* to help stop the spread of Covid-19? If so, what is your perception (if any) of how the *emergency remote teaching* impacted your education? 2. Did you experience *online learning* during Covid-19? If so, what is your perception (if any) of how online *learning* impacted your education? 3. Did you experience *blended learning* during Covid-19? If so, what is your perception (if any) of how blended *learning* impacted your education? 4. Can you provide an example of how the instructor provided clear instructions on how to participate in course learning activities? 5. Can you provide an example in which the instructor helped to keep the course participants engaged in productive dialogue? 6. Can you provide an example of how the instructor designed the lessons so that you remained engaged and participated in the discussions? 7. Can you give an example of how getting to know other course participants gave you a sense of belonging in the course? 8. Can you give an example of how it made you feel when disagreeing with other students while maintaining a sense of trust?	Researcher developed questions (#1-3; 14-16) CoI-based questions (#4-13) A purposive sampling of 10-12 eligible participants (or until data saturation occurs) Field and interview notes Additional information offered by participants Transcription of recorded interviews Validation of member-checking protocols Reflexive journal (Patton, 2015; Saldaña, 2021)

Research problem, purpose, and framework	Research question (RQ), method, and design	Data collection tool	Data points/interview questions	Data sources
			9. Can you provide an example of when online discussions helped you to develop a sense of collaboration?	
		CoI—*Cognitive presence*	10. Can you provide an example of how course activities increased your curiosity to learn?	
			11. Can you provide an example of using a variety of information sources to explore problems posed in this course?	
			12. Can you provide an example of how combining new information helped you answer questions raised in the course activities?	
			13. Can you provide an example of how you applied the knowledge created in this course to your work or other non-class-related activities?	
		Interpretative description	14. What features of your current online learning are you satisfied with, and why?	
			15. What features of your current online learning are you dissatisfied with, and why?	
			16. What features of your current online learning do you want to be improved, and why?	

Note. Table adapted from the Prospectus Alignment Design, Walden University.

The interviews were the primary unit of analysis and supplemental data points included additional information offered by participants, member-checking, interview notes, and reflexive journaling (Kahlke, 2014; McLear, 2021; Saldaña, 2021). Data analysis occurred constantly and concurrently upon collection as a comparative and iterative method of generating a broad understanding of the data to position the findings and explanatory factors within the CoI framework (Castleberry & Nolen, 2018; Thorne, 2016). Descriptive coding was used to initially summarize the basic topic of a narrative

passage in a word or short phrase (McLear, 2021; Patton, 2015; Saldaña, 2021). Second Cycle coding and further analysis and interpretation, including a thematic analysis grounded in CoI theory - guided the study's content analysis (McLear, 2021; Saldaña, 2021). Garrison et al.'s (2000) CoI theoretical framework and the qualitative interpretive description conceptual framework were ideally suited to address the research question and understand the phenomenon from the students' perspective (Caelli et al., 2003; Kahlke, 2014; Sandelowski, 2000). Understanding the students' experiences was essential to informing the practice of education within the context of this phenomenon.

Current Literature Using the Community of Inquiry Framework

Caskurlu et al. (2021) conducted a thematic synthesis to analyze the factors influencing students' online experiences and found that

> deep and meaningful online learning occurs as a result of (a) online course structure; (b) guidance, modeling, and scaffolding by the instructor; and (c) collaborative work among active and supportive participants in learning communities. From a TP perspective, results highlighted the importance of course design and facilitation, which complies with earlier studies suggesting that they support social and cognitive interaction, help create a welcoming environment, and encourage students in collaborative activities…Further, especially *being real*, which is at the core of SP, turned out to be an important analytical theme that is necessary to establish relationships, create the sense of community, and build a safe and welcoming environment where students share their perspectives and seek others' perspectives. (p. 10)

Therefore, online learning required careful planning, collaboration with course designers, ongoing communication with students, observation, and evaluation to pinpoint problematic areas in each of the presences. Toward that end, Shearer et al. (2020) used the CoI framework to explore the question, "What is it that students and faculty want today in their online learning experiences?" Not surprisingly, both faculty and students expressed the need for a multimodal approach as no single pedagogical approach met learners' needs. Anderson and Dron (2011) reached a similar conclusion after analyzing three decades of pedagogies used in Col applications. Shearer et al. found that merely digitizing face-to-face content and moving it to an online presence was insufficient as faculty advocated for a paradigm shift—one that offered students an interactive and engaging experience. The psychological dimension emerged as students and faculty expressed the need for a safe place—where either can step out of their comfort zones, develop autonomy, confidence, and competence to overcome the fear of failure.

Watts (2019) used CoI to analyze students' participation in a graduate-level Online Student Orientation (OSO) course to examine student satisfaction, perceptions of online learning, and student retention. Watts found that students' time management; academic skills (e.g., essential reading, listening, and thinking); instructor focus and engagement; communication; and course structure and design were critical to online success. OSO also helped with student retention. The students recommended the introduction of the OSO at the freshman level to prepare students earlier for online education and improve their chances of success and retention.

In another study, Mardi (2019) employed a generic qualitative study anchored in CoI theory to explore student reflections of their worst and best experiences and lessons learned through online collaborative learning. The themes that emerged included: "specific teacher characteristics, sense of community, learner effort, sense of improvement and progress, student expectations of online classes, and the impact of feelings and emotion on other presences" (p. 50), which researchers may be able to apply in other settings to help strengthen learning.

Throughout the literature, researchers demonstrated the trustworthiness of generic qualitative inquiry to explore the meaning of human experiences as interpreted by the person who experienced the phenomena. Unlike quantitative methods or other qualitative approaches steeped in theory, generic qualitative research gave the investigator the flexibility to design a stand-alone way to understand the shared realities of participants (Caelli et al. 2003). Further, researchers achieved meaningful and trustworthy results by adhering to the rigorous standards suggested by Lincoln and Guba (1985). For these reasons, a generic qualitative approach was ideally suited to explore the research question.

Summary

The first wave of the Coronavirus (Covid-19) significantly impacted education globally by affecting 181 countries and more than 1.5 billion students. The pandemic suddenly forced all schools to abandon traditional face-to-face instruction in favor of ERT—and subsequent evolution to online and blended education which delivered optimal learning and helped contain the virus' spread (Lynch, 2020; McLear, 2021).

While the existing literature discussed the impact of the pandemic on higher education, very little peer-reviewed research existed on how the shift from face-to-face instruction to ERT, fully online, or blended education affected HBCU students. The purpose of this generic qualitative study was to explore HBCU students' experiences with ERT, online and blended learning amid the Covid-19 pandemic using Garrison et al.'s CoI theoretical framework viewed through Thorne et al.'s (1997) conceptual lens of qualitative interpretive description to understand the participants' perceptions of the teaching, social, and cognitive presences required for meaningful learning. The study applied to HBCU students who had to switch from face-to-face instruction to ERT, online, and blended learning during the pandemic to minimize virus spread; it excluded students who were enrolled in online or blended courses before the pandemic. A significant gap existed because researchers knew little about how Covid-19 impacted HBCU students' education. The student voices were central to the discussion, and exploring their experiences was essential to understanding the phenomenon (Sandoval-Lucero & Brownlee, 2020; Smith, 2020). Therefore, this study aimed to uncover their perceptions of ERT, online and blended learning using a generic qualitative approach and CoI theoretical framework to answer the research question and contribute to the literature. In preparation for the study, it was necessary to better understand the phenomenon by examining the current literature before uncovering students' experiences with ERT, online, and blended learning amid the Covid-19 pandemic.

In this chapter, the researcher described the search terms and databases used to select articles for review based on the research question. A discussion of conditions that

led to the immediate transition from traditional face-to-face instruction to ERT necessitated schools' closure to avoid spreading the Covid-19 virus then ensued. The literature review continued with the challenges, opportunities, and recommendations associated with the ERT transition to allow HEIs to pivot to a planned and sustainable fully online learning environment to combat interruptions to learning caused by environmental threats. The researcher then examined the unique challenges confronting HBCUs, which disproportionally affected students of color during the pandemic—and the HBCUs' national call to action to overcome these challenges. A discussion on Garrison et al.'s (2000) CoI theoretical framework used in this study followed, along with a review of pertinent articles which examined the application of CoI theory to online learning published within the past five years. The researcher restated an overview of the conceptual framework—qualitative interpretive description developed by Thorne et al. (1997).

This literature review contained current findings that provided insight into the challenges and opportunities confronting HBCUs—before and after Covid-19—and their students by extension. Online and blended teaching is a complex process that requires rethinking the role of the instructor, student interactions, and meaningful ways of learning (Garrison et al., 2010). Therefore, the CoI framework and qualitative interpretive description were ideally suited for examining the quality of HBCU students' online education through three interdependent elements: social, cognitive, and teaching presence (Garrison et al. 2000). The research question, what are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive

presences amid the COVID-19 pandemic? —was critical to understanding the problem's ongoing scope, positive gains, and insight into future research (Baloran, 2020; McLear, 2021; Torun, 2020). For example, the findings may be helpful to HBCUs and stakeholders in the design and delivery of online courses to help institutions, teachers, and students to prepare for and successfully overcome the threats to learning caused by wars, natural disasters, and pandemics (Bozkurt & Sharma, 2020; Dhawan, 2020; McLear, 2021).

In Chapter 3, I will discuss the study's design and methodology, role of the researcher, issues of trustworthiness, and ethical considerations.

Chapter 3: Research Method

The purpose of this generic qualitative study was to explore HBCU students' experiences with ERT, online learning, and blended learning amid the Covid-19 pandemic using Garrison et al.'s CoI theoretical framework viewed through Thorne et al.'s (1997) conceptual lens of qualitative interpretive description to understand the participants' perceptions of the teaching, social, and cognitive presences required for meaningful learning. The study applied to HBCU students who had to switch from face-to-face instruction to ERT during the pandemic to minimize virus spread and subsequently enrolled in blended courses as HBCUs adapted pedagogies to avert the virus's mutations. Students who were enrolled in online or blended programs before Covid-19 were excluded from participation. The student voices were central to the discussion and exploring their experiences was essential to understanding the phenomenon (Sandoval-Lucero & Brownlee, 2020; Smith, 2020). Therefore, a necessary goal of this study was to contribute to the scant literature on how HBCU undergraduate students experienced the transition to online and blended education in response to the threats posed by Covid-19.

In this chapter, I will restate the research question and discuss the research design and the rationale for its selection. The chapter will also address the researcher's role, disclosure of personal or professional relationships with the participants and the institutions they attended, and any biases and ethical issues that affected the study's trustworthiness. I will also discuss the rationale for participant selection, instrumentation, and data analysis. The chapter will conclude with a discussion of issues of

trustworthiness, the ethical protocols required to protect participants' confidentiality, a chapter summary, and a transition to Chapter 4.

Research Design and Rationale

Research Question

The overarching research question was as follows: What are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive presences amid the Covid-19 pandemic? An overarching question can be an effective strategy in qualitative research because it "allows a researcher to capture the basic goals of the study in one major question." (Agee, 2009, p. 435). I developed the research question to gain insight into HBCU undergraduate students' perceptions of their educational experiences using Garrison et al.'s. (2000) CoI framework as the students participated in ERT, online learning, and blended courses during the pandemic.

Research Design

I chose a qualitative interpretive description approach—a subcategory of generic qualitative research—to answer the research question. This design lends itself to understanding a phenomenon through querying a small number of participants, analyzing patterns of meanings and emerging themes to answer a research question and inform educational practice (Kahlke, 2014). For these reasons, a quantitative method was not appropriate. I considered—and eliminated—many other qualitative methodologies before choosing the generic qualitative interpretive description approach.

Rationale

Patton (2015) described the various qualitative approaches and the criteria for their uses. For example, researchers using ethnography seek to understand the culture of a group; this study did not involve such an aim. Researchers using grounded theory aim to develop a theory or model to explain a phenomenon or process; I did not seek to do so in this study. Phenomenology and heuristic inquiries involve an effort to uncover the meaning, structure, and essence of the lived experience for a person or group of people; this study did not involve such an effort. Using narrative inquiry or narrative analysis, researchers explore what a narrative reveal about life and the culture that created it; this study did not entail such an approach. However, a primary distinction of the generic qualitative design is its focus on understanding how participants experienced or made sense of an event, occurrence, or experience—which this study had. Researchers conducting generic qualitative inquiries seek to understand practical consequences and useful applications about an issue or problem and help practitioners address issues in the field (Kahlke, 2014).

I considered the qualitative single case study as an alternative approach because Patton (2015) considered it an umbrella design suited to any qualitative approach. However, according to Walden University's Institutional Review Board (IRB), case studies require coordination with partner research organizations, posing challenges in accessing the target population. A generic qualitative approach does not require such coordination, making access to participants less restrictive and more direct. Qualitative methods such as phenomenology, grounded theory, case study, or ethnography are based

on “specific methodological frameworks that emerged from specific disciplinary traditions” (Lambert & Lambert, 2012, p. 255). However, a qualitative interpretive description design can stand alone making it an ideal research tradition choice.

Further, according to Kahlke (2014), researchers can use an interpretative description approach to develop research questions, investigate a phenomenon, and provide theoretically and methodologically sound evidence to improve instruction in the practice setting—providing additional justification for its use. Interpretive description is built on constructivist epistemological assumptions that knowledge is not absolute; it is socially constructed based on a person’s experience (Kahke, 2014; McLear, 2021).

Role of the Researcher

My role was that of a researcher-observer and interviewer responsible for the data collection, analysis, and reporting. I was the collection instrument whose biases could influence the process. To help maintain objectivity, Caelli (2003) argued that “researchers employing a generic approach must explicitly identify their disciplinary affiliation, what brought them to the question, and the assumptions they make about the topic of interest” (p. 5). My worldview was that of a constructivist whose disciplinary affiliation was aligned with the interpretive description method. Curiosity about how HBCU undergraduate students describe their experiences with the transition from face-to-face instruction to ERT and subsequent online and blended learning served as the motivation for the study. HBCUs are private or public and are not funded equally (O’Keefe, 2021). Therefore, an assumption was that students of better funded HBCUs may have a more positive experience with the transition. However, I did not reach any

preconceived conclusions but listened to the data and employed reflexive journaling to pinpoint the rationale for decision making to illuminate potential biases that might have affected the study's outcome. I scripted the interview questions and prompts to keep the inquiry neutral and maintained trustworthiness (Carminati, 2018; Lincoln & Guba, 1985).

I did not have any personal or professional relationships with the participants or the institutions they attended. There were no supervisory or instructor relationships involving power over the participants. I used reflexive journaling to document the rationale for decision making at each step of the data collection and analysis to identify biases and minimize threats to trustworthiness. There were no conflicts of interest or power differentials with the participants or the HBCUs they attended. I was not affiliated with any HBCU and did not hold a supervisory position over any participant. I was committed to protecting participants from harm, and any potential ethical issues that arose were managed through consultation with the dissertation committee and Walden's IRB.

Methodology

Participant Selection Logic

The target population was a purposeful sampling based on achieving data saturation of 10 HBCU undergraduate students aged 18 or higher who initially transitioned from face-to-face instruction to ERT. The sample included participants who subsequently enrolled in online and blended learning as HBCUs adapted pedagogies to maximize learning while minimizing exposure to the virus. While data saturation could occur with 10–12 students, the number of participants may vary. Patton (2015) explained

data saturation as reaching a point where no new information arises from participants about the phenomenon under investigation. The population was purposefully selected for their experiences during the transition—making them uniquely qualified to answer the research question (What are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive presences amid the Covid-19 pandemic?) Students who were enrolled in online or blended programs before the Covid-19 pandemic were excluded from participation.

I acknowledged that the online experience for freshman students (i.e., general undergraduate courses) may be different from that of juniors and seniors because of course specialization (i.e., declared major). Further, some specialization courses may not work well online (e.g., lab, drama, practicum). Therefore, I collected limited demographical data (e.g., age, gender, years of college experience, declared major [if known], HBCU attended, and online or blended courses taken) for analysis to help distinguish potential differences and position emerging themes in the context of the broader phenomenon. The participant selection logic helped ensure data accuracy and credibility by aligning HBCU students' perceived learning experiences with the research question.

Procedures for Recruitment, Participation, and Data Collection

The purpose of this generic qualitative study was to explore HBCU students' experiences with ERT, online learning, and blended learning amid the Covid-19 pandemic using Garrison et al.'s CoI theoretical framework viewed through Thorne et al.'s (1997) conceptual lens of qualitative interpretive description to understand the

participants' perceptions of the teaching, social, and cognitive presences required for meaningful learning. Before collecting data, I obtained Walden IRB approval. I recruited eligible HBCU students for interviews through HBCU social media groups using an invitational announcement. The invitation contained bullet statements and short descriptive phrases such as “HBCU undergraduates needed to discuss online learning experiences during the Covid-19 pandemic. A one-hour telephone interview commitment is required. The invitation closes out in two weeks. A $20 Visa gift card is available for participation.” The invitation contained a link to more detailed information, including the informed consent form, eligibility criteria, a confidentiality statement, and my contact information. The consent form required participants' acknowledgment that I would record the interviews for data collection. I scripted the interview to ensure that each participant was asked the same questions, to control bias, and to give participants an equal opportunity to comment on their learning experiences (see Appendix B, Interview Guide). I collected the data verbatim and ensured accuracy through cross-checking the transcription with the recording. Where applicable, I used probes to gather more in-depth responses or clarify answers. Data collection occurred as frequently as eligible participants volunteered for the study and completed the interview, and I transcribed and validated the takeaways through member-checking protocols.

In qualitative research, the investigator is the instrument of data collection (Patton, 2015; Saldaña, 2021). The sources of data collection were in-depth interviews, grounded in Garrison et al.'s (2000) CoI theoretical framework and viewed through Thorne et al.'s (1997) conceptual lens of qualitative interpretive description. The open-

ended interview questions illuminated the participants' experience of ERT, online learning, and blended learning amid the Covid-19 pandemic to answer the research question: What are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive presences amid the Covid-19 pandemic? I verified respondents' eligibility to participate in the study through their responses to the following set of questions:

1. Are you 18 years of age or older?
2. Were you enrolled in or did you complete an online or blended college course *before* the Covid-19 pandemic?
3. Have you attended or are you currently attending an HBCU during the transition from in-person to emergency remote teaching due to your school's closure to prevent the spread of Covid-19?
4. Are you currently enrolled in a 100% online HBCU course?
5. Are you currently enrolled in a blended HBCU course (combines online and in-person learning)?

I also collected the following limited demographic data for analysis to further understand the phenomenon in a larger context:

- gender
- race/ethnicity
- marital status
- housing/living situation
- parental annual income (range)

- highest parental education level completed
- class standing
- declared major (if known)
- HBCU attended
- online or blended courses taken during Covid-19

I contacted participants who completed the informed consent and met the eligibility criteria to answer questions and arranged a date and time for an interview convenient for them, considering their academic class schedules, whether operating from campus or home. To ensure no harm to participants, I explained the project's scope, available options should participants feel harmed by the process, and the freedom to withdraw from the study—at any time, for any reason—without fear of consequences (APA, 2017).

The design included the informed consent agreement, in-depth interviews, field and interview notes, additional information offered by participants, transcription of recorded interviews, and validation of member-checking protocols (Saldaña, 2021). Initially, I planned on recording interviews by phone; however, upon reconsideration, using Google Meet (audio recording only) was a more efficient way to capture the data. Before recording, I obtained each participant’s consent. I protected participants' identities and confidentiality by using participant identifiers from the project's onset, masking any HBCUs identified by participants. As outlined in the *Ethical Principles of Psychologists and Code of Conduct* (APA, 2017), I secured all electronic data with password protection and stored a backup copy in the cloud. I secured nonelectronic data in a locked cabinet in my home office. After 5 years following publication, I will permanently delete all files.

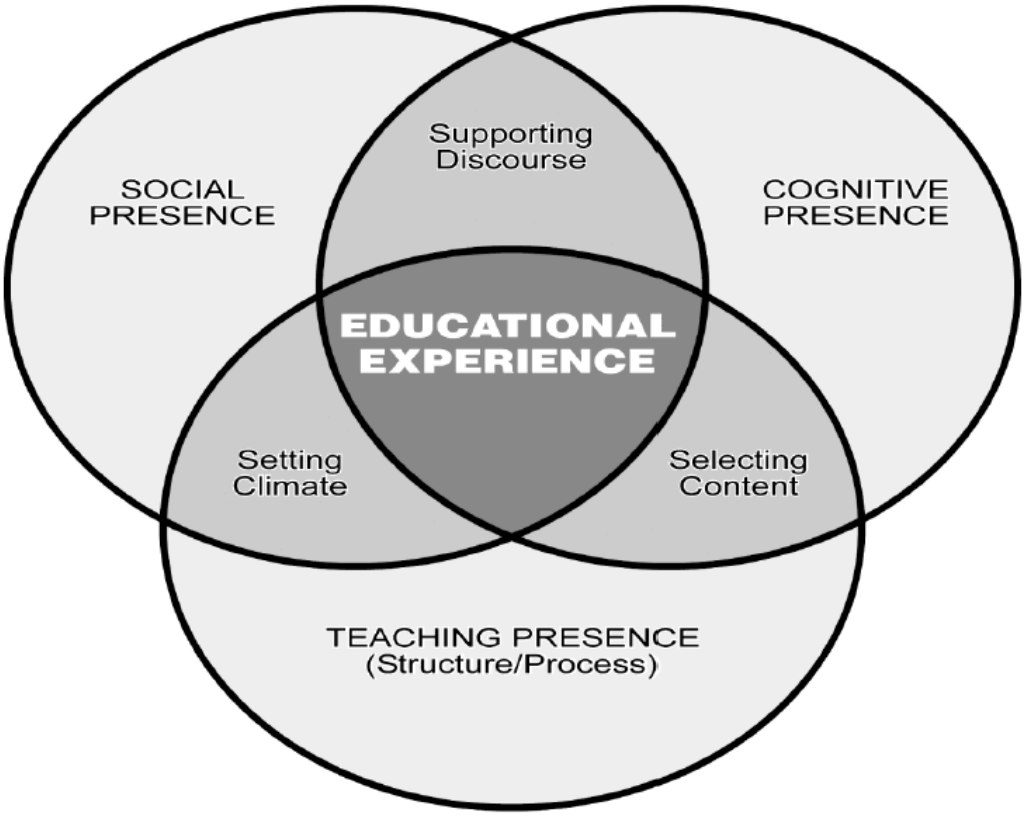
The in-depth interviews lasted approximately 1 hour per person; I offered a $20 Visa gift card to participants who completed the interview as a token of appreciation for their time and effort. Research has shown that nominal gifts can boost participant response (Jia et al., 2021) and can also avoid any perceptions of inducement or coercion in Western research (Bitter et al., 2020). I collected data over 2 weeks and ended after achieving data saturation with 10 participants. Therefore, there was no need to employ purposeful snowball sampling for its ease in accessing hard-to-reach populations (Leighton et al., 2021; Naderifar et al., 2017). Upon conclusion of the interview, participants were debriefed on the purpose of the study, thanked for their participation, and issued a $20 Visa gift card in appreciation for their time and effort. Member checking occurred in real time during the interview by restating main ideas or clarifying statements to ensure that I understood the participants' meaning. After transcription and initial coding, I emailed my interpretation of takeaways to each interviewee to confirm accuracy. This approach acknowledged the significance of the participants' time and limited reengagement for follow-up of unnecessary interviews. Participants were offered a copy of the research findings via email at no charge if they elected this option.

Instrumentation

The researcher used semi-structured interviews to collect the data. The interview questions were adapted from an open-source CoI survey developed by Garrison et al. (2000) and can be found at https://coi.athabascau.ca/coi-model/coi-survey/. Garrison et al. designed the CoI instrument to address the three presences (teaching, social, and cognitive) to support the CoI theory as depicted in Figure 1.

Figure 1

Community of Inquiry Framework



Note. From "Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education," by D. R. Garrison, T. Anderson, and W. Archer, 2000, *The Internet and Higher Education, 2*, p. 88. Copyright 2000 by Elsevier Science Inc. Reprinted with permission.

Several researchers validated the CoI framework including Caskurlu (2018), Stenbom (2018), Abbitt and Boone (2021), Arbaugh et al. (2008), and Swan et al. (2008). Other researchers validated the CoI survey instrument in several languages including Chinese (Ma et al., 2017), Portuguese (Moreira et al., 2013), Turkish (Olpak & Cakmak, 2018), Spanish (Velázquez et al., 2019), and Korean (Yu & Richardson, 2015). The CoI survey instrument has also been used in many studies across diverse cultures, suggesting its universality among different populations (e.g., Saadatmand et al., 2017). Therefore, the CoI survey was an appropriate instrument for use in this study with slight modification to construct semi structured interview questions. Appendix A contains a listing of the research questions used to elicit data to explore participants' experiences with ERT, online, and blended instruction to triangulate and support the CoI presences. The close correlation between the research question, the interview questions, and the CoI framework ensured the sufficiency of the data collection instrument to answer the research question, what are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive presences amid the COVID-19 pandemic? Appendix B contains the Interview Guide.

Data Analysis Plan

I based the data analysis plan on Patton's (2015) and Saldaña's (2021) qualitative approaches to analyzing qualitative data. In this approach, the data were the interviewees' verbatim responses to the interview questions, and the coding was "the transitional process [of participants experience] between data collection and more extensive data analysis" (Saldaña, 2021, p. 4). To answer the research question, I examined the

phenomenon using the CoI survey instrument developed by Garrison et al. (2000) to create semi structured interview questions to probe each CoI presence. Table 2 provides an example of how the CoI presences may manifest in the data.

Table 2

Community of Inquiry Template

Elements	Categories	Indicators (examples only)
Cognitive presence	Triggering event Exploration Integration Resolution	Sense of puzzlement Information exchange Connecting ideas Apply new ideas
Social presence	Affective expression Open communication Group cohesion	Emotions Risk-free expression Encouraging collaboration
Teaching presence	Coursework design and organization Instructor facilitation Direct instruction	Defining and initiating discussion topics Sharing personal meaning Focusing discussion

Note. Modified with permission from "Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education," by D. R. Garrison, T. Anderson, and W. Archer, 2000, *The Internet and Higher Education, 2,* p. 89. Copyright 2000 by Elsevier Science Inc.

Coding enables researchers to "organize and group similarly coded data into categories or "families" because they share some characteristic – the beginning of a pattern." (Saldaña (2021, p. 8). However, Saldaña acknowledges that "Rarely will anyone get coding right the first time." (p. 10). Therefore, to help ensure a rigorous inquiry, each interview was transcribed, checked for accuracy against the recording, validated through member checking, and then coded using Quirkos software to generate 1st and 2nd cycle

open coding. During the First Cycle coding, I read each transcription, coding the responses with a word or phrase that explained the narrative. Second Cycle coding was then applied to refine the codes and categories, potentially "relabeling or dropping First Cycle codes all together for new ones" (Saldaña, 2021, p. 10). The Second Cycle recoding was necessary to grasp the meaning and generate categories and themes, to analyze their connections comprehensively.

The data analysis and coding process consisted of transcribing the interview responses of each participant, coding each answer using First Cycle and Second Cycle coding, and then cross coding the data across each participant's response for patterns (similarities or differences) and emerging themes (Patton 2015; Saldaña, 2021). Table 3 is an example of using open coding in qualitative research. Triangulation occurred by comparing interview responses among participants and against the research question, what are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive presences amid the COVID-19 pandemic? As quoted by Saldaña (2021), according to Sipe and Ghiso (2004), "All coding is a judgment call" since we bring "our subjectivities, our personalities, our predispositions, [and] our quirks to the process" (Saldaña, 2021, p.7). Therefore, to help control bias and identify discrepant cases, I employed member checking protocols and maintained reflexive journal memos (Patton 2015; Saldaña, 2021). Saldaña recommended a lone researcher could help achieve trustworthiness through member checking to ensure an accurate interpretation by initially coding interview data when transcribing and maintaining a reflective journal with analytic memos (p. 28). I analyzed the codes, categories, themes,

and reported the findings to reflect the variability among participants' experiences (Patton, 2015; Saldaña, 2021).

Table 3

Example of Open Coding

Open codes	Categories	Participant identifier	Excerpts
Hands-on and in-classroom centers	Effective implementation of activities	P-4	"Doing the activities in their centers often works best"
		P-7	"We do lots of hands-on learning experiences"
		P-6	"We go into the centers and complete our activities"
		P-3	"It provided the children with hands-on learning experiences"
Teaching guides	Resources used to provide instruction	P-2	"The curriculum books help you"
		P-3	"The creative curriculum came with intentional teaching strategy guides"
		P-7	"Comes with a teaching guide"
		P-4	"I also like that the lessons and guides are there, so I'm not overwhelmed"
Training	Resolving doubt and challenges	P-2	"In certain trainings we've had, the people from Creative Curriculum taught us"
		P-5	"I've done lots of trainings"

Note. Sample provided by the Qualitative Methodology Office, Walden University

Issues of Trustworthiness

Trustworthiness - expressed as credibility, transferability, dependability, and confirmability—determine how much confidence readers have in qualitative research (Carminati, 2018; Patton, 2015). Trustworthiness is equivalent to reliability, validity, generalizability, and objectivity in quantitative analysis (Carminati, 2018; Lincoln &

Guba, 1985). Unlike quantitative research that uses numbers and statistical equations, qualitative research uses text, photographs, or other non-numerical data to analyze a phenomenon. (Saldaña, 2021). However, there is confusion on whether qualitative research can achieve the rigor and generalizability associated with quantitative research (see Carminati, 2018 for discussion). The author contended that qualitative researchers could attain trustworthiness through "transparency, reflexivity, and accuracy of the research practice itself and the researcher's ability and effort to unfold and explain interactions" (Carminati, 2018, p.6). Lincoln and Guba (1985) identified criteria to ensure trustworthiness in qualitative research, and I discuss practical strategies below to achieve it in this study.

Credibility

First, to have credibility, the researcher's findings and interpretations must be plausible and align with the participants' sense of reality (Lincoln & Guba, 1985). To achieve credibility, the researcher should describe appropriate strategies such as triangulation, prolonged contact, member checks, saturation, reflexivity, and peer review (Patton, 2015). I achieved prolonged contact with the phenomenon through an exhaustive review of the literature to understand how the Covid-19 pandemic affected students of HEIs. Although researchers conducted few studies on how the pandemic affected HBCU students, the prolonged contact with the literature helped to orient me with the phenomenon in enough depth to investigate without bias.

The target population was a purposeful sampling of 10 HBCU undergraduate students, age 18 or higher, who transitioned from traditional face-to-face instruction to

ERT during the pandemic to minimize virus spread or subsequently enrolled in online or blended courses as HEIs adapted pedagogies to combat the virus's spread. I conducted interviews until reaching data saturation—that is, the point at which there was no new information arising from participants about the phenomenon under investigation (Patton, 2015). To further reduce bias, the study was grounded in empirical theory using Garrison et al.'s (2000) CoI theoretical foundation viewed through the conceptual lens of qualitative interpretive description (Kahlke, 2014; Thorne et al., 1997) to undergird the investigation. I checked the transcripts against the appropriate recordings for accuracy and employed member checking after coding and analysis to ensure my interpretation of takeaways was accurate (Patton, 2015; Rubin & Rubin, 2012; Saldaña, 2021).

Further, I used triangulation to ensure the codes, categories, and emerging themes and patterns were embedded in CoI theory to address the research question. I sought feedback from the dissertation committee throughout the study and used peer debriefings and reflective journaling to pinpoint potential biases and critical decision making (Saldaña, 2021). All data were password protected and secured in my home office. I stored a password protected electronic backup copy of the data in the cloud.

Transferability

Second, to have transferability, researchers should be able to apply the findings in a similar context (Lincoln & Guba, 1985). However, before researchers can do so, they must understand how the investigator arrived at the findings and conclusions. Therefore, to help establish transferability, I outlined in detail the components of this investigation to include the following main takeaways:

1. A discussion of the study's purpose, research question, interview questions, conceptual and theoretical frameworks, and the research design and rationale to orient researchers with the investigation, population, setting, and methods of inquiry. This understanding is a prerequisite to applying transferability in comparable settings (Carminati, 2018; Lincoln & Guba, 1985).
2. A detailed description of the methodology, including participant selection logic, procedures for recruitment, participation, and data collection, to allow researchers' understanding of the study in the context in which it was conducted. Participants were purposefully selected based on their eligibility to answer the research question. The interview questions were grounded in Garrison et al.'s (2000) CoI framework to elicit thick, rich descriptions from participants. I used probes to ensure my understanding or generate more data if interviewees responded with a "yes" or "no" to a question. (Ravitch & Carl, 2016). The use of thick descriptions—achieved from a nationally recruited sample of HBCU undergraduate students—ensured transferability and will help other researchers duplicate the study in a comparable natural setting. The recruitment of participants through HBCU social media sites allowed direct, national access, which increased the possibility for maximum variation in participant selection (Patton, 2015; Saldaña, 2021).

Dependability

Third, dependability is the extent to which stability or change in the natural environment is occurring and documented (Lincoln & Guba, 1985). To help achieve

dependability, I employed strategies such as audit trails and triangulation (Patton, 2015). For example, I created an audit trail consisting of raw data (i.e., Quirkos- coded transcriptions, assignment of codes and themes, documentation of peer review summaries, methodological and decision making processes, and reflexive journaling) used to guide my thinking and decision making at each stage of the research—— from the conception of the idea to formulation of the research question, collection and analysis of the data, and publishing the findings and recommendations. To ensure credibility, transferability, dependability, and confirmability suggested by Lincoln and Guba (1985), I adopted the following strategies: identified criteria to ensure participants met the eligibility requirements, and transcribed interviews accurately by comparing the transcription to the appropriate recording. Data collection continued until achieving saturation using Quirkos First Cycle and Second Cycle methods (Patton, 2015; Saldaña, 2021). I used the CoI framework to ground the study and explored the phenomenon through the lens of qualitative interpretive description to analyze codes, categories, patterns, and themes that aligned with the research question. Triangulation was achieved through cross coding participants' responses to interview questions, analytic memos, and member checking (Lincoln & Guba, 1985; Patton, 2015; Saldaña, 2021). I used coding tables (see Appendices D and E) to increase transparency and help explain data collection, analysis, and findings—thereby enhancing trustworthiness (Cloutier & Ravasi, 2020).

Confirmability

Fourth, confirmability is the ability for the researcher to collect data as an instrument, make sense of the data, and justify findings, interpretations, and recommendations without bias. The research question and interview questions were grounded in Garrison et al.'s (2000) CoI survey instrument. Researchers validated the survey in English—and other researchers translated and validated the instrument in several languages, including Chinese, Portuguese, Turkish, Spanish, and Korean. Using the CoI instrument to develop interview questions allowed me to investigate the phenomenon scientifically without bias (Carminati, 2018). I achieved prolonged engagement through an exhaustive review of the literature and in-depth interviews to understand participants' experiences transitioning to emergency remote learning, online, and blended learning amid the Covid-19 pandemic. Reading and re-reading the data during the coding process to assign meaning to the text was also an example of prolonged engagement (Patton, 2015; Saldaña, 2021). Persistent observation also ensured credibility by examining the data in detail to distinguish between relevant and irrelevant data (Saldaña, 2021). However, I exercised caution to spot all discrepant cases for inclusion and analysis to explain the full range of variability among participants (Patton, 2015; Saldaña, 2021).

To achieve triangulation, I cross coded interviewees' transcripts to identify, examine, and analyze common themes and discrepant cases based on participants' experiences with the phenomenon. Reflective journaling, peer debriefing with neutral colleagues to discuss and challenge analytical decision-making processes, and

accountability to the dissertation committee also helped control bias and ensure trustworthiness (Patton, 2015). I summarized peer debriefings in a reflexive journal and maintained them as archival data.

Ethical Procedures

Ethics in higher education exist to protect participants, researchers, and institutions from harm (Rothman, 2017). Of significance is the protection of participants given the potential conflicts that may arise due to power differentials (APA, 2017). To assess the potential for harm and weigh the risks and benefits of conducting the research, Walden's IRB prohibited the recruitment of participants or data collection until I obtained ethical approval from the university's IRB—a more salient requirement during the Covid-19 pandemic (Chenneville & Schwartz-Mette, 2020). Since this research examined the phenomenon of HBCU undergraduate students' experience with ERT, online, and blended learning amid Covid-19, I recruited participants from an educational setting. Therefore, I closely examined Walden's (2022) *IRB Guide for Collecting Data in an Educational Setting*, and the APA's (2020), *Conducting research during the COVID-19 pandemic* for potential sources of ethical conflict.

I did not teach in an HBCU or had a personal or professional relationship with students; therefore, no ethical conflicts existed. Likewise, I did not collect data from previous students. While I collected data from other teachers' students, doing so did not pose any ethical dilemmas relating to leverage or strain attributed to the investigator-participant relationship or my gain. I did not perform dual roles as an evaluator and

instructor, nor did the study's design and research question take the inquiry outside the domain of education.

However, since potential participants may have been attending school on campus or from home, the recruitment and data collection plan included measures to help minimize disruption to learning. For example, I allowed participants to choose the date and time of the interview that best accommodated their class schedule. While I acknowledged that participants may not have equal access to the internet, potentially reducing their availability to participate in the study (APA, 2020; Chenneville & Schwartz-Mette, 2020), I revised the initial plan to conduct interviews by telephone because it proved to be more problematic—especially for international students. Therefore, upon further evaluation, the Google Meet platform (audio option only) offered a more efficient method of capturing, reviewing, and securely storing the data. The informed consent agreement contained the participants' permission to record the interview (APA, 2017). Although the natural setting was within HBCUs, I did not direct inquiries to any specific race or ethnicity. HBCU students represent diverse racial and ethnic backgrounds. For example, Bluefield State College, an HBCU in West Virginia, has a 90 percent White student population and a White president (Bracey, 2017). In contrast, St. Philip's College in Texas is the nation's only HBCU and Hispanic Serving Institution (HSI), with 60 percent Latinx students, 29 percent White, and 12 percent African American or Black (Sandoval-Lucero & Brownlee, 2020; Morris, 2017).

Therefore, recruitment invitations targeted HBCU undergraduate students—regardless of race or ethnicity—who transitioned from face-to-face instruction to ERT,

online, or blended learning as HBCUs adapted pedagogies to combat the virus's spread. However, I collected limited demographic data (Appendix C) to ensure eligibility and conduct post-analysis to understand the phenomenon in a larger context. The recruitment strategies—neutrally developed—allowed interested individuals to read the inclusion criteria and volunteer as possible participants. The recruitment invitation included a web link to the interview, which contained an informed consent outlining their rights and protection as participants. I wrote the informed consent using standard English that undergraduates readily understood.

The informed consent explained the nature of the study, potential risks and benefits, confidentiality and privacy, and the voluntary participatory nature of the research. That is, participants may withdraw for any reason and choose not to answer any question without fear of consequences. I protected participants' identities and confidentiality using participant identifiers from the project's onset. I also provided instructions on obtaining a free copy of the study's findings and contacting me if they had questions at any stage of the data collection process. Upon conclusion of the analysis, I formally debriefed participants by email. All data was password protected and filed in a separate folder on my research computer secured in the home office. I backed up password protected data in cloud storage with access restricted to me. No one else had access to the data other than the raw data required by Walden University policy. I will maintain the data for 5 years after publication, at which time, I will permanently delete all files (APA, 2017; Rubin & Rubin, 2012).

Summary

In this chapter, I began with an introduction restating the research's purpose, research question, and justification for the study. Also included in the opening was a brief discussion about the conceptual lens used to view the investigation—the interpretive description design developed by Thorne et al. (1997)—initially to explore and integrate findings in the nursing field—but now adapted to other practice settings, including the field of education (Kahlke, 2014). The discussion continued with the justification for selecting Garrison et al.'s (2000) CoI as the theoretical framework to develop interview questions and ground the study.

From there, I transitioned into more specific areas like the research design and rationale, methodology, the researcher's role as an observer, and the instrument responsible for the data collection, analysis, and reporting. Acknowledging that researcher bias is a significant threat to confirmability, I outlined action steps to help maintain trustworthiness. Further, I disavowed any relationship with potential participants and the HBCUs they attend.

However, consultation with Walden's IRB was ongoing to guard against unforeseen ethical dilemmas which could threaten the study's trustworthiness. A discussion of participant selection logic ensued. I defined the target population, explained the relationship between data saturation and sample size, and the variability among the population based on the participants' age, gender, years of college experience, and declared majors (if known). I collected limited demographic data to help explain the

variability—along with thick, rich data—so that other researchers can duplicate the study in similar settings (i.e., transferability).

I discussed recruitment, participation, and data collection strategies in detail, as were the data analysis plan and trustworthiness issues. Since potential participants may have been attending school on campus or from home, the recruitment and data collection plan included measures to help minimize disruption to learning. I explored ethical procedures, particularly in an educational setting based on Walden University's IRB requirements. Key take-aways included obtaining approval from the IRB before recruiting participants and collecting data to prevent harm to individuals, myself, and the affected institutions. The chapter concluded with safeguarding data and destroying it 5 years after the publication of the research.

In chapter 4, I will discuss the setting, participant demographics and characteristics, data collection, data analysis, evidence of trustworthiness, and results. Chapter 4 will conclude with a summary and a transition to Chapter 5.

Chapter 4: Results

Through this interpretative description qualitative study, I aimed to explore HBCU students' experiences with ERT, online learning, and blended learning amid the Covid-19 pandemic. I selected Garrison et al.'s (2000) CoI theoretical framework to understand the participants' perceptions of the teaching, social, and cognitive presences required for meaningful learning. The study applied to HBCU students who initially switched from traditional face-to-face instruction to ERT—and transitioned to online and blended learning during the pandemic as HBCUs adapted pedagogies to combat the virus's mutation. Students who were enrolled in online or blended programs before Covid-19 were excluded from participation. The overarching research question was as follows: What are historically Black college and university undergraduate students' perceptions of the teaching, social, and cognitive presences amid the COVID-19 pandemic?

Further, I explored each participant's experience and perceptions in the following areas to understand the phenomenon more comprehensively, maintain prolonged contact with participants, and help answer the research question:

- perception of ERT on education
- perception of online learning on education
- perception of blended learning on education
- exploration of CoI presences in current online or blended learning
- satisfaction with current online learning
- dissatisfaction with current online learning

- recommendations to improve current online learning

The student voices were central to the discussion, and exploring their experiences robustly and reporting the findings in their own words were essential to understanding the phenomenon (Sandoval-Lucero & Brownlee, 2020; Smith, 2020). Therefore, a necessary goal of this study was to contribute to the scant literature on the perceptions of how HBCU undergraduate students experienced the transition from traditional classroom instruction to ERT, online learning, and blended learning to gain insight on the teaching, social, and cognitive presences necessary for meaningful learning. This chapter contains information on the setting, participants' demographics, data collection and procedures, analysis, trustworthiness of the study, and results. The chapter concludes with a summary and a transition to Chapter 5.

Setting

I obtained approval to collect data from the Walden University IRB (Approval number 04-26-22-0587716). I recruited 10 eligible HBCU students who met the selection criteria for interviews through HBCU social media groups using an invitational announcement (see https://hbcuconnect.com/content/381676/hbcu-students-with-remote-and-blended-learning-experience-amid-the-covid-19-pandemic-sought-for-research-study). I used two data collection methods—a demographic questionnaire, which was administered first, followed by an interview. I collected demographic data for post factum analysis using a Google Form I designed to offer volunteers expedient choices (e.g., multiple choice or short answer write-in responses) to required fields to capture participants' demographics and characteristics, including the consent agreement

acknowledgement. Establishing rapport with participants began with the recruitment advertisement and continued through data collection and member checking. For example, upon completion of the demographic collection form, participants clicked on a submit button, which immediately provided them confirmation that their input was received and recorded. Further, the volunteers were thanked for their participation and advised that I would contact them to schedule the interview. Simultaneously, an email notification that someone submitted the demographic collection data was sent to me at a Gmail address created specifically for the purpose of receiving and attending to demographic data collection. Doing so ensured that the notification would not be comingled with personal email and potentially get overlooked. Further, to help monitor the arrival of email to the account, a distinct chime was assigned as an audible alert.

After designing the Google Form, testing, and debugging the technological issues, I posted the invitation on HBCU social media sites and LinkedIn and began data collection. Between July 17, 2022, and July 31, 2022, 12 eligible volunteers completed the demographic data collection and were invited to complete the interview. However, two of the volunteers did not meet their scheduled appointment. Follow-up by email and phone were unsuccessful, and I attributed the mortality to the voluntary nature of human research. That is, participants have free will in deciding whether to enter or continue with the study without fear of coercion or consequence. The 10 remaining participants completed the interviews, and I closed the data collection Google Form after achieving data saturation (see https://docs.google.com/forms/d/e/1FAIpQLSfZHG6ruiOJd6aS4khneFpbaDTBnKC7Tn

RG2D1WgqnLyATIVA/closedform). The invitation contained a link to more detailed information, including the informed consent form, eligibility criteria, confidentiality statement, and my contact information. The consent form required participants' acknowledgment that I would record the interviews for data collection.

Demographics

I employed a purposeful sampling of 10 participants recruited from six HBCUs across the United States. The participants were sophomores, juniors, and seniors who met the eligibility criteria for inclusion in the study and represented a broad range of academic majors, including biology, science, business, and psychology. All the participants (six males and four females) identified as Black, with differing ethnicities. Most ranged between 18 and 25 years old, were single, and lived with student roommates (see Appendix C for other demographic data).

Data Collection

Upon participants' completion of the demographic data, I was immediately notified through the Gmail-Google Form interface. Participants were then contacted via return email to schedule the interviews using Google Meet. Once scheduled, I provided preparatory interview instructions including interview questions to allow participants at least 3 days to reflect on their answers (see Appendix A). Interview data were subsequently collected from 10 participant interviews using Google Meet audio recording option only. Initially, I considered conducting the interviews by telephone; however, upon further evaluation, the Google Meet platform offered a more efficient method of capturing, reviewing, and securely storing the data. Participants were invited to interview

between July 17, 2022, and July 31, 2022. Interviews were scheduled between July 20, 2022, and August 2, 2022—and completed between July 20, 2022, and August 6, 2022. Participants were asked to turn off their cameras to help protect their identities. The in-depth interviews lasted about 1 hour per person on average. Approximately 40 minutes were spent on the interview questions and responses; 10 minutes on the warmup, purpose statement, explanation of terms used, rapport building, and consent to audio record the interview; and another 10 minutes at the end for debriefing. After the debriefing, participants were thanked for their participation and issued a $20 Visa gift card in appreciation for their time and effort. Member checking occurred in real time during the interview by restating main ideas or clarifying statements to ensure that I understood the participants' meaning. After transcription and initial coding, I emailed the interpretation of takeaways to each interviewee to confirm accuracy. This approach acknowledged the significance of the participants' time and limited reengagement with participants for follow-up of unnecessary interviews.

I scripted the interview to ensure that each participant was asked the same questions, to control bias, and to give participants an equal opportunity to comment on their learning experiences (see Appendix B, Interview Guide). At the onset of the interview, I continued to establish rapport by welcoming and thanking each participant for volunteering for the study. Participants were also reminded of their consent to audio record the interview to help me understand their experiences and provide them with a summary to review for accuracy. Confidentiality was also readdressed, and the participants were asked if they had any questions before proceeding. Questions were

addressed as appropriate. Permission to audio record the interview was then obtained from each participant. I then explained the purpose of the study and defined the major terms being used—*emergency remote teaching*, *online learning*, and *blended learning* (see Appendix B). The participants were asked if they had any questions, and answers were provided where appropriate before proceeding.

I collected the data verbatim using Google Meet audio recordings and ensured accuracy through cross checking the transcription with the recording. Where applicable, I used probes to gather more in-depth responses or clarify answers. Upon conclusion of the interview, participants were given the opportunity to add anything not discussed about their experience with either the ERT, the online learning, or the blended learning. Further, they were advised to email me within a day or two if they thought of something they would like to include in the transcript. Data collection occurred as frequently as eligible participants volunteered for the study and completed the interview, and I transcribed and validated the takeaways through member checking protocols.

I collected data over a 2-week period and terminated requests for additional volunteers after achieving data saturation with 10 participants. Upon conclusion of the interview, participants were debriefed on the purpose of the study, thanked for their participation, and emailed a prepurchase $20 Visa gift card directly from the vendor in appreciation for their time and effort. The recorded interviews were transcribed using Otter (see https://Otter.ai) between July 22, 2022, and August 8, 2022. To ensure accuracy, I compared the transcription to the audio recording. Minor corrections were made where appropriate and then emailed to each participant for review. Participants

were asked to make any corrections and reply by return email. All participants complied with the instructions. Member checking occurred in real time during the interview by restating main ideas or using clarifying statements to ensure that I understood the participants' meaning and through the participants' review of the transcripts for accuracy. I also used reflexive memos to help guide decision making when coding data. These approaches acknowledged the significance of the participants' time and limited reengagement with participants for follow-up of unnecessary interviews. Participants were offered a copy of the research findings via email at no charge.

Data Analysis

Before starting the coding process for the interview data, I quickly browsed through each transcript, noting first impressions. Then, using Quirkos licensed software, I coded relevant words, phrases, sentences, or sections of the first transcript based on the participant's response to the interview categorical questions contained in Appendix A. Next, I coded and analyzed each transcript among the participants' responses by category for the emergence of new codes. If new codes emerged, I reviewed the first set to see if those codes also appeared. This continuous iterative process was repeated throughout the coding process between September 2, 2022, and October 21, 2022, resulting in the emergence of the following themes that aligned with the CoI presence and the research question:

- Advancement from the early stages of ERT to a more stable online and blended learning environment was evident.

- Perceptions of the teaching, social, and cognitive presences in current online and blended learning are evolving.
- Benefits and challenges of online and blended learning are a natural outgrowth of advancement.
- Additional instructor training is necessary for continued advancement to maximize student learning.

Evidence of Trustworthiness

As discussed in Chapter 3, trustworthiness is a study's credibility, transferability, dependability, and confirmability. Trustworthiness determines readers' confidence in qualitative research (Carminati, 2018; Patton, 2015). Trustworthiness is equivalent to reliability, validity, generalizability, and objectivity in quantitative analysis (Carminati, 2018; Lincoln & Guba, 1985). Unlike quantitative research, which uses numbers and statistical equations, qualitative research uses text, photographs, or nonnumerical data to analyze a phenomenon (Saldaña, 2021). However, there is confusion on whether qualitative research can achieve the rigor and generalizability associated with quantitative research (see Carminati [2018] for discussion). Carminati (2018) contended that qualitative researchers could attain trustworthiness through "transparency, reflexivity, and accuracy of the research practice itself and the researcher's ability and effort to unfold and explain interactions" (p. 6). Lincoln and Guba (1985) identified criteria to ensure trustworthiness in qualitative research below, which I employed as practical strategies for trustworthiness in this study.

Credibility

First, to have credibility, my findings and interpretations needed to be plausible and align with the participants' sense of reality (Lincoln & Guba, 1985). To achieve credibility, I described and utilized strategies such as triangulation, prolonged contact, member checks, saturation, reflexivity, and peer review (Patton, 2015). I achieved prolonged contact with the phenomenon through an exhaustive review of the literature to understand how the Covid-19 pandemic affected students of HEIs and by conducting in-depth interviews with 10 participants who met the eligibility requirements for the study. Further, I explored each participant's experience and perceptions in the following areas to understand the phenomenon, maintain prolonged contact, and help answer the research question:

- perception of ERT on education
- perception of online learning on education
- perception of blended learning on education
- exploration of CoI presences in current online or blended learning
- satisfaction with current online learning
- dissatisfaction with current online learning
- recommendations to improve current online learning

Although researchers have conducted few studies on how the pandemic affected HBCU students, the prolonged contact with the literature helped orient me with the phenomenon in enough depth to investigate without bias. The target population was a

purposeful sampling of 10 HBCU undergraduate students, age 18 or higher, who transitioned from traditional face-to-face instruction to ERT during the pandemic to minimize virus spread or subsequently enrolled in online or blended courses as HBCUs adapted pedagogies to combat the virus's spread. I conducted interviews until reaching data saturation—that is, the point at which there was no new information arising from participants about the phenomenon under investigation (Patton, 2015). To further reduce bias, the study was grounded in empirical theory using Garrison et al.'s (2000) CoI theoretical framework to undergird the investigation. Interviews were conducted using Google Meet (audio option only) to help protect visual images of the participants. Audio transcripts were transcribed using Otter.ai encrypted technology. I checked the transcripts against the appropriate recording for accuracy and made corrections where necessary. Validation was achieved through member checking after coding and analysis to ensure that my interpretation of takeaways was accurate (Patton, 2015; Rubin & Rubin, 2012; Saldaña, 2021).

Further, I used triangulation to ensure that the codes, categories, and emerging themes and patterns were embedded in CoI theory to address the research question. I sought feedback from the dissertation committee and Walden's IRB where appropriate and used reflexive journaling to pinpoint potential biases and critical decision making (Saldaña, 2021). All data were password protected and secured in my home office. I stored a password-protected electronic backup copy of the data in the cloud using Quirkos software.

Transferability

Second, to have transferability, researchers should be able to apply the findings in a similar context (Lincoln & Guba, 1985). However, researchers must understand how the investigator arrived at the findings and conclusions before researchers can do so. Therefore, to help establish transferability, I outlined in detail the components of this investigation to include the following main takeaways:

1. A discussion of the study's purpose, research question, interview questions, conceptual and theoretical frameworks, and the research design and rationale to orient researchers with the investigation, population, setting, and methods of inquiry. This understanding was a prerequisite to applying transferability in comparable settings (Carminati, 2018; Lincoln & Guba, 1985).
2. A detailed explanation of the methodology, including participant selection logic, procedures for recruitment, participation, and data collection, to allow researchers to understand how I conducted the study. Participants were purposefully selected based on their eligibility to answer the research question. The interview questions were grounded in Garrison et al.'s (2000) CoI open-source survey to elicit thick, rich participant descriptions. I used probes to ensure I understood or to generate more data if interviewees responded with a "yes" or "no" to a question. (Ravitch & Carl, 2016). Thick descriptions were achieved from a nationally recruited sample of 10 undergraduate students from six HBCUs to ensure transferability and help other researchers duplicate the study in a comparable natural setting.

However, I masked the data to protect the participants' identities and their attending HBCUs. The recruitment of participants was through HBCU social media sites (e.g., HBCU CONNECT), which allowed direct national access and increased the possibility for maximum variation in participant selection (Patton, 2015; Saldaña, 2021). See Appendix C for participant demographic data.

Dependability

Third, dependability is the extent to which stability or change in the natural environment occurs and is documented (Lincoln & Guba, 1985). To help achieve dependability, I employed audit trails and triangulation strategies (Patton, 2015). For example, I documented the data collection dates and created an audit trail of raw data (i.e., coded transcripts using Quirkos software, assignment of codes and themes, methodological and decision-making processes, and reflexive journaling). I used the raw data to guide my thinking and decision making at each study stage. To ensure credibility, transferability, dependability, and confirmability suggested by Lincoln and Guba (1985), I

- identified criteria to ensure participants met the eligibility requirements
- transcribed interviews accurately by comparing the transcription to the appropriate recording and continued data collection until achieving saturation using Quirkos software, equivalent to First Cycle and Second Cycle coding methods (Patton, 2015; Saldaña, 2021)

- used the CoI framework to ground the study and explore the phenomenon through the lens of qualitative interpretive description to analyze codes, categories, patterns, and themes that align with the research question
- achieved triangulation through cross-coding participants' responses to interview questions, analytic memos, and member checking (Lincoln & Guba, 1985; Patton, 2015; Saldaña, 2021)
- used coding tables (see Appendices D and E) to increase transparency and help explain data collection, analysis, and findings—thereby enhancing trustworthiness (Cloutier & Ravasi, 2020)

Confirmability

Fourth, confirmability is the ability of the researcher to collect data as an instrument, make sense of the data, and justify findings, interpretations, and recommendations without bias. The research question and interview questions were grounded in Garrison et al.'s (2000) CoI survey instrument. Researchers validated the survey in English—and other researchers translated and validated the instrument in several languages, including Chinese, Portuguese, Turkish, Spanish, and Korean. Using the CoI instrument to develop interview questions allowed me to investigate the phenomenon scientifically without bias (Carminati, 2018). I achieved prolonged engagement through an exhaustive literature review and in-depth interviews to understand participants' experiences transitioning to ERT, online and blended learning amid the Covid-19 pandemic. Further, during the coding process, I spent considerable time reading and re-reading the data to assign meaning to the text to achieve prolonged

engagement (Patton, 2015; Saldaña, 2021). Persistent observation also ensured credibility by examining the data in detail to distinguish between relevant and irrelevant data (Saldaña, 2021).

To achieve triangulation, I cross-coded interviewees' transcripts to identify, examine, and analyze common themes and discrepant cases based on participants' experiences with the phenomenon. Further, I included interview questions to identify the participants' most salient perceptions of satisfaction, dissatisfaction, and recommendations to improve online learning. For consistency and validity, I coded the responses separately and triangulated the findings with those from the other interview responses. To help provide a robust inquiry and answer the research question, I located the additional data points within the CoI framework (see example in Appendix E). Reflexive journaling, peer debriefing with neutral colleagues to discuss and challenge analytical decision-making processes, and accountability to the dissertation committee also helped to control bias and ensure trustworthiness (Patton, 2015). I provided raw data to the dissertation committee and maintained archival data for destruction 5 years after dissertation publication.

Ethical Procedures

Ethics in higher education exist to protect participants, researchers, and institutions from harm (Rothman, 2017). The protection of participants is significant, given the potential conflicts that may arise due to power differentials (APA, 2017). To assess the potential for harm and weigh the risks and benefits of conducting the research, Walden's IRB prohibited the recruitment of participants or data collection until I obtained

ethical approval from the university's IRB—a more salient requirement during the Covid-19 pandemic (Chenneville & Schwartz-Mette, 2020). Walden University's approval number for this study is 04-26-22-0587716. Since this research examined the phenomenon of HBCU undergraduate students' experience with ERT, online, and blended learning amid Covid-19, I recruited participants from an educational setting. Therefore, I closely examined Walden's (2022) *IRB Guide for Collecting Data in an Educational Setting* and the APA's (2020) *Conducting research during the COVID-19 pandemic* for potential sources of ethical conflict.

I never taught at an HBCU or had a personal or professional relationship with students; therefore, no ethical conflicts existed. While I collected data from other teachers' students, doing so did not pose any ethical dilemmas relating to leverage or strain attributed to the investigator-participant relationship or my gain. I did not perform dual roles as an evaluator and instructor, nor did the study's design and research question take the inquiry outside the education domain.

However, since potential participants may have been attending school on campus or from home, the recruitment and data collection plan included measures to help minimize disruption to learning. For example, I allowed participants to choose the date and time of the interview that best accommodated their class schedule or agenda. Initially, I considered conducting the interviews by telephone; however, upon further evaluation, the Google Meet platform (audio option only) offered a more efficient method of capturing, reviewing, and securely storing the data. The informed consent agreement contained the agreement for participants' permission to record the interview

(APA, 2017). Although the natural setting was within HBCUs, I did not direct inquiries to any specific race or ethnicity since HBCU students represent diverse racial and ethnic backgrounds. For example, Bluefield State College, an HBCU in West Virginia, has a 90 percent White student population and a White president (Bracey, 2017). In contrast, St. Philip's College in Texas is the nation's only HBCU and Hispanic Serving Institution (HSI), with 60 percent Latinx students, 29 percent White, and 12 percent African American or Black (Sandoval-Lucero & Brownlee, 2020; Morris, 2017).

Therefore, recruitment invitations targeted HBCU undergraduate students—regardless of race or ethnicity—who transitioned from face-to-face instruction to ERT, online, or blended learning as HBCUs adapted pedagogies to combat the virus's spread. I collected the following demographic data:

- age
- gender
- race/ethnicity
- marital status
- housing/living situation
- parental annual income (range)
- highest parental education level completed
- class standing
- declared major (if known)
- HBCU attended (data masked)

I collected the demographic data for post-factum analysis to understand the phenomenon in a larger context (see Appendix C). The recruitment strategies—neutrally developed, allowed interested individuals to read the inclusion criteria and volunteer as possible participants. The recruitment invitation included a web link to the interview, which contained an IRB-approved informed consent form outlining participants' rights and protection. I wrote the informed consent using standard English that undergraduates readily understood.

The informed consent explained the nature of the study, potential risks and benefits, confidentiality and privacy, and the voluntary participatory nature of the research. That is, participants may withdraw for any reason and choose not to answer questions without fear of consequences. I protected participants' identities and confidentiality using pseudonyms from the project's onset. I also provided instructions on obtaining a free copy of the study's findings and how to contact me if they had questions at any stage of the data collection process. Upon conclusion of the analysis, I debriefed participants using Google Meet (audio only). All data remained password protected and filed in a separate folder on my personal computer, secured in my home office. I backed up password-protected data in a cloud storage with access restricted to me. I provided the raw data to the dissertation committee, as required by Walden University's policy. I will maintain archival data for 5 years after publication when all files will be permanently deleted (APA, 2017; Rubin & Rubin, 2012).

Results

Advancement From the Early Stages of Emergency Remote Teaching to a More Stable Online and Blended Learning Environment Was Evident

Participants' Perceptions of the Early Stages of ERT on Their Education

Eight of the ten participants experienced the initial shift from traditional in-person learning to ERT and seven negatively perceived ERT in their education. The exception was P7, whose perception was more neutral, stating, "it did not affect me that much," and summarized the learning experience as "just a list of quizzes, assignments, and tests to do in this online system." P5 recollected ERT was "quite hard at first" and perceived the process as "kind of impossible." P1 reported being "unable to get answers from the instructor" and finding "the class style challenging." P2 expressed being "very confused about where to start and how to start" – frustrated with the learning experience and having unexpected costs involving "broadband subscriptions" and "taking too much time to study." Further, the combination of limited funds, the additional expenses, isolation from the lockdown, and the inability to communicate with peers and instructors in person created a "very stressful" experience that impacted the learning experience. Despite these challenges, P2 eventually learned to rely on a curriculum to get through the courses, finding that over time, ERT was "educating as well."

P3 initially reported that ERT "was not very difficult for me." However, as the interview progressed, P3 reflected on a turning point citing "the hectic part of the studies was when I had to do a lot of assignments and school projects" consisting of "much typing"—and like P2, having to "pay for data subscriptions" to get "a steady internet

connection." P3 admitted that "having a full-time online class cost more than expected"—not just monetarily—but also impacted family obligations. "I could not get to pick up my son and daughter easily because of putting in extra online time." The administrators shut down the school's campus library, and P3 had to use the online library to do research. However, "some of the materials were in the school library,"—creating frustration.

Moreover, P3 reported that the instructor was "so busy" and "did not have much time to talk to students" or "go one-on-one if you did not understand something." P3 acknowledged having "issues with reading" and resorted to "calling some friends to help," which made the process "exhausting," "time-consuming," and "not very comfortable for me." The cumulative effect resulted in P3 suffering "a little emotional setback."

P4 also expressed "difficulty," and the ERT process "affected my learning negatively." Difficulty interacting with peers and professors was a prevailing theme for several participants, including P6, who reported being unable to "communicate with your professor in person" and, consequently, had "difficulty grasping the content of the course." Further, P6 stressed that "having materials like good Wi-Fi and a laptop to start with" was critical to success but even so, "when you are at home doing virtual learning, and an emergency comes up, or something happens, and Wi-Fi fails, you cannot communicate." P6 was overcome by the magnitude of the work, stating, "time management affected me." However, P9's perception was that ERT "impacted my learning negatively" for different reasons stating, "most of the classes would have to be canceled because of technology and poor planning" and not being able to "present

anything on my research paper." However, P9's perception of not being "able to form connections with my professors" aligned with those of P6, P3, P2, and P1.

Further, P9 reported that "the setting was too flexible and relaxed" and "could decide to skip a class" because of not having the "motivation to participate in schoolwork." Nonetheless, P9 reported an upside to ERT, citing, "it improved my grades" because of introducing a pass/fail scoring system that did not affect the standard letter grading system. "That definitely improved my grades because a pass would have kept my GPA up even if I had gotten a B normally." However, P9 found the overall process "hard" because of an inability to "see other students" and form relationships (see Appendix D).

Participants' Perceptions of Online Learning on Education

Despite the challenges observed in the early transition to ERT, the participants' perception of online learning became more positive over time. For example, P2 eventually learned to rely on a curriculum to get through the courses and found that ERT was "educating as well." The prevailing perception was that with time, online learning became easier as instructors received training and became more proficient with online learning platforms and delivery systems. P10 framed it this way, "with the online learning, they [instructors] had more time to practice, they had more time to go for training and everything." Students were also learning and adapting to online platforms like Canvas, Blackboard, Zoom, Google Meet, and digital library resources to facilitate learning. P1 expressed a marked improvement in instructor accessibility and overcoming

the learning difficulty observed in ERT, commenting that "my [online learning] experience was great," and "it was fun."

However, only some were optimistic. For example, P2 and P6 felt they had to invest too much time studying. P2 related, "there's not enough time to study in the day or night," while P6 echoed, "staying on a computer for hours, the whole day was very hard, staring at a screen from 8 am until 5 pm the whole day." Nonetheless, the overall perception was positive. P5 reported that instructors incorporated "more collaborations and collection activities," which "arose my activism in online duties and classes." P1 had similar perceptions stating, "I didn't have a challenge working together with most of my colleagues"—finding "everything was properly arranged" with "proper time for class schedules." P3 found online learning to be "quicker" and "not so difficult for me" with "resources on YouTube and different bookshops online." P3 took advantage of technology to advance learning: "If I have to understand something, I just have to Google it." P4 rectified the difficulty with internet connections: "At first, I had some difficulties, especially a good internet connection, but later, I had a better experience because I bought a router from Amazon."

P9's perception was that of having autonomy and agency, stating that online learning "was pretty easy to me" and admitted to "learning a lot better" because of "having my schedule and figuring when I needed to do stuff." Further, P9 reported liking the flexibility of online learning as "it allowed me to take more frequent breaks, but also do the work when it was needed to get done." P7 appreciated the convenience of online learning, stating, "I liked online learning because it's a difficult time to travel somewhere

and walk. However, online, you can use your laptop." P1 perceived being "comfortable with the instruction" and P5 commented that the online learning "was really helpful." However, P9 stated feedback was an issue: "sometimes [instructors] will use Zoom links to ask questions and get feedback, but most of the time, it was conflicting with some of my classes, so that was not always a good option." Email was an alternate way to communicate with instructors, but P9 did not "feel it was the same as being able to ask questions in person and go more in-depth." P6 did not favor online learning stating it "made it hard to focus at times or stay committed to completing your work or understanding the content or assignments." In the context of understanding course content, P6s perception of ERT and online learning remain unchanged.

The evidence supported the advancement to a more stable online learning environment. Instructors had more time to practice while students were also learning and adapting to online platforms like Canvas, Blackboard, Zoom, Google Meet, and digital library resources to facilitate learning. I observed a marked improvement in instructor accessibility in which a participant's perception of online learning was that of being "great" and "fun." However, other participants found room for improvement, citing those courses required too much time for studying – an issue that fell within the TP (course design and organization), which was also evidence of an area requiring attention in an ever-evolving TP.

Participants' Perceptions of Blended Learning on Education

Most participants had a favorable perception of blended learning, finding it an excellent alternative to traditional in-person learning. P1 perceived it as "a door to teach

positively," found it "nice," and not "a challenge to me." P3 believed blended learning was a "perfect" teaching methodology because it provided a "choice" between online and in-person classes based on students' circumstances and learning styles. "Students [can choose to] go in for in-person classes, then most of the days, stay at home for online classes" (P3). P10 concurred, stating, "I felt it was a perfect balance between everything else, and if blended learning stays like that, I'm okay with it for a very long time." P10 also noted that "at this point, they [instructors] had perfected the online method" and, like P3, found blended learning relaxing by introducing a social component. "If you didn't want to go to school on Monday, you could stay at home and watch the lecture; then the next day, you can go to school because you want to see people." P10 also perceived a sense of closeness with the online component of blended learning, stating, "as much as they [instructors] had perfected the online method, we're also developing a sense of closeness at this point. Instructors will ask us questions or show videos, keep us engaged making things and sharing our screens to make us close again." P3 shared the perception that blended learning was "always relaxing, refreshing and fun." P3 enjoyed the privacy and autonomy of decision making, stating, "I have space to do my assignments, go online and make some decisions on my own." P2's perception was one of flexibility and discussed how a scheduled in-person class had to be delivered remotely because the professor contracted Covid-19: "she [the instructor] was recovering, and we did virtual learning with her from her home" to avoid canceling class or interrupting learning. P4 stated, "combining these two [online and in-person classes] to make it blended learning was tactical" which resulted in "my having a better learning experience." P6s perception

was that blended learning was "an improvement from 100% online learning because you were able to have some classes in person." P7 recounted that "the majority of my classes were in person, and I didn't do that much online, so the one blended [online] class didn't affect my learning." However, P5 who experienced a fuller blend, stated that "learning became quite the best."

Although favoring blended learning, participants also discussed problematic areas. P4 stated there were lingering problems with broadband and internet connections: "when you're talking about the online [aspect of blended learning], not all the students have internet access." P6 spoke about the scheduling confusion between online and in-person sessions: "some days you're in-person in the classroom, and some days, you're virtual, so that could get confusing [and] could affect the instruction that you're getting and the amount of time because some professors couldn't remember the schedule or keep up." P2 perceived that a few professors were having difficulty adapting to the requirements of the school syllabus and that learning "was still heavy, even while you went to school." The tendency, according to P2, was "to have fewer physical classes, and more virtual classes…including "having classes at night."

Although enrolling in university during the transition to online learning, P8, a sophomore, used a combination of conventional wisdom based on historical practice and lived experiences to illustrate the impact of blended learning on education. For example, "before COVID, professors provided more collaborative experiences and presentations" (conventional wisdom) "but this year, there were only four presentations" (lived experience). Further, P8 reported, "our team received a company sponsor (lived

experience), and in previous years before COVID, we would do a site visit, different tours, and spend a week working with them" (conventional wisdom). However, "due to COVID, we couldn't have any of those experiences" (lived experience). The takeaway was that sponsors had to suspend historical sponsorship and internship programs when the campus closed during Covid-19 to limit the virus spread. When the university and sponsoring activities resumed with a smaller footprint, it negatively impacted the ability of students to participate in fieldwork, interact with subject matter experts, ask questions, and get hands-on training to reinforce lessons taught in the classroom. P9, a senior, perceived that blended learning "was okay; it wasn't anything special" and highlighted the following interruptions and barriers to learning:

- Many of my in-person classes got canceled out of concern that the virus was spreading.
- We couldn't discuss this in person because most collaborations were not allowed.
- Wearing the masks created a divide between the professor and the student because of not seeing the professor's face.
- We could not engage in lab courses because of Covid-19 isolation protocols.
- Most of my labs had to be online.
- It was just very inconvenient.
- We had to use McGraw Hill simulations of the person doing the lab.
- It [the learning experience/simulation] wasn't the same.

- For chemistry and physics, we had to watch videos of someone doing it and write down that information in the video instead of learning it for ourselves.

In contrast, P10, a sophomore who had never experienced traditional in-person classroom learning in university, observed that "there was a sense of awkwardness when we had to go back to class." "I have never had a college experience with a fully in-person class," P10 reported and reminisced that "in high school, after the in-person class, you usually see people lounging afterward talking or laughing. However, none of that in college; once the class ended, everyone went to their respective places." P10 described the challenge professors experienced trying to create a SP in the classroom: "as much as the teachers would try their very best to reach out to us and engage us in the class, students were awkward with each other because we had not seen each other in person before." Therefore, students were unsure of how to interact with each other. P10 explained, "it was like, who do I pair up with? Who do I talk to?"

Moreover, P10 surmised, "You're on your own, surrounded *by* people, but you're not *with* people." "You're on your own with your laptop listening, and after that, you leave." Despite the perceived challenges imposed by Covid-19 protocols, overall, the participant's perceptions of blended learning in their education were positive and supported the advancement to a more stable learning environment with a preference over that of traditional in-person classroom instruction.

Perceptions of the Teaching, Social, and Cognitive Presences in Current Online and Blended Learning Are Evolving

To probe the participants' perception of coursework design and organization, I asked them to provide an example of how the instructor provided clear instructions on how to participate in course learning activities. Overall, the participants' perceptions of teaching design and organization presence were positive. The participants favorably commented on coursework design and organization, which encompassed communicating essential course topics, course goals, how to participate in course learning activities, and important due dates/time frames for learning activities. For example, P1 stated, "we always get the necessary instructions from him [instructor]," and P6 elaborated that "clear instruction could come in the form of writing out instructions about the assignment and posting it to Blackboard or Canvas." P7 shared experiences in which "during the lecture, [the instructors] will explain things, like how to use the syllabus and textbook" and "they would discuss any assignments that are due that day, and let you know which ones are due next—and that's how we would go." P8 echoed similar perceptions: "she [instructor] made it very clear every time we had a meeting what was due the next day or what was due the next week. The instructor outlined everything." Further, "she provided a syllabus, so everything was there." P2 and P3 relayed that their instructors conveyed essential information "on Google slides or PDFs or documentation through email." P10 discussed providing access to international students: "she [instructor] gave us options on how to access things like discussion topics, goals, and due dates online if you were not in the States, or if you were not coming to class in person" by "going to our platform, which

was Blackboard, and you will see all the instructions there." P10 also stated, "you could email her, and she will give you all the instructions." The instructor "also ensured that the teaching assistants (TAs) were easily accessible almost every time to answer any questions."

Facilitation

To probe the participants' perception of the facilitation component of the TP, I asked two questions:

1. Can you provide an example of how the instructor introduced, facilitated, and directed instruction to help achieve meaningful learning outcomes?
2. Can you provide an example of how the instructor helped to keep you engaged and participating in productive dialogue?

Most of the participants demonstrated a positive perception of facilitation. P10 reflected on a technique the instructor used: “A professor made us make an airplane out of paper, like origami. We all made different airplanes, and she used it to show that is how our mind works—and that's how she started talking about psychology.” P1 stated, "he [the instructor] gave me the proper orientation and the guideline of what I was supposed to do." "I could approach him for assistance" P2 recalled being "ready to study and achieve my goals" because the instructor was also "very willing to explain everything." Further, P2 stated, "we were able to learn and implement what the instructor taught us," which overlaps with the CP (Resolution).

P3 cited "[doing] group projects together" as an example of how the instructor designed the lessons so that students remained engaged and participated in the

discussions, and P4 focused on the instructors' use of technology like "Zoom, email, invite links to online courses, topics, and instructions" which were "easy to follow." Further, P4 cited the image slides "the instructor made were engaging" and facilitated attention by providing "a clear knowledge of what he is talking about." P5 referenced "being grouped and assigned case studies to research" and doing "lots of collaboration," which reinforced the development of a sense of community among the course participants, overlapping with the SP (Group Cohesion). P5 also stated the instructor showed "active mentorship and noted there was quite a lot of discussion" in the "group talks [which] brought us and our ideas together"—overlapping with the SP (Open Communication & Group Cohesion). P6 recalled having "to do reflections or peer discussions, which provoked thoughtful conversations reflected in learning. "We had to communicate and take time to hear other people's thoughts, as well as our own and write about one specific thing you learned to help you see what you gained from the course." The teaching activity, facilitated by the instructor, overlapped with the SP (Open Communication) and the CP (Triggering Event/Exploration).

However, P6 noted online labs were "a bit lacking" and not as effective: "If you had a lab class, it'd be like ‘go watch a YouTube video of someone else completing the lab’, which could make it hard to be engaged." However, in a different online class, P6 provided another example of a professor using active engagement: "we broke out into breakout rooms and worked together to answer problems and then got back together with the whole class and discussed how we worked it out. I think that was very engaging and helped retain information." However, Covid-19 protocols curtailed the instructors' use of

active engagement when students initially returned to the in-person portion of blended learning:

> Students had to alternate days that they went in, so there weren't too many people at once. They [professors] didn't want students to interact physically because of COVID protocols. So, we lacked peer activities or reflections, and it was more of listening to the teacher. (P6)

Therefore, online courses (other than lab classes) had the potential to be more engaging. P8 stated, "from the get-go, the professor put us into teams of 20 students, so you already have that kind of bond with the group in that class that you would generally flock to." Further, "the teacher made us think outside the box, so it was very different compared to my other classes where it was just very standard." P8 remarked, "it was more engaging and allowed us, *all of us*, to speak during that setting." P8's learning experiences contained an overlapping SP (Open Communication).

P9 experienced both positive and negative aspects of instructor facilitation. A positive learning experience occurred when the "professor would make us read papers and watch videos about individuals experiencing these diseases, which put things into perspective and helped me to remain engaged and increased my curiosity about neuropsychology." P9's example of facilitation using engagement teaching techniques overlapped with the CP (Triggering Event). Another positive example was when P9 spoke highly of a professor who was "really helpful" by allowing the class to "ask questions using the online 'raise hand' feature," which facilitated feedback, understanding, and learning in real-time. However, P9 also recalled a negative experience

in which another instructor "completely blocked that [raise hand] function" and "didn't even let people put on the microphone to ask questions." P9 stated that "many people were asking her [the instructor] questions about the course, and she got frustrated and just did that" [blocked the raised hand function]. However, in doing so, the instructor turned off the students and frustrated their learning. P9 reflected that this might have also been attributed to the instructor's personality or teaching style, stating, "even when I sent emails to this instructor, sometimes they weren't answered," which overlapped with the TP (Direct Instruction) and the SP (Open Communication). However, P9 reported being "able to communicate with the teaching assistants in that course, so that helped." Concerning how the instructor designed the lessons so that students remained engaged and participated in productive dialog, P10 stated,

> In almost all my courses, I need to watch a video, movie, animation, or documentary. That helps a lot because what I term 'the tech generation,' we don't want to see a whole bunch of writing and a textbook doesn't necessarily help us to retain stuff. It's we watch it, we remember one or two things from the video, and then we'll talk about it. I feel many instructors are implementing videos, movies, and animation to explain the coursework, and it's good because I don't understand some things when I read the textbook. However, I completely understand because I watch an animation or documentary or something where I see people move.

Direct Instruction

Although not explicitly explored, seven participants provided data impacting direct instruction. P4 stated that the "instructor provided instructions on how to approach

topic questions," which helped to learn the course goals and objectives. P1 recalled that "the instructor sent detailed information to each of us" [on relevant issues]. P8 mentioned that "the teacher told us about a protest on topics we've been talking about and challenged us to go and observe what was taking place," which helped us learn course-related objectives. P8 also recalled "checking in every two weeks with our professor to get feedback and make sure we were ready to go on presentation day." P7 experienced "the professor gave out graded pop questions randomly throughout the Zoom lesson." The graded aspect was evidence of receiving feedback that helped P7 understand strengths and weaknesses relating to learning outcomes. P3 stated that the "instructor used group talks, group projects, and collaboration" [to focus discussion and help me learn].

As previously discussed, P9 recalled a negative experience in which another instructor became overwhelmed by student questions about the course and "completely blocked the 'raise hand' function" and "didn't even let people put on the microphone to ask questions." P9 later stated that the professor's actions "put me off from the course because I just couldn't understand what was going on, and I left the course feeling dissatisfied."

Conversely, P10 reflected on a professor who was "big on communication." "She was patient with us and never got frustrated, even though we asked the same questions over and over again"—indicative of providing feedback to help students understand relative to the course's goals and objectives. Further, the professor provided feedback in a timely fashion, as reported by P10: "once you send a message or a question, she replied within one day, sometimes within hours in a relatively short amount of time." As a result,

"we were able to work with the instructions and achieve the objectives." P10 reflected on yet another instructor:

> I have another professor in a blended course who gave out more information in class than if you stayed online. Sometimes even when those of us in-person tried to say, “Oh, the people online cannot hear you or something towards that line,” he's like, “Oh, they're not in class, so he can't do anything about it.”

P10 concluded that professors did not have consistent, intentional, focus-driven instructional delivery methods or temperaments. P10 noted that instructor temperament, expertise, and delivery styles varied considerably: "It was not a clear-cut, equal situation in every single class, and it was very, very dependent on the professor's personality and delivery style."

The data provided evidence of an evolving TP compared to the participants' perceptions of early ERT in their education. Further, in many examples, the TP overlapped with the social and cognitive presence—a characteristic of the CoI framework. Even though the overall perception of the TP was positive, the evidence suggested that sound teaching practices were inconsistent. The participant's perception that some professors did not have consistent, intentional, focus-driven instructional delivery methods or temperaments—along with the perceptions of other participants—provided evidence of an evolving TP that required ongoing training.

Social Presence (Affective Expression)

To probe the participants' perception of affective expression, I asked them to provide an example of how getting to know other course participants gave them a sense

of belonging. Nine of the ten participants provided positive examples. P1 "made some friends, shared insights, assisted each other to develop knowledge, and was comfortable using the online platform to hold meetings." In doing so, P1 fulfilled the significant components of Affective Expression:

- getting to know the other course participants provided a sense of belonging to the course,
- was able to form distinct impressions of some course participants, and
- found online or web-based communication an excellent medium for social interaction.

The theme continued as P2 discussed how "it was very easy to know your colleagues at school" because of being "automatically assigned to a team to work with" in which "everyone will know you." P3 described a similar process for collaborative online work: "every one of us joined the online meeting using first and last name, and your student number attached," in which "you get to see and know your fellow students." P4's perception of belonging in the course was "when you see your colleagues participating as well." It makes "you *feel* like you're in the right place—that this is the *right* course you're supposed to be doing." As pointed out by P6, "being able to see some of your classmates in person a couple of times a week was also helpful" in feeling a sense of belonging. Further, P6 reflected, "although you're just reading someone's discussion board post, or maybe just seeing their box on your screen in a zoom session, those small or limited interactions still help to know there are real people and other students in your class."

P5 recounted having "a lot of group work and a lot of collaboration and collective ideas," which "really helped to belong more, understand people more, and work more with people." P7 recalled using technology to help create a bond among the students: "there's an app people use, especially in our group meeting, to send links so we can talk about things." P8 described an online course that mimicked the camaraderie of an in-person class: the instructor would assign the students "to breakout rooms with different students, which allowed us to collaborate. Even though it was not an in-person experience, she [the instructor] made it feel like it was."

Further, the technique generated spontaneous collaboration beyond the virtual classroom, helping to strengthen a sense of belonging: "after we had classes like those or had her class, we would go off to meet up to have lunch at the cafeteria and discuss the class" (P8). Additional learning was taking place voluntarily outside the classroom – indicative of an overlapping CP. Conversely, P9 expressed a personal and insightful affective expression:

> It didn't give me a sense of belonging. I felt distant from other students; I didn't connect with anyone. We had to do projects, like little class assignments together, but after that, I didn't speak to any of the people or form any meaningful connection with them. Being an international student also made connecting with other course participants difficult. During online group discussions, I found it challenging to communicate my ideas because sometimes people found it difficult to understand me because of my accent. I also found it difficult to understand

other students when they spoke. The difficulties carried out in personal experiences hindered me from forming deeper connections with other students. P10 stated that "forming groups allowed us to understand the topic so that we don't fail, and we can move on to the next level like organic chemistry II or something beyond that." Further, "we felt this kind of connection because we're all struggling with that course."

Open Communication

Although not explicitly explored, the researcher coded participants' responses to include open communication data. This data represents a range of communication across a broad spectrum of participants' perspectives. For example, P1 described the online discussions as "superb" and stated that a "willingness to listen" to colleagues and "working together as one to find solutions" made the experience "delightful." Further, other participants are "always willing to listen" [to P1] during discussions—suggesting a bi-directional comfort in communicating through the online medium, participating in the course discussions, and interacting with the other course participants. P3 found it "easy to ask questions and participate in the class" and commented that "we didn't argue"—indicative of a pleasant learning environment. Likewise, P5 stated, "I never argue with people in any way," and P7 commented, "I did not have disagreements with students."

P6's perception differed in that online discussions may have presented a block to open communication and interaction with peers: "it's hard to imagine who that person is behind what they wrote because you don't know them, or you haven't seen them." However, P6 also commented that "you can always connect and engage them via email,

text, or Zoom, which was helpful," suggesting a friendship and bond that overlaps with an affective expression, open communication, and group cohesion. Similarly, P8 mentioned it's "like when you create a bond or trust within your class, or a group of students"—only possible with open communication among cohorts. On the other hand, P9 may have withheld opinions in class discussions due to discomfort:

> Sometimes I felt like I disagreed with people's opinions, but I've never been someone who would express my opinion, especially in a classroom setting. During online group discussions, I found it challenging to communicate my ideas because sometimes people found it difficult to understand me because of my accent. I also found it difficult to understand other students when they spoke.

P10 reflected on disagreeing with a peer in a discussion where the other student's feelings were hurt and "a professor defused the situation," helping to reestablish open communication, trust, and harmony in the online classroom.

Group Cohesion

To probe the participants' perception of the group cohesion aspect of the SP, I asked the participants two questions:

1. Can you give an example of feeling comfortable disagreeing with other course participants while still maintaining a sense of trust?
2. Can you provide an example of when online discussions helped to develop a sense of collaboration?

As previously stated, (P6) expressed difficulty in disagreeing with students in an online learning environment because "it's hard to imagine a person that you can't see, or you

haven't physically interacted with in person." However, P6 continued, "if you're reading someone else's discussion post and you don't agree with what they say, I think it could be hard to reflect on that." Nonetheless, P6 asserted that "discussion board posts allowed me to hear other people's thoughts or reflections on content or activity."

P9 asked, "What if I didn't engage in any disagreement?" and quickly stated, "I don't remember ever engaging in conflict with anyone." As previously noted, P9 admitted, "there were times where I felt like I disagreed with people's opinions about things, but I've never been someone who would express my opinion, especially in a classroom setting." P9 concluded by stating, "I might be thinking it in my head, but I've never been very outspoken with stuff like that." However, P9 found online discussions "really helpful to hear about other people's opinions about certain topics."

The remaining participants provided either affirmative or neutral responses concerning how it made them feel when disagreeing with other students while maintaining a sense of trust. Further, the participants' responses supported that other course participants acknowledged their points of view, and online discussions helped them to develop a sense of community through collaboration. For example, P1 emphasized that "finding the solution" was key and "working together as one" was the best way to "come together and agree." Further, P1 described online discussions as "superb" and an environment where "everybody is willing to work together as a team to achieve learning outcomes." Concerning how it made P2 feel when disagreeing with other students while maintaining a sense of trust—P2 stated that "you're not supposed to be annoyed—we're learning" and the reason "we disagree *is* to learn." Student

collaboration was also valued: "a classmate created a student directory to find someone with similar assigned tasks so you can collaborate and get an idea of what you want to do." P3 expressed comfort when disagreeing with classmates because they were "simple disagreements"—and "if someone should disagree, we should find an answer to the question." It "wasn't a fight" but "something everyone should go home and think about." P4 was unphased about disagreements stating, "I'll disagree and make my commentary or give my answer," but conceded that "when someone is showing you or telling you the right thing, you tend to get a bond with the person," which helps to develop a spirit of collaboration. P5's perception was never to consider disagreements a "bad feeling." "I never argue with people in any way" but try "to make myself understood."

Further, P5 enjoyed "working together with the other students to collaborate on course requirements." P7 denied having "disagreements with students." P8 considered it "a friendly debate, like when you create a bond or trust within your class or a group of students." It reflected that "from the get-go, that's what the professor did on purpose because she didn't start offering [debates] until we got to know each other. Then, we could have these deep conversations about some topics as we collaborate on projects together." P10 described an experience in which "a [student] said something about her views of the society, and I disagreed with her. I didn't mean to say it in a way to shut her down" [but it may have been taken that way]. "It was a professor who defused the situation" and "I was like, 'oh, so we all have different opinions'—and that's good." The experience left P10 believing, "I can disagree with people and still maintain that sense of trust within the classroom."

Overall, the participants felt comfortable disagreeing with other course participants while maintaining a sense of trust which online discussions helped them to develop a sense of collaboration. Further, the variability of instructor delivery techniques to help shape the SP and create a learning community supported increased awareness consistent with an evolving SP. For example, some instructors were being intentional about when to introduce topics requiring "deep conversations" to allow students to "collaborate on projects together" (P8) or stepping in to diffuse potential situations triggered by disagreements to maintain trust and group cohesion (P10).

Cognitive Presence (Triggering Event)

To probe the triggering event within participants, I asked them to provide an example of how course activities piqued their curiosity. Most of them expressed those problems posed in the coursework increased their interest in course issues, and they felt motivated to explore content-related questions. P1 reported that "offline lecture motivated me to research more content-related questions," whereas P2's triggering event was "going home with the task of mixing in the research—that's what pushed me and increased my curiosity to learn more." P3 discovered "loving to watch videos of something to learn" and "watched them with interest." P4 "loved to do research, read books on topics in upcoming courses to get more knowledge and understanding, and to be able to give opinions when participating in the course." P5 stated that the online course activities "boosted my enthusiasm for learning because it was faster than I imagined." P5 cited "easy access to information, test results, and various resources," as tangible benefits

which were unlike traditional learning," in which you had to "get more data from faculty."

On the other hand, P6 described the online activities as "something I struggled with" because of a lack of motivation. P6 prefers "being a hands-on learner and being an in-person student" and "struggled with motivation to learn the content when classes were entirely virtual." P6's perception is that "with online learning, a lot of it comes down to teaching yourself, which is hard." Further, "it was hard to find motivation and stare at the computer screen that long to learn." P7 exclaimed, "none of the course activities piqued my curiosity." Conversely, P8 revealed that

> We were discussing different topics like racial topics and different outliers when it comes to the police or kidnappings, or shootings—and it sparked my curiosity to the point that I became intrigued and changed my major! When you're developing in a class and you like something, it can change your direction.

Initially, P9 stated, "I don't think any of my course activities piqued my curiosity to learn" because a professor's actions "put me off from the course because I just couldn't understand what was going on, and I left the course feeling dissatisfied." However, upon further reflection, P9 recalled a piqued curiosity when another professor "would make us read papers and watch videos about individuals who were experiencing diseases which piqued my curiosity in neuropsychology."

P10 reported taking an art appreciation course, not expecting to create any art:

> I went into an art appreciation class thinking, oh, all I have to do is talk about art, criticize it and just appreciate art because I'm an art-appreciating person. When my

> professor said we had to make our art and describe what it meant, I was like, I love art, but I'm not an artist! Giving the matter a reasonable amount of time thinking about what to do, what to draw, or what to paint, I discovered an interest in becoming an artist. I found out that I wanted to learn more. The art I made and the positive comments I received gave me the curiosity to want to know more about the arts field.

Exploration

To probe the exploration component of the CP, I asked participants to provide an example of using various information sources to explore problems posed in the course. P10 provided insight on a course assignment to find a solution to a social problem:

> We had this multi-modal paper to write where we had to identify a social problem that we felt was at the back of our minds 24/7 and write about it, but it didn't just stop there. We had to act it out as a protest—and then it didn't stop there. We had to do research on pictures and documentaries and stuff like that. Those are very different information sources, but they opened our minds to so many ways that just that one problem has been in our minds for so long. Exploring those different information sources gave us a broad idea of where society stands and where people generally stand. To be able to explore it through different ways of information sources that our professor gave in the instructions and how to do it gave us more options. There may be other solutions, and you may have to blend them to pick a solution.

P1 stated, "conducting online research, seeking trusted colleagues' opinions, and using other resources to solve problems" in which the mixture of conducting research for relevant information, seeking different perspectives from colleagues, and brainstorming created the synergy to help resolve content-related questions. P2 reported using "YouTube, websites, Google, and the Oxford and Longmans dictionaries." The dictionaries were vital to P2s learning: "you're gonna have those two dictionaries, and I get an idea here, and an idea there to truly know what that statement is, or what the word is about, or how I could use it, and how I could express myself." P3 found it "helpful" to use "YouTube, social media platforms, other schools' websites, curriculums, and doing outside research." P4 stated, "you actually get more knowledge" when you "combine information sources to understand problems and issues better." P4s reported "loving to do research and consulting with colleagues," P5s preference was using "YouTube videos, the library, lots of books and research." P6 used "a lot more resources, because it may have been harder to get help, like tutoring or reaching professors." The resources included "watching more YouTube videos of problem sets, or people explaining the content or relied on the textbook, Google or other websites that have the information." P7 said, "whenever I don't understand something in the class, I just go to YouTube and search that same topic and learn it or I could resort to asking other fellow students - that's my number two option; but usually it's YouTube that gives answers to the question." P8 reported, "I've always used Google, Britannica, and different news outlets like the Washington Post and Times that stayed current with different topics." P9's preference

was "mostly YouTube, Khan Academy, and the school's digital library with references and books."

Overall, the participants utilized a variety of information sources to explore problems posed in the course—including brainstorming with colleagues and finding relevant information to help them resolve content-related questions and to be prepared better to participate in online discussions and appreciate diverse perspectives.

Integration

To explore the participants' perception of integration, I asked them to provide an example of how combining new information helped to answer questions raised in course activities. P1 focused on the collaborative learning activities that helped to construct explanations and solutions: "my colleagues and I use new information to solve a problem," in which the cohorts' philosophy is "a problem shared is a problem solved." P1 stated that "colleagues' opinions assisted me positively in helping me to solve the problem" and felt "very delighted" when doing so. However, P2 perception was that "it's not been so easy," and would "just read more" to figure out how to combine new information to help answer questions. P3 expressed a different technique using autonomy, scaffolding, open communication, and reflection on course content and discussions: "I choose to learn, and I have an idea of what's being done." Because "it's easy to ask questions and participate in the class study," P3 used discussions to help fill in the gaps in knowledge when combining new information.

Like P2, P4 relied on self-sufficiency stating, "I had to conduct research using a variety of information from the internet and textbooks to help me." On the other hand, P5

reported being able to connect the dots "on certain teachings and courses," which facilitated the processing of "the new information which helped in having quick, more reliable ideas." Consequently, P5 was "able to build on more ideas in my courses" and "solved problems and understood scenarios even faster and better." P6 used inquiry and feedback from instructors and peers "to help clarify something that I didn't understand" before attempting to combine and apply the new information to problem-solving. However, P6 made a distinction when communicating online or in person: "when you're speaking to someone in person, it's easier to guide a conversation or get clarity from what someone wants from you. However, when someone posts directions of what they want you to do online, it may or may not be so clear." P6 recalled having "to email back or ask peers a whole bunch of questions to gather more information about the task at hand." P7 stated, "I would combine information I learned in personal research with my courses."

P9 recalled that "some of the things I learned in calculus helped me with some calculations in physics" and having to "write papers and learn different techniques in an English course helped me in one of my research classes." P10's perspective was that "it doesn't necessarily give you a way to answer the questions raised in the course activities—you're just aware, which I feel awareness is like a very close step to solving the problem." P10's philosophy was that "if you're aware, it means that you're not going to take this *out* of consideration; you can take it *into* consideration when you're thinking about plans."

Resolution

To gain insight into participants' perspectives of the resolution aspect of the CP, I asked them to provide an example of how they applied the knowledge created in the course to their work or other non-class-related activities. P1 stated, "knowledge is power," stressing that "everything we learn in school has to be applied in our everyday work activities." P1 described the business principles "derived from school" to "assist my parents in operating their business." In so doing, P1 described the essence of the resolution: ways to test and apply the knowledge created in the courses and apply the solutions in practice. P1 remarked, "all those insights result from the new knowledge." P2 reflected on "learning a lot of morals and discipline among my fellow students, which helped me maintain a mutual relationship with friends and families outside the school walls—decreasing my anxiety and stress." P3 reported "understanding and applying course principles to help develop people in the community throughout their lives."

P4 used the linguistics learned in English courses "to teach others who are looking up to you." P5 stated that "working with people in class activities helped us to communicate more effectively in a small environment and achieve more." P6 exclaimed, "I gained more than textbook knowledge from the course," and explained: "it wasn't so much the knowledge that I got, but the skills, habits or traits that I had to learn or adapt to during the pandemic which taught me to use better time management, communication skills, things like that." P7 said, "it depends on the class" and gave examples of how the knowledge created in the course may or may not apply to their work or other non-class related activities. "Some classes, like calculus, I honestly don't know when I will ever use

that information. However, "information from biology classes are helpful in the real world" and the "many things I learned in chemistry that relates to medicine and understanding the human body that I apply the knowledge to my work." P8 reported collaborating to develop solutions to social issues "like racial topics, police brutality, kidnappings, or shootings." P9 stated, "I took Spanish and was able to use that to communicate outside of school." Further, P9 found that "my science classes were helpful for this internship that I did." P10's perspective was that:

> My classes helped me immensely with open-mindedness by paying attention to and understanding people's diverse perspectives. Talking to people outside of the class allows me to listen to what people are saying and reflect on a new perspective. You don't necessarily have to agree with everyone's opinions but being calm and listening goes a long way to helping people and helping yourself because you're now gaining more knowledge. You're not just stuck in your myopic view; you're branching out because the knowledge created in any coursework is now a part of you in terms of a lifelong skill.

Most participants expressed an active CP which included a triggering event, exploration, integration, and resolution – signaling an increasing presence well beyond the perceptions observed in the early ERT environment. Further, their responses to the CoI inquiry provided evidence of a CP capable of achieving meaningful learning. However, given the overlapping and synergic characteristics of the CoI framework, it was evident that some of the participants' perceptions demonstrated that CP is also evolving.

Not all the participants received instruction that fully incorporated the teaching, social, and cognitive presences necessary for meaningful learning.

Benefits and Challenges of Online and Blended Learning Are a Natural Outgrowth of Advancement

Online Learning

The participants noted several benefits of the evolving online learning platform. P9's perception was that of having autonomy and agency in which "learning was a lot better" because of "having my schedule and figuring when I needed to do stuff." P7 appreciated the convenience of online learning, stating, "I liked online learning because it's a difficult time to travel somewhere and walk. However, online, you can use your laptop." P1 perceived being "comfortable with the instruction"—and P5 commented that the online learning "was helpful." However, other participants expressed challenges with online learning. For example, P6 did not favor online learning stating it "made it hard to focus at times or stay committed to completing your work or understanding the content or assignments." In the context of understanding course content, P6s perception of ERT and online learning remained unchanged throughout the study. P9 stated feedback was an issue: "Sometimes [instructors] will use Zoom links to ask questions and get feedback, but most of the time, it was conflicting with some of my classes," so that wasn't always a good option. Email was an alternate way to communicate with instructors, but P9 didn't "feel it is the same as being able to ask questions in person and go more in-depth."

Blended Learning

Most participants had a favorable perception of blended learning, finding it an excellent alternative to traditional in-person learning. P1 perceived it as "a door to teach positively," found it "nice," and not "a challenge to me." P3 believed blended learning was a "perfect" teaching methodology because it provided a "choice" between online and in-person classes based on students' circumstances and learning styles. P10 concurred, stating, "I felt it was a perfect balance between everything else, and if blended learning stays like that, I'm okay with it for a very long time." P4 stated, "combining these two [online and in-person classes] to make it blended learning was tactical," which resulted in "my having a better learning experience." P6's perception was that blended learning was "an improvement from 100% online learning because you were able to have some classes in person."

Although favoring blended learning, participants also discussed problematic areas. For example, P4 stated there were lingering problems with broadband and internet connections: "when you're talking about the online [aspect of blended learning], not all the students have internet access." P6 spoke about the scheduling confusion between online and in-person sessions: "some days you're in-person in the classroom, and some days, you're virtual, so that could get confusing [and] could affect the instruction that you're getting and the amount of time because some professors couldn't remember the schedule or keep up." P2 perceived that a few professors were having difficulty adapting to the requirements of the school syllabus and that learning "was still heavy, even while you went to school." P5 stated, "I'm not satisfied with the online curriculums," and

professors "have more work to do in creating more elaborate studies, collaboration, and collection activities."

The participants perceived intrinsic and practical benefits like autonomy and agency, flexibility, privacy, and convenience, which grew out of an evolving and increasingly stable online and blended learning environment; they also perceived inherent challenges—natural outgrowths of advancement. Therefore, overcoming perceived challenges is necessary to continue advancing to derive the full benefits of online and blended learning. Consequently, the participants recommended that instructors receive additional training to overcome any perceived challenges to allow the continued evolution from the early stages of ERT to an even more advanced online and blended learning environment to optimize learning opportunities for all students.

Additional Instructor Training Is Necessary for Continued Advancement to Maximize Student Learning

The need for additional instructor training surfaced in response to participants' satisfaction, dissatisfaction, and recommendations to improve online learning. For example, P5 recommended workshops "to help instructors understand how to handle online learning classes" by training them in "a more deliberative way of teaching that uses case studies, so students engage more adequately." Further, P5 advocated for "stronger interaction and collaboration to deepen online classroom interactions" and making "better use of class time."

Moreover, P5 recommended using "online modules to cover complex topics for students to access on demand" and "developing short informative videos to help orient

students to lab scenarios more quickly and get them started exploring concepts." P4's perception focused on the technology: "every part of the delivery should be improved—video, audio, broadband—to get a better experience." P2, concerned about technology and finances, suggested having "a less data-consuming application and a way to track your data subscription." P6 was not satisfied with the delivery of course content and found the instructor support lacking: "during the pandemic and online learning, professors were very 'hands off' and expected you to learn and teach yourself." Further, P6 expressed that "it's harder to grasp concepts and interact with the professor when it's online." Instructors "make it easier when it's online, which could negatively affect the student in the long run." P6 recommended "improving the rigor and delivery of content online" and having “more engaging teachers” who can “explain the material adequately and be available to ask questions and provide suitable answers”. However, P7 offered a different perspective: "I don't have an issue with online learning; it's very convenient. For certain people, it's an issue; some find online learning harder, but I found it's either easier or the same" [as traditional in-person classroom learning].

Nonetheless, there was an expressed need for additional instructor training in other areas. For example, P8 reflected that "some professors can be a little disengaging and won't offer collaborative experiences whether online or in person." P5 and P6 shared the same perspective, also reinforced by P9: "professors should find better ways to keep students engaged" and that "professors need more online training because I think a lot of them didn't receive the training." Thinking ahead, P5 pointed out that additional

instructor training will help to "continue developing online delivery systems to meet a sustainable future."

Summary

In this chapter, the researcher began by reaffirming the study's objective, which was to examine the experiences of HBCU students with ERT, online, and blended learning during the Covid-19 pandemic using Garrison et al.'s (2000) CoI theoretical framework to understand the participants' perceptions of the teaching, social, and cognitive presences required for meaningful learning. The researcher also restated the overarching research question, what are historically Black college and university students' perceptions of the teaching, social, and cognitive presences amid the COVID-19 pandemic?

I emphasized the importance of centering student voices and thoroughly exploring their experiences to ensure credibility and a comprehensive understanding of the phenomenon. I discussed the setting, which included Walden University's IRB approval, identification of the target population, invitational recruitment announcement, data collection plan, and obtaining informed consent.

I then discussed the participants' demographics and characteristics—and explained the interview methodology and data collection protocols. Next, I detailed the steps for data analysis and the alignment with the CoI framework and the research question. I outlined the steps taken to support evidence of trustworthiness and discussed the results in-depth to answer the research question. The results showed that the early transition from traditional in-person instruction to ERT negatively impacted the participants'

education. Further, I did not observe significant evidence of a teaching, social, and cognitive presence during early ERT. However, as time went on, these presences became more evident as instructors received training and participants adapted to an evolving and increasingly stable online and blended learning environment. The data analysis produced four themes: (1) the evidence of advancement from the early stages of ERT to a more stable online and blended learning environment, (2) the evolving perceptions of teaching, social, and cognitive presences in the current online and blended learning, (3) the benefits and challenges of online and blended learning, and (4) the need for additional instructor training to maximize student learning.

The findings suggested that enough evidence of a teaching, social, and cognitive presence existed in the HBCU sample to effect meaningful learning. However, while participants articulated the perceived benefits of online and blended learning, they also identified challenges that must be overcome with additional instructor training to preserve and further advance online and blended learning to maximize opportunities for every student.

In chapter 5, I will interpret the findings, outline the study's limitations, provide recommendations, state implications, and conclude.

Chapter 5: Discussion, Conclusions, and Recommendations

Through this interpretive descriptive qualitative study, I aimed to explore HBCU students' experiences with ERT, online learning, and blended learning amid the Covid-19 pandemic. I selected Garrison et al.'s (2000) CoI theoretical framework to understand the participants' perceptions of the teaching, social, and cognitive presences required for meaningful learning. Because researchers knew little about how the pandemic impacted HBCU students' learning, conducting the research was necessary to understand the phenomenon more comprehensively in the participants' words. To help guide the study, I explored the following areas:

- the participants' perception of how ERT, online, and blended learning impacted their education
- exploration of current online or blended learning using selected questions from the CoI survey instrument to assess the teaching, social, and cognitive presences required for meaningful learning experiences
- the participants' satisfaction, dissatisfaction, and recommendations to improve current online learning

Key Findings

As discussed in Chapter 4, I did not observe significant evidence of a teaching, social, and cognitive presence during early ERT. However, as time went on, these presences became more evident as instructors received training and participants adapted to an evolving and increasingly stable online and blended learning environment. Four themes emerged from the data analysis:

- Advancement from the early stages of ERT to a more stable online and blended learning environment was evident.
- Perceptions of the teaching, social, and cognitive presences in current online and blended learning are evolving.
- The benefits and challenges of online and blended learning are a natural outgrowth of advancement.
- Additional instructor training is necessary for continued improvement to maximize student learning.

Based on the participants' perceptions and responses to the CoI inquiry, evidence of an evolving teaching, social, and cognitive presence existed to support meaningful learning. However, while participants articulated the perceived benefits of online and blended learning, they also identified challenges that must be overcome with additional instructor training to preserve and further advance online and blended learning to maximize opportunities for every student. For example, participants perceived the need for more training in course design and organization, facilitation, and direct instruction (TP); affective expression, open communication, and group cohesion (SP); and triggering event, exploration, integration, and resolution (CP).

Interpretation of the Findings

In Context of the Literature

The findings confirmed previous research regarding ERT, extending the knowledge to HBCU participants. Further, the study confirmed the distinction between ERT and online learning. Moreover, viewing the participants' perceptions through the

CoI framework confirmed the presence of an evolving teaching, social, and cognitive presence in online and blended learning. A greater need for high-touch experiences synonymous with HBCU teaching and ongoing targeted faculty training was also apparent to meet the recruitment demands in a competitive 21st century.

ERT

HBCU participants experienced common themes that emerged during the transition from traditional classroom instruction to ERT, including poor to no internet access, financial constraints, a lack of technological devices, and affective or emotional support (Alvarez, 2020; Baloran, 2020; Ojo & Onwuegbuzie, 2020). For example, participants reported that internet connection problems and the unexpected expense of data subscriptions posed major issues that negatively impacted learning. Emotional well-being surfaced as a theme during the literature review (e.g., Adedoyin & Soykan, 2020; Clabaugh et al., 2021) and was also evident in this study as a participant suffered an emotional breakdown because of stress attributed to increased finances and an inability to communicate with the instructor to get help with assignments. The emotional toll experienced by the participant confirmed Alvarez's (2020) conclusion that students' psychological stress about finances and a lack of affective support contributed to interrupted learning engagement, thereby extending this knowledge to HBCU students.

The literature review also showed that the most influential factors for remote learning during Covid-19 were technology management, institutional support, student competence in using remote systems, and student demands for superior technology from faculty and institutions (Alqahtani & Rajkhan, 2020), and the participants confirmed

having these difficulties as well. Further, the literature reported that many HEIs were unprepared to handle the transition (Apostol, 2020; Lynch, 2020)—and based on the representative sample, I confirmed and extended the knowledge that the participants' HBCUs were unprepared for transitioning from traditional classroom instruction to ERT. For example, Hussain et al. (2020) recommended that during ERT, instructors should not overwhelm students with excessive coursework, assignments, and assessments to avoid adding stress caused by the disruption. Instead, instructors should place top priority on the student's well-being. Nevertheless, participants felt overwhelmed by the amount of time they had to invest in coursework and assignments, finding it difficult to concentrate and learn the material.

Further, this study's findings confirmed and extended to HBCU participants that Bartz's (2020) knowledge of a lack of TP because of missing materials and instructor-student interface also contributed to students' concerns. For example, the instructor's cancellation of classes because of unfamiliarity with online technology and poor planning negatively affected participants' learning because of an inability to present and participate in class projects, obtain feedback, and interact with the professor and cohorts. Consequently, participants were unable to construct knowledge because of an inconsistent TP. A study conducted at one HBCU confirmed similar results:

> Overall, students said online learning was a difficult transition that was not compatible with their learning style and increased their workload. They reported difficulties with the lack of instructor interactions and most students found lectures, class participation, group work, and student presentations to be difficult

> in the online environment. The majority reported that their instructors did not accommodate them during this time. Forty-four percent also reported that student engagement, use of technology, response to email, grading and giving feedback became worse online. (Sturgis & Lamb, 2020, p. 133)

These findings are consistent with a TP that lacked the teaching, social, and cognitive presence required for meaningful and worthwhile learning outcomes (Decker, 2016a, 2016b, 2016c, 2016d; Garrison et al., 2000).

Moreover, the findings confirmed Hodges et al.'s (2020) distinction between ERT and online education and extended the definitions to the HBCU participants' experiences. Specifically, the study confirmed that whereas online education was the culmination of years of adequate planning, designs, theories, and models, ERT was a crisis response to an immediate environmental threat that does not lend itself to employing the principles of online education. Second, although the mandated transition to ERT required instructors to be active in the course design, organization, and delivery of remote learning, the results showed a limited delivery process that did not incorporate instructional theory or other practices associated with online education (Adedoyin & Soykan, 2020). A potential cause could have been HBCU unpreparedness because most HEIs had an insufficient number of instructional course designers to help faculty implement remote learning (Hodges et al., 2020). Another potential reason could have been that while some HBCU faculty received training, others did not (Sturgis & Lamb, 2020). Even so, it would be unrealistic to expect that recently trained faculty would not be overwhelmed by the sheer magnitude of leading the transition from in-person learning to ERT.

Online Learning

Challenges often reveal opportunities for improvement, and the pandemic forced change resistant HEIs to accept modern technology (Dhawan, 2020). For example, in the years preceding the Covid-19 pandemic, "only 18% of 105 HBCUs offered online degrees" (Sturgis & Lamb, 2022, p. 131). However, that number is closer to 100% because the pandemic forced HBCUs to transition from face-to-face instruction to ERT (Sturgis & Lamb, 2022). The findings confirmed that despite the challenges observed in the early transition to ERT, attending HBCUs acted to train instructors in the delivery of online delivery systems. Sturgis and Lamb (2022) explored faculty training in 10 HBCUs and found that hundreds of teachers received training in online systems, including Blackboard and Zoom, within the weeks following the shutting of schools. Consequently, the participants' perception that online learning became more positive as instructors attended training and had more time to practice confirmed the previous research. Students were also learning and adapting to online platforms like Canvas, Blackboard, Zoom, Google Meet, and digital library resources to facilitate learning. The evidence supported the advancement to a more stable online learning environment with a marked improvement in the teaching, social, and cognitive presence—notably in instructor accessibility, in which participants favorably commented on coursework design and organization, which encompassed communicating essential course topics, course goals, how to participate in course learning activities, and important due dates/time frames for learning activities.

Further, the participants' perceptions of facilitation were also mostly positive, in which the instructors' use of digital tools helped to engage student discussion and stimulate learning. The use of digital tools is consistent with Conway et al.'s (2011) study, which found that today's students grew up with 24/7 access to technology and had a much deeper appreciation and connection to media that can "capture, process, send and receive information through multiple devices anywhere, anytime" (p. 277). Further, the pandemic highlighted the role of digital tools in higher education as it created an unprecedented opportunity for faculty and students to realize and take advantage of the benefits of online learning. Therefore, the participants' satisfaction with the instructors' use of visual aspects such as movies, documentaries, and animations are rooted in a postmillennial reality. The perception also aligned with Sturgis and Lamb's (2022) observation that students "expect the learning process to integrate new technology and multimedia tools that expand their digital toolset" (p. 129).

Moreover, Ray (2020) examined the challenges and adaptations of higher education in a post-Covid-19 world and found emerging trends in online learning that can facilitate learning through smartphones, tablets, and laptops - confirming the preference for learning using engaging digital technology. However, despite these advantages, other participants found room for improvement, citing difficulty with internet connection and data consumption issues. Others perceived that the courses required too much time for studying; indicated that lab courses were not as engaging or challenging; expressed dissatisfaction with online curricula, delivery, and course content; and noted a need for more collaborative activities. Thomas and Spencer (2020) found that the application of

the five high-touch personal needs (i.e., challenge, commitment, control, creativity, and caring) observed in HBCUs facilitated student learning by helping administrators to reflect on the use of collaborative assignments, timely and specific feedback, humor, and fun activities. Thomas and Spencer's investigation showed that the approach led to reduced fear and anger, thereby increasing students' feelings of safety and control. However, this study's findings supported the need for greater high-touch personal needs as participants recommended additional instructor training to improve content delivery, provide more collaborative assignments, feedback, instructor support, and more engaging activities. Moreover, it would be reasonable to expect that these participants would experience a measure of stress and frustration given the difficulty of communicating with the instructor and the need for high-touch experiences to facilitate learning (Spencer & Thomas, 2020).

Sturgis and Lamb (2022) reported a survey of 1,976 students conducted by one HBCU in which "18.34% were unsure [of returning] and 19.12% of the students said they would not return if the courses were entirely online" (p. 132), signaling a potentially negative impact on student satisfaction and retention rates. The negative impact becomes significant given Smith et al.'s (2020) study, which showed that reduced budgets and understaffed faculty also limited HBCUs' ability to offer as many online courses as their predominantly PWI counterparts and keep up with ever-advancing changes in "technology infrastructure, training, equipment, and support" (p. 18). Consequently, PWIs with state-of-the-art technology targeted HBCU student populations for recruitment, further reducing their eligible applicant pool.

However, HBCU enrollments increased at 40 HBCUs following the killings of George Floyd and Breonna Taylor in 2020 as students of color experienced racial harassment at PWIs and turned to HBCUs for safety (Guy-Sheftall & Jackson, 2021). In return, White supremacist groups targeted at least 17 HBCUs across the United States with bomb threats, reminiscent of the 1963 Ku Klux Klan 16th Street Baptist Church bombing in Birmingham, Alabama that killed four young black girls (Klobuchar, 2009). Outraged by the hate and injustice, wealthy, empathetic philanthropists donated heavily to HBCUs—providing a much-needed financial boost (Guy-Sheftall & Jackson, 2021). Therefore, to achieve and maintain a competitive edge, HBCUs must afford students an optimal online learning experience to limit attrition resulting from dissatisfaction with online instruction due to inadequate course design and organization, facilitation, and direction of cognitive and social processes required for personally meaningful and educationally worthwhile learning outcomes (Decker, 2016a; Garrison et al., 2000).

Blended Learning

According to Amenduni and Ligorio (2022), many students enjoyed the technology and the possibility of using the online component of blended learning, making its application even more popular than traditional learning. The authors' views were consistent with this study's findings, as most of the HBCU participants sampled had a favorable perception of blended learning and found it an excellent alternative to traditional in-person learning. Some participants may have preferred blended learning over 100% online learning because of a greater teaching, social, and cognitive presence available through physical access to peers and the instructor. Although favoring blended

learning, participants also discussed problematic areas. These included lingering problems with broadband and internet connections, scheduling confusion between online and in-person classes, and a few professors who were having difficulty adapting to the requirements of the school syllabus—making learning challenging because the content delivery needed to include more engaging learning activities. Despite the perceived challenges, overall, the participants' perceptions of blended learning in their education were positive and supported the advancement to a more stable learning environment with a preference over that of traditional in-person classroom instruction.

While there was evidence of teaching, social, and cognitive presences to effect meaningful online and blended learning, it was also evident that the presences were evolving. A participant concluded that professors did not have consistent, intentional, focus-driven instructional delivery methods or temperaments and noted that instructor temperament, expertise, and delivery styles varied considerably. Consequently, these inconsistencies either promoted or retarded learning. As further evidence to support the inconsistencies and the need for additional instructor training, consider the range of the participants' satisfaction and dissatisfaction with their current online learning. For example, at one end of the spectrum, a participant's perception was that of being completely satisfied, while at the opposite end, another participant suggested the entire delivery should be overhauled for a better learning experience.

The participants noted several benefits of the evolving online and blended learning platforms, such as autonomy and agency, flexibility, convenience, and comfort.

To further promote, enhance, and ensure a sustainable future, the participants recommended additional instructor training as follows:

- Address internet connection and data consumption issues (TP).
- Establish time limits on course learning objectives (TP).
- Integrate more online collaboration groups to work together and solve problems (TP, SP, CP).
- Ensure that disengaged professors provide a stronger teaching, social, and cognitive presence through collaborative learning experiences, whether online or in-person (TP, SP, CP).
- Evaluate every part of the online design and delivery process to ensure optimal student learning (TP, SP, CP).
- Create purpose-driven workshops to help instructors understand how to design, deliver, facilitate, encourage, and support students' online learning by finding better ways to keep students engaged (TP, CP, SP).
- Standardize online and in-person math grading practices (TP).
- Eliminate the professors' monotonous reading of slides and use more digital tools to stimulate learning through active engagement (TP, SP, CP).
- Continue developing online delivery systems to meet a sustainable future (TP, SP, CP).

The literature contained examples of how some HBCUs tackled these issues which may serve as a blueprint for other HBCUs with evolving presences which require additional

instructor training to optimize learning. For example, Sturgis and Lamb (2022) provided insight into how 10 HBCUs initially trained faculty at the onset of the pandemic. Similarly, Smith et al. (2020) illustrated how a department at Morgan State University conducted a student input survey to understand the students' most salient needs and hired a social media and digital spaces expert to help guide the transition to a more competent online presence.

The four lessons that emerged from Smith et al.'s (2020) investigation are restated, given their potential for adaptation. First, establishing a sense of community early is critical in creating an online identity and presence to meet students' academic, social, and well-being. Since HBCUs were noted for having high-touch qualities and characteristics—there was no need to create a 'new' online identity; instead, the authors recommended faculty should capitalize on transferring the high-touch qualities and characteristics of HBCUs to an online presence to foster a virtual connectedness among instructors, staff, and students. Second, instructors should show compassion by teaching to the whole person. Instruction is more than covering lecture material as listening, understanding, and responding to students' experiences can affect their motivation and emotional well-being. Third, community engagement and community-based participation are critical to co-create creative ideas before, during, and after each course. It gives students agency, flexibility, and responsibility over their learning. Fourth, keep growing digitally by regularly attending virtual workshops and webinars to stay abreast of technological changes and their impact on online education. These lessons are just as applicable today as they were in 2020, as the evidence of this study supported that the

teaching, social, and cognitive presences are evolving—and instructors and by extension their students—can benefit immensely from targeted training to improve the design, facilitation, and direction of cognitive and social processes required for meaningful and worthwhile learning outcomes (Decker, 2016a, 2016b, 2016c, 2016d; Garrison et al., 2000).

In Context of the Community of Inquiry Framework

The CoI framework is dynamic and synergistic in that the greater the presence, the greater the fidelity as the three presences work together to support each other, making the overall learning experience more meaningful. Researchers believe that SP is a mediator between cognitive and teaching presence (DeNoyelles et al., 2014; Whiteside et al., 2017). The participants provided evidence of this relationship by recognizing the value of a SP and advocated for a TP that included collaboration, open communication, and group cohesion to facilitate learning. Further, research supports that CP is most associated with student satisfaction and success (Hosler & Arend, 2012; Yang et al., 2016). The findings in this study collaborated with this affiliation as participants expressed dissatisfaction and frustration with not being able to grasp the course content and achieve learning outcomes. Moreover, the TP is believed to be the most significant value to students (Hodges & Cowan, 2012; Preisman, 2014). The value's significance was evident by the emphasis participants placed on the design and organization, facilitation, and direct instruction required to integrate and operationalize the social and cognitive presences for optimal learning—and to create a more sustainable online learning model.

When viewed through the CoI theoretical lens, it became evident that there was a lack of a teaching, social, and cognitive presence during the early transition to ERT which negatively impacted the participants' learning. For example, participants found the instructors inaccessible (direct instruction), which led to confusion about learning objectives and outcomes (facilitation) and stymied learning (CP). Further, instructors cancelled classes because of challenges with technology and poor planning (instructional design and organization)—and an improper class atmosphere contributed to one participant skipping classes without accountability (instructional design and organization, facilitation, and direct instruction). Another participant experienced isolation, stress, and discomfort resulting from poor communication between instructors and peers—indicative of a limited SP. Further, the instructor's instructional design conflicted with Hussain et al.'s (2020) recommendation that instructors should create student-instructor and student-student communication channels to help alleviate students' feelings of isolation and improve their participation and confidence about the ERT experience. An example of an overlap between social and cognitive presence occurred when a participant found it difficult to interact with peers and professors (SP - open communication) and grasp the content of the course. The latter—not being able to 'grasp the content of the course'—is the CP in which students develop the means to move beyond the early stages of learning to the stage where learning has meaning, and they can understand and apply new concepts (Decker, 2016c; Garrison et al., 2000). These examples supported Hodges et al.'s (2020) assertion that ERT is a crisis response to an immediate environmental threat that does not lend itself to employing the principles of online education. Furthermore,

Bozkurt and Sharma's (2020) concluded that ERT should be viewed for what it is—an emergency teaching platform and not be confused with online education.

Over time, instructors attended more training and became proficient enough to effect meaningful learning that incorporated the teaching, social, and cognitive presences. Consequently, learning became less chaotic and more stable. Participants cited examples of receiving the proper course orientation, participating in group collaboration activities, conducting research, and applying knowledge to class projects, work, or real-world situations. However, one participant's dislike for online learning remained unchanged from ERT to the present—potentially attributed to a preference for blended instruction, learning style, or the online instructional experience. Another participant related an experience in which a professor blocked the 'raise hand' function and disabled the students' microphones. The professor eliminated any opportunity for students to ask questions or to provide feedback—an element of the TP (direct instruction) with an overlapping SP (open communication) and a CP in which the participant's learning was stymied and led to frustration and dissatisfaction with the course. Yet another participant reported feeling distant from other students—attributed to a SP in which self-consciousness about an accent hindered online group discussions and blocked the emotional connection to others. Such challenges may be overcome with instructor awareness, training, greater high-touch student experiences, encouragement, and the creation of a comfortable, risk-free, and safe learning environment.

Participants identified a need for further training as instructional delivery appeared to be inconsistent, which can present a barrier to learning (Borup & Evmenova,

2019). While some participants lauded their instructors for their patience, course design, teaching acumen, open communication, creativity, and ability to create a challenging and stimulating learning environment—other participants found their instructors to be difficult and rigid. Most dissatisfied participants cited a need for improved instructor engagement, collaboration activities, course content delivery, student support, and time-managed courses. Given the recommended training, the prevailing perception was that not all professors had consistent, intentional, focus-driven instructional delivery methods, styles, or temperaments in which their delivery varied considerably, which could positively or negatively impact learning.

Limitations of the Study

First, the participants' unique experiences, instructor competence, quality of online or blended learning, personalities, and learning styles shaped their perceptions—and the findings may not accurately reflect a more extensive sampling of participants (Patton, 2015). However, in qualitative research, the reader determines transferability based on their perception of the study's trustworthiness and the relatable conditions within their practice setting (Castleberry & Nolen, 2018). Therefore, readers can extract pertinent information for inclusion in their practice. Second, the study did not include the perspectives of faculty. Understanding the faculty's experiences helps explain the circumstances surrounding the transition to ERT, continuing training in online methodologies and delivery systems, and student recommendations to improve course curricula, content, and instructor engagement. Third, while the interpretive descriptive qualitative study generated rich data to answer the research question, a mixed methods

design may have provided a means to quantify the degree of the participants' perceptions of the CoI presence in their education. Further, a mixed methods design may help confirm the relationship between teaching, social, and cognitive presences. Nonetheless, gaining insight into the degree of the participants' perceptions may have student retention implications for future research.

Recommendations

The purpose of this interpretive descriptive qualitative study was to explore HBCU students' experiences with ERT, online and blended learning amid the Covid-19 pandemic using Garrison et al.'s (2000) CoI theoretical framework to understand the participants' perceptions of the teaching, social, and cognitive presences required for meaningful learning. Future research should include a mixed methods design or longevity study to understand the effects of online and blended learning on education, particularly as it applies to HBCU students' satisfaction and retention rates. Further research should also encompass the faculty's perspective on the quality of continuing online training, institutional support of all faculty and staff in the acquisition and use of cutting-edge digital learning tools and best practices, and a follow-up study to determine the students' perspectives of the efficacy of online and blended learning courses to help assess online learning sustainability in times of future threats to education caused by natural disasters, wars, and pandemics.

Implications for Positive Social Change

Since HBCU students were central to the discussion, their perceptions, experiences, and recommendations to advance online learning may contribute to social

change. The participants' recommendations may help HBCU decision-makers at the county, state, and national levels prepare better to confront traditional learning threats caused by wars, natural disasters, and pandemics (Bozkurt & Sharma, 2020; Dhawan, 2020; Hodges et al., 2020). The National Council for Online Education (NCOE, 2022) endorsed the empowerment of faculty members to "teach even more skillfully online by making courses more engaging and learning more effective," thereby validating the participants' recommendations for ongoing instructor training. However, HBCUs must balance technology procurement with educational processes and maintenance costs to ensure student affordability (Dhawan, 2020). Toquero (2020) recommended collaborating with shareholders to develop best practices, while Anderson (2020) stressed creating a student-teacher presence and a sense of community. For long-term sustainment, Adedoyin and Soykan (2020) suggested mining the emerging literature for novel ideas to design online models that promote student learning and reduce instructor workload. Further, Smith et al. (2020) and Sturgis and Lamb (2022) provided a blueprint for HBCU faculty training. Therefore, the additional training recommended by the participants will be necessary to avoid suboptimum learning experiences, enhance online delivery, and promote future HBCU sustainability.

The CoI framework was ideally suited for assessing students' perceptions of online and blended learning, given its parsimonious design and construct validity (Archibald, 2013; Garrison et al., 2000). CoI continues to evolve as one of the most widely used models in the design and study of online learning environments (Halverson et al., 2014; Garrison, 2017). Further, researchers used it extensively in qualitative,

quantitative, and mixed methods methodologies across several online and blended instructional domains (Chang-Tik, 2020; Lim & Richardson, 2021). While generic, researchers applied the CoI framework to online, face-to-face, or blended classrooms as the design provided a means to evaluate deep and meaningful online learning experiences through three interdependent and overlapping presences: teaching, social, and cognitive (Garrison et al., 2000). Further, based on Garrison et al. (2000) —Decker (2016a, 2016b, 2016c, 2016d) provided teaching-in-practice (TIP) sheets using the CoI framework to help design, facilitate, and direct the cognitive and SPs required for meaningful and worthwhile learning outcomes. The TIP sheets may be valuable in supplementing HBCU faculty training.

Conclusion

The Covid-19 pandemic affected 181 countries and more than 1.5 billion students globally, suddenly forcing all schools to abandon traditional face-to-face instruction in favor of ERT to help contain the virus's spread (Bozkurt & Sharma, 2020; Lynch, 2020; McLear, 2021). While literature existed on how the transition to ERT impacted HEI students' learning, researchers needed to learn more about the effect on HBCU students. Therefore, this interpretive descriptive qualitative study aimed to explore historically Black college and university students' experiences with ERT, online, and blended learning amid the Covid-19 pandemic. The researcher selected Garrison et al.'s (2000) CoI theoretical framework to understand the participants' perceptions of the teaching, social, and cognitive presences required for meaningful learning. The overarching research question asked, what are historically Black college and university students'

perceptions of the teaching, social, and cognitive presences amid the COVID-19 pandemic? The student voices were central to the discussion. Exploring their experiences robustly while staying close to the data by reporting the findings in the participants' own words was essential for credibility and understanding the phenomenon more comprehensively.

The results showed that participants perceived a negative impact on their learning during the initial transition from traditional in-person instruction to ERT. However, as the pandemic persisted, instructors received training and became more proficient in online delivery methods that included teaching, social, and cognitive presences. Nonetheless, instructor performance was inconsistent, and participants recommended additional training to promote a sustainable TP that included the design, facilitation, and direction of cognitive and social processes required for meaningful and educationally worthwhile learning outcomes for all students (Decker, 2016a, 2016b, 2016c, 2016d; Garrison et al., 2000).

HBCU participants identified many positive benefits from a pandemic response to education, including flexibility, autonomy, and scheduling convenience afforded by online and blended learning. Many of them expected a continuance of these benefits after the pandemic and opposed a return to pre-pandemic in-person classroom learning. The literature supported the importance of faculty training and preparedness for sustained online and blended learning, given the ever-present threats to traditional learning. Consequently, the HBCUs that invested in technology, training, and infrastructure before the pandemic were well ahead of the transitional curve (Guy-Sheftall & Jackson, 2021).

Conversely, other HBCUs may have struggled because they lacked an immediate "core of trained faculty, instructional designers, and leadership to support the transition to emergency remote teaching" (NCOE, 2022).

However, moving forward, HBCUs can continue to take advantage of the best practices to design and deliver online and blended courses that utilize well-established, quality frameworks and expand the learning opportunities as a sustainable model. Therefore, HBCU administrators should support all faculty in their pursuit of acquiring and implementing cutting-edge knowledge that leverages digital learning tools and best practices. Doing so maximizes the technologies required to supplement the in-person portion of blended courses or newly created 100% online courses (NCOE, 2022). As HBCUs offer more online options to meet student demands, they must orient students with each course, make a note to address student expectations and provide a safe learning space that encourages open communication and collaboration with cohorts. Further, students need to understand the learning environment before entering it—and the amount of time required to complete assignments and achieve learning outcomes. Therefore, course orientations should familiarize students with the technologies used and how the faculty and institutional support services will assist them in achieving academic objectives.

Given the unpredictability of future natural disasters and pandemics—coupled with the terroristic threats from white supremacist groups—all faculty members and staff involved in the instructional mission of HBCUs must be able to apply the lessons learned from ERT. Continuing online education at a moment's notice to avoid the struggles and

difficulties encountered during the Covid-19 pandemic will be critical (Hodges et al., 2020). Presently, HBCUs have the momentum for a more significant online learning advancement, which can help attract a post-millennial tech-savvy generation. Boosting student satisfaction and retention rates through targeted faculty training will help HBCUs survive in an unprecedented and highly competitive 21st-century post-pandemic higher education recruitment era.

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Appendix A: Interview Questions

1. Were you enrolled in or completed a college or university-level online or blended program ***before*** Covid-19?
2. Did you experience the mandatory shift from *in-person* classroom instruction to *emergency remote teaching* to help stop the spread of Covid-19? If so, what is your perception (if any) of how the *emergency remote teaching* impacted your education?
3. Did you experience *online learning* during Covid-19? If so, what is your perception (if any) of how the *online learning* impacted your education?
4. Did you experience *blended learning* during Covid-19? If so, what is your perception (if any) of how the *blended learning* impacted your education?

Concerning Current Online or Blended Learning Experiences:

5. Can you provide any examples of how the instructor provided clear instructions on how to participate in course learning activities?
6. Can you provide an example of how the instructor introduced, facilitated, and directed instruction to help you achieve meaningful learning outcomes?
7. Can you provide an example of how the instructor designed the lessons so that you remained engaged and participated in the discussions?
8. Can you give an example of how getting to know other course participants gave you a sense of belonging in the course?

9. Can you give an example of how it made you feel when disagreeing with other students while maintaining a sense of trust?
10. Can you provide an example of when online discussions helped you to develop a sense of collaboration?
11. Can you provide an example of how course activities increased your curiosity to learn?
12. Can you provide an example of using a variety of information sources to explore problems posed in this course?
13. Can you provide an example of how combining new information helped you answer questions raised in the course activities?
14. Can you provide an example of how you applied the knowledge created in this course to your work or other non-class related activities?
15. What features of your current online or blended learning are you satisfied with, and why?
16. What features of your current online or blended learning are you dissatisfied with, and why?
17. What features of your current online or blended learning do you want to be improved, and why?

Appendix B: Interview Guide

Welcome and thank you statement: Thank you for volunteering to participate in this research study. As a reminder, you gave me consent to record this interview to help me understand your experiences and provide you with a summary to review to ensure my interpretation is accurate. The discussion and your identity will be confidential. Do you have any questions before we get started? (**Note**: *Address questions as appropriate*).

Purpose statement: The purpose of this study is to explore HBCU students' experiences with *emergency remote teaching*, *online*, and *blended learning* (as applicable) amid the Covid-19 pandemic. Before we get started, let me define the terms we'll be using - *emergency remote teaching*, *online learning*, and *blended learning*.

Emergency remote teaching is different from online learning. Emergency remote teaching is an unplanned and immediate shift from *in-person* instruction to remote teaching to limit the interruptions to education caused by environmental threats. For example, teachers having to upload educational content to instruct remotely because schools had to shut down *in-person* classrooms to limit the spread of Covid-19.

Online learning, on the other hand, is more than simply uploading educational content. It incorporates learning theories and decades of instructional practices to create an effective online instructor presence and student learning environment. Online learning gives students control over their learning and fosters collaboration with their peers.

Blended learning is a combination of *in-person* and carefully designed *online education* to help students achieve learning objectives.

Do you have any questions on the terms we'll be using as I described them before we get started? (**Note**: Address as appropriate).

"**Great! Let's get right into it**."

1. Were you enrolled in or completed a college or university-level online or blended program ***before*** Covid-19? (**Note**: *If an affirmative response, the student is ineligible for participation. Politely thank the student for volunteering and terminate the interview*).
2. Did you experience *emergency remote teaching* during Covid-19? If so, how would you describe your perception of the *emergency remote teaching* had (if any) on your education?
3. Did you experience *online learning* during Covid-19? If so, how would you describe your perception of the *online learning* had (if any) on your education?
4. Did you experience *blended learning* during Covid-19? If so, how would you describe your perception of blended *learning* had (if any) in your education?

The Following Questions Pertain to your Current Online or Blended Learning Experiences

5. Can you provide any examples of how the instructor provided clear instructions on how to participate in course learning activities?

6. Can you provide an example of how the instructor introduced, facilitated, and directed instruction to help you achieve meaningful learning outcomes?
7. Can you provide an example of how the instructor designed the lessons so that you remained engaged and participated in the discussions?
8. Can you give an example of how getting to know other course participants gave you a sense of belonging in the course?
9. Can you give an example of how it made you feel when disagreeing with other students while maintaining a sense of trust?
10. Can you provide an example of when online discussions helped you to develop a sense of collaboration?
11. Can you provide an example of how course activities increased your curiosity to learn?
12. Can you provide an example of using a variety of information sources to explore problems posed in the course(s)?
13. Can you provide an example of how combining new information helped you answer questions raised in the course activities?
14. Can you provide an example of how you applied the knowledge created in the course(s) to your work or other non-class related activities?
15. What features of your current online learning are you satisfied with, and why?
16. What features of your current online learning are you dissatisfied with, and why?

17. What features of your current online learning do you want to be improved, and why?

Conclusion/wrap up:

Thank you for taking the time to participate in the study. Your contributions will be helpful in exploring HBCU students' experiences with *emergency remote teaching*, *online*, and *blended learning* (as applicable) amid the Covid-19 pandemic. Before we wrap things up, do you have questions or anything you would like to add? (**Note**: *Address as necessary*). If you think of anything in the next day or two, please feel comfortable reaching out to me by email. Thanks again for your participation. Have a good day!

Appendix C: Participant Demographics

Participant Demographics	Value
Age	
18-25	8
26-30	2
Gender	
Male	6
Female	4
Race/Ethnicity	
Black/African American	6
Black/Afro Caribbean	1
Black Nigerian	2
Black/Nigerian American	1
Marital Status	
Single	9
Married	1
Housing/Living Situation	
Living alone	3
Living with student roommates	4
Living with non-student roommates	1
Living with parents/guardians	2
Parental Annual Income (range)	
Less than $25,000 per year	1
$51,000 - $100,000 per year	4
$101, 000 - $200,000 per year	4
Prefer not to say	1
Highest Parental Education Level Completed	
Bachelor's Degree	5
Master's Degree	2
Ph.D./Doctorate or higher	2
Prefer not to say	1
Class standing	
Sophomore	2
Junior	3
Senior	5
Declared major	
Biology	4
Biomedical Science	1

Business Administration	2
International Business	1
Psychology	1
Undecided	1

Appendix D: Participants' Perceptions of Emergency Remote Teaching on Education Viewed Through the Community of Inquiry Framework

Excerpt	Participant identifier	Assigned code	CoI Presence
"unable to get answers to questions from instructor"	P1	Inaccessible instructor	Teaching Presence – Direct Instruction
"I was very confused of where to start and how to start"	P2	Confusion	Teaching Presence – Design & Organization; Facilitation
"most of the classes would have to be canceled because of technology and poor planning"	P9	Canceled classes	Teaching Presence – Design & Organization
"the setting was too flexible and relaxed"		Improper classroom atmosphere	
"I could decide to skip a class instead of going to class"		Skipping classes	
"I wasn't used to software like Zoom"	P2	Unfamiliarity with technology	
"I couldn't have contact with people"		Isolation	Social Presence
"it was very uncomfortable for me"	P3	Discomfort	
"it was very stressful"		Stressful	Social Presence – Affective Expression
"it was exhausting"		Exhausting	
"I had a little emotional setback"		Emotional setback	
"if it was in person, I could talk to my instructor"	P3	Poor communication	Social Presence – Open Communication
"I couldn't get to pick up my son and daughter easily because of putting in extra online time"		Family-study conflicts	Social Presence overlapping w/Cognitive Presence
"I'm a kind of student that works with my instructor"		Cooperation	Social Presence overlapping w/Teaching Presence

"I wasn't able to form connections with my professors"	P9	Unable to form connections	
"it was more difficult to interact with peers and my professors and grasp the content of the course"	P6	Difficulty interacting and learning	Social Presence w/overlapping Cognitive Presence
"I have issues with reading"	P3	Reading issues	Cognitive Presence
"having materials like good Wi Fi and a laptop to start with"	P6	Digital tools & materials	
“it affected my learning negatively"	P4, P9, P1	Impaired learning	Cognitive Presence w/overlapping Teaching & Social Presence
"It was educating as well"	P2	Educating	
"I'd say that, that it was pretty much hard at first, it was quite hard at first"	P5	Exceptionally difficult	
“we couldn't present anything on my research project"	P9	Stymied learning	
"I experienced some difficulty assimilating information"	P1	Difficulty understanding	
"I didn't have motivation to participate in schoolwork"	P9	Lacking motivation	
"the class style was challenging”		Challenging	
"if you don't have a basic knowledge of what you're learning, you could meet folks to lead you or guide you on that process"	P3	Mentors	Cognitive learning overlapping w/Social Presence
“we are going through the pandemic and Covid-19 and trying to cope with the sudden change"	P5	Coping w/sudden change	Overlapping Teaching, Social, and Cognitive Presences

Appendix E: Sample Matrix, Online and Blended Learning Perceptions Aligned With Community of Inquiry Framework and Overlaid With Satisfaction, Dissatisfaction, and Recommendations for Improvement

Excerpt	Participant Identifier	Satisfaction	Dissatisfaction	Recommended Improvements	CoI Presence Category
"professor gave me the proper orientation and guidelines of what I was supposed to do" [TP] "Participants are accommodating and very social and I made some friends" [SP] "we shared insights, collaborated, and worked together as one" [SP] "I used knowledge from coursework to help my parents run their business" [CP]	P1	"I'm very satisfied with every feature" "it enabled me to be very good with online activities" [TP, SP, CP]	"internet connection problem is a very big challenge for me" [CP]	"I have not fully experienced any difficulty apart from the internet connection" [CP]	Teaching Presence [TP] Social Presence [SP] and Cognitive Presence [CP]
"instructor used Google slides and PDF files to share course content" [TP] "instructor used audio, video, diagrams, and references to help me study" [TP] "you get to know everyone on your team" [SP] "we created a learning network [and] learn when we collaborate" [SP, CP]	P2	"online learning allows for a customized learning experience" [TP, SP, CP] "more cost-effective than traditional education" [CP]	"sometimes you have to wait a long time before meetings start" [which consumes broadband data/creates expense] [TP]	"should have a platform like Google to share screens" [TP] "have an application that is less data-consuming" [TP] "have a way to track your data subscription" [TP]	Teaching Presence [TP] Social Presence [SP] and Cognitive Presence [CP]

"we're able to learn and implement what we were taught" [CP]					
"professor used Google links, Google Meet, email, and Zoom to communicate" [TP] "we did group projects together [and] didn't argue" [CP, SP] "mixing in the research pushed me to learn more" [CP]	P3	"online learning is quicker and can save time" "I like the privacy" "improves my learning abilities" "it's fun" [TP, SP, CP]	"learning too much at one time is a problem" "having to sit online for three or four hours is too much" [CP]	"online learning should be time-managed" "have more online collaboration groups to meet and solve problems" [CP]	Teaching Presence [TP] Social Presence [SP] and Cognitive Presence [CP]
"teacher used online links to websites, articles, Google Meet to take part in online learning" [TP] "we bonded well learning from each other" [SP, CP] "I do research, collaborate with colleagues, and combine sources to understand problems better" [CP, SP, CP]	P4	"I like the parts with audio and video [TP]; it helps you to pay attention and get more knowledge" [TP, CP]	"bad internet connection is a major issue when the videos keep glitching with interrupted sounds" [TP]	"every part of the delivery should be improved – video, audio, broadband – to get a better experience" [TP, SP, CP]	Teaching Presence [TP] w/overlapping Social Presence [SP] and Cognitive Presence [CP]
"we were grouped and assigned case studies to research" [TP] "we did lots of collaboration and collection activities" [TP, SP] "instructor was quite active	P5	"I got more knowledge and understanding that helped me to get where I am now" [CP]	"I'm not satisfied with the online curriculums" [CP]; they [instructors] have more work to do in creating more elaborate studies, collaboration, and collection	"a workshop could be created to help instructors understand how to handle online learning classes" [TP] "continue developing online delivery systems to meet	Teaching Presence [TP] Social Presence [SP] and Cognitive Presence [CP]

bringing us together to discuss ideas and work in teams" [TP, SP] "new information helped me to have quick, reliable, and more ideas to build upon and solve problems faster and better" [CP]			activities" [TP, SP]	a sustainable future" [TP, SP, CP]	
"professor wrote out instructions about assignments and posted it to Blackboard or Canvas" [TP] "it's hard to imagine a person that you can't see, or you haven't physically interacted with in person" [SP] "with online learning, a lot of it comes down to teaching yourself which is really hard" [TP, SP, CP]	P6	"I was satisfied with the flexibility of some of the online courses" [TP] "you can complete the assignment by the end of the day on your own time" [TP, CP]	"I was not satisfied with the rigor and delivery of the course content" [TP] "it's harder to grasp concepts and interact with the professor when it's online" [TP, SP, CP]	"the delivery of the course content definitely needs to be improved" [TP] "professors should have offered more support to students" [TP, SP, CP]	Teaching Presence [TP] w/overlapping Social Presence [SP] and Cognitive Presence [CP]
"professors showed us how to use the syllabus and textbook [and] would remind us of upcoming assignments" [TP] "we created groups and used an app to communicate and got to know each other" [SP] "I would combine information I learned in personal research to my courses" [CP]	P7	"I like online learning classes where the lecture is recorded so people can go back, pause, and rewind to go over something they didn't understand" [TP, CP] "I like the flexibility" [TP] "[in online learning]	[with] "in-person classes, if you don't understand a few things, you still have to go back later and search for it on your own time" [TP, CP] "with in-person math classes, some teachers like you to use the same formula they use [TP]. If you use a different	"I don't have an issue with online learning; it's very convenient" [TP, SP, CP] "for certain people it's an issue; some find online learning it harder bit I found it's either easier or the same [as traditional classroom learning]" [CP]	Teaching Presence [TP] w/overlapping Social Presence [SP] and Cognitive Presence [CP]

		while you're watching the lecture, you can just go to a new tab and search whatever the teacher just said and understand it immediately" [TP, CP] "for online math class or any class that deals with math, like chemistry, you can just type in your answer – you either get it right or wrong but you don't have to show your work" [TP, CP] [however], "if it were in person, there's no bad internet connection that's stopping you from doing you work and being graded fairly" [TP, CP]	formula, they would mark it wrong – even if you got the right answer" [TP, CP] "for this 100% online class I was taking, the instructor graded pop questions during the lecture [TP]. If you didn't answer those questions, you got a zero" [CP] "if you don't have a good internet connection, that can cause you to miss a question and you get a zero, and there's no going back" [TP] "certain professors do not work well online [TP]. I don't think that's an online issue – it's just that some professors don't lecture well online" [TP] "Maybe they're not very technologically savvy because they make a lot of mistakes on the quizzes and the exams" [TP]		
"she gave us different opportunities to collaborate with each other in breakout rooms	P8	"I love the breakout rooms and how you can engage with different	"my biggest and only one, is how some professors can be a little disengaging and won't offer	"make disengaged professors provide collaborative learning	Teaching Presence [TP] w/overlappin g Social Presence

[which] was definitely more of an engaging class that felt like an in-person experience" [TP, SP] "the teacher made us think outside the box which was different from my other classes" [TP, CP]		classmates" [SP]	collaborative experiences like other professors do" [TP, SP, CP]	experiences, whether online or in-person" [TP, SP, CP]	[SP] and Cognitive Presence [CP]
Online: "for certain classes, our professor recorded the lectures during the class, and we were able to go back to it and learn which was very helpful" [TP, CP] **In-person**: "a lot of my classes got canceled out of concern the virus was spreading" [TP] "we couldn't engage in discussions in-person because most of the collaborations weren't allowed" [TP, SP, CP] **Lab courses**: "we couldn't engage with in person courses because of isolation [TP]; so, most of my labs had to be online which was very inconvenient" [TP, CP]	P9	"I liked some of the homework we had using WileyPLUS or McGraw Hill because they'll give you examples of how to solve a problem and let you go back and try again if you got it wrong" [CP]	"I didn't like the limited access to our instructors online" [TP] "going back to how my professor was able to cut the communication access by disabling the raise hand function and microphone [TP, SP, CP] - I feel like if it was in-person, she couldn't do that" [TP] "limited resources for lab courses" [TP] "the lack of discipline on my part – it was easier to laze around instead of doing my schoolwork" [CP]	"professors need more online training because I think a lot of them didn't actually receive the training" [TP] "professors should find better ways to keep students engaged" [TP, SP, CP]	Teaching Presence w/ overlapping Social Presence and Cognitive Presence
"the professor posted clear-cut instructions on	P10	"I'm satisfied with the introduction	"I'm dissatisfied with the rigid	"the monotonous reading" [TP]	Teaching Presence [TP]

Blackboard on what to do" [TP] "forming groups allowed us to understand the topic, so we didn't fail, and can move on to the next level" [SP, CP] "when I was explaining my art design, I found out that I wanted to learn more" [CP]	of visual aspects like movies, documentaries, and animations because I feel teachers are taking into consideration that we're not a reading generation" [TP, CP] "I like that teachers are being open and flexible with how they teach" [TP] "you still see rigid teachers, but having that [flexibility] in most of my courses, gives me joy" [TP, SP]	teachers that are left" [TP] "they [rigid teachers] come to class, share that slide, and read off the slides" [TP] "that [reading off the slides] doesn't give you a sense of learning anything" [TP, CP] "when someone talks for a long time, I zone out" [TP, CP] "when the instructor is just reading slides, you lose interest because at night I can look up the slides and know what's going on" [TP, CP]	"some teachers just talk and don't bring anything more engaging" [TP, CP] "online, you can see that some professors don't care if we pass or not" [TP] "some teachers are just difficult" [TP] "I want personality in the classroom but not the transfer of negative personality" [SP] "the transfer of negative energy into the classroom setting can be controlled" [TP, SP]	w/overlapping Social Presence [SP] and Cognitive Presence [CP]