

Walden University ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2022

Faculty Perspectives on Quality of Online Courses in Health Education and Promotion Programs

Dana Wawrzyniec Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations

Part of the Public Health Education and Promotion Commons

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Education and Human Sciences

This is to certify that the doctoral dissertation by

Dana Wawrzyniec

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee

Dr. Carol Spaulding, Committee Chairperson, Health Education and Promotion Faculty Dr. Victoria Williams, Committee Member, Health Education and Promotion Faculty Dr. John Saindon, University Reviewer, Health Education and Promotion Faculty

> Chief Academic Officer and Provost Sue Subocz, Ph.D.

> > Walden University 2022

Abstract

Faculty Perspectives on Quality of Online Courses in Health Education and Promotion

Programs

by

Dana Wawrzyniec

MS, Michigan State University, 2015

BS, Madonna University, 2012

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Education and Promotion

Walden University

May 2022

Abstract

The need to make quick transitions online due to COVID-19 challenged many Health Education and Promotion (HEP) faculty to identify how to create quality online HEP courses. A review of the literature identified the need for qualitative research on the quality of online courses from the faculty's perspective. The purpose of this general qualitative study was to explore the perceptions and experiences of HEP faculty at multiple universities, in terms of the organization and facilitation of their online courses, communication between instructor and student, and assessment of students. The community of inquiry (COI) framework, which evaluates the teaching, social, and cognitive presence in online classes, provided the conceptual framework for this study. The sample included 10 online HEP instructors from eight different universities. An online COI survey completed prior to individual interviews provided descriptive statistics that were used to form the individual interviews. The result of the study indicated that social presence was the most vital component when creating an online class; however, it was also the area that needed the most improvement. Additionally, participants asserted that it is essential that faculty members receive professional development and training before transitioning to online platforms and further, there is also a need for support after transitioning. The results of this study could have a positive social change at the organizational level of universities' HEP programs by suggesting resources to faculty to develop high-quality online courses and providing the support they need to transition from face-to-face to online, even if it is a quick transition.

Faculty Perspectives on Quality of Online Courses in Health Education and Promotion

Programs

by

Dana Wawrzyniec

MS, Michigan State University, 2015

BS, Madonna University, 2012

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Education and Promotion

Walden University

May 2022

Dedication

This is dedicated to my amazing and sweet daughter, Emma. I am so thankful to have you as my daughter. Keep looking at life as an adventure and thank you for always being my adventure buddy. I also dedicate this dissertation to my three grandparents who lost their lives but gained eternal salvation during the writing of this. I know that you were helping me from heaven to finish and are throwing a big party in heaven!

Acknowledgments

First and foremost, I would like to thank God for giving me the courage, strength, and grace to complete this project despite all the obstacles and challenges that got in my way! A special thank you to those who helped me to "just trust" and finish this project when all obstacles where against me! I would also like to thank my parents for supporting me and always giving me positive thoughts and would say, "just finish it we all know you are going to finish!".

Thank you, Dr. Spaulding for helping me through this journey with our weekly meetings and all the valuable feedback. I will always remember how you have had an impact on me and helped me be confident in my work. I will be always thankful for that.

List of Tablesv
List of Figures vi
Chapter 1: Introduction to the Study1
Background3
Problem Statement4
Purpose of the Study
Research Question
Theoretical Framework6
Conceptual Framework7
Nature of the Study8
Definitions8
Assumptions9
Scope and Delimitation9
Limitations11
Significance12
Summary14
Chapter 2: Literature Review15
Literature Search Strategy21
Theoretical Foundation
Conceptual Framework
Key Variables and Concepts25

Table of Contents

Teaching Presence	25
Challenges of Creating Teaching Presence	28
Social Presence	29
Challenges to Creating Social Presence	31
Cognitive Presence	32
Challenges to Creating Cognitive Presence	35
Health Education and Promotion and COVID-19	36
Summary and Conclusion	39
Chapter 3: Research Method	41
Research Design and Rationale	41
Central Concepts of the Study	41
Role of the Researcher	43
Methodology	45
Participant Selection	46
Inclusion and Exclusion Criteria	47
Recruitment Procedures	47
Procedure for Recruitment, Participation, and Data Collection	50
Data Analysis Plan	52
Trustworthiness	54
Credibility	54
Dependability	56
Confirmability	56

Ethical Procedures	57
Summary	57
Chapter 4: Results	59
Setting	60
Demographics	61
Data Collection	62
COI Survey	62
Individual Interviews	64
Data Analysis	66
Results	68
Presentation of Themes	68
Research Question 1	72
Theme 1: Repetitive and Simple Layout of Course	72
Theme 2: Personal Interactions from Instructor	82
Research Question 2	87
Theme 3: Review of Curriculum is Needed	89
Theme 4: Social Presence is Essential for Quality	93
Research Question Three	97
Theme 5: Professional Development is Essential Due to Time Constraints .	97
Discrepant Cases	100
Trustworthiness	100
Credibility	100

Transferability	101
Dependability	102
Confirmability	
Summary	102
Chapter 5: Discussion, Conclusions, and Recommendations	104
Interpretation of the Findings	106
Teaching Presence	106
Challenges to Creating Teaching Presence	
Social Presence	
Challenges to Creating Social Presence	
Cognitive Presence	109
Challenges to Creating Cognitive Presence	
Theory of Planned Behavior	111
Limitations	111
Recommendations	112
Implications	113
Conclusion	116
References	118
Appendix A: COI Survey	140
Appendix B: Interview Guide	147
Appendix C: Demographic and COI Survey Results	151
Appendix D: Themes	169

List of Tables

Table 1. Pre-Codes	68
Table 2.COI Survey Results (Interview Participannts): Teaching Presence	74
Table 3. COI Survey Results (Non-Interview Participants): Teaching Presence	75
Table 4. COI Survey Results (Interview Participants):Social Presence	83
Table 5. COI Survey Results (Non-Interview Participants): Social Presence	84
Table 6. COI Survey Results (Interview Participants): Cognitive Presence	91
Table 7. COI Survey Results (Non-Interview Participants): Cognitive Presence	.92

List of Figures

Figure 1. COI Components and Codes	70
Figure 2 Catergories and Themes	71

Chapter 1: Introduction to the Study

The United States' first public health revolution occurred during the late 19th century through mid-20th century with the goal of controlling morbidity and mortality because of infectious disease. By the mid-1970s, it was apparent that the best way to reduce morbidity, save lives, and reduce healthcare costs could be achieved through health promotion and disease prevention (Cottrell et al., 2018). Furthermore, in 1998, the U.S. Department of Commerce and Labor officially recognized the occupation of health educator, indicating that the profession would grow and expand (Cottrell et al., 2018). Health educators work in a variety of roles, including teaching future health educators in an academic setting. Students look to their Health Education and Promotion (HEP) faculty members to be role models and to prepare them for a career in health education, thus marking the importance of providing quality courses in college and university's HEP programs (Bruess, 2003).

Over the past several decades, the field of HEP has seen a progression. As a result, there has been an increase in higher education institutions that offer HEP and public health programs (Blavos et al., 2020). In addition to an increase in available programs, HEP programs have started to align with public health programs resulting in an opportunity for collaborations among various health education and public health specialties (Blavos et al., 2020). For successful programs, courses need to build students' skills while incorporating hands-on opportunities. Thus, these courses need to include firsthand experiences of public health educators, include media sources such as video or audio clips, and include discussions on current events to make the information relevant

(Nelson-Hurwitz & Lee, 2020). Online education, or eLearning, provides HEP faculty an opportunity to engage students that they may not normally be able to reach, to prepare them to be future health educators (Glanz, 2017). However, HEP faculty that transition to teaching online, need to develop a new pedagogy, different from teaching face-to-face, to provide a quality class and experience to their HEP students (Sinacori, 2020).

Research has indicated that with the increase in eLearning, from a student's perspective and grade outcome, there is not a significant difference from face-to-face classes and online learning (Baker & Unni, 2018). Research also indicates that students in health sciences are looking for a more flexible way to obtain their education (Harwood et al., 2018). While there is information on student's satisfaction with online courses, there is limited information from faculty member's perspectives, on the quality of their online courses (Barbera et al., 2016). Obtaining this information can help significantly improve the quality of HEP programs while gaining knowledge of how to best prepare educators for teaching online. This information can be instrumental for HEP faculty members and administration during the rapid transition to eLearning initiated by the COVID-19 pandemic (Hughes et al., 2020).

In this Chapter, I introduce the problem that HEP faculty members must learn a completely new pedagogy when transitioning to online learning and lack of acquiring this new pedagogy can result in low quality, academic classes. Also, I identify the gaps in knowledge of understanding from the faculty's perspectives of their online experiences. I use this gap to frame my research questions as well as explain my conceptual framework. I also outline the scope and limitations of the study while defining the significance of the outcome.

Background

When developing undergraduate courses for HEP programs, the goal is to create a challenging, yet engaging, course for students. The course needs to correlate with the interest, needs, and learning styles of the students. Hence, when HEP faculty transition to online learning, these factors must be taken into consideration (Gardner et al., 2018). However, the well-known strategies, or pedagogies, that faculty know for teaching face-to-face, cannot be directly transferred to an online environment (Seymour-Walsh et al., 2020). Rather, the faculty members are required to learn a new pedagogy which requires the instructor to be trained and supported before, during, and after transitioning to teaching online (Sinacori, 2020). Luongo (2018) concluded that online instructors experience several self-perceived barriers when transitioning to an online platform. Barriers include an increase in responsibility and workload though compensation remained low, lack of resources provided by the institution, and lack of training.

The community of inquiry (COI) framework is the leading framework for investigating online and blended learning. The development of the COI survey dug deeper into understanding students' perspectives and satisfaction of online courses (Garrison, 2017). Research has investigated students' perspectives of satisfaction and grade outcomes between traditional face-to-face classes, compared to that of online courses (Baker & Unni, 2018). Harwood et al. (2018) found no statistical difference in student satisfaction, or grade outcome, between a traditional 15-week face-to-face health science class compared to a 7-week intensive online course. Hence, research shows that students are opting to enroll in online courses compared to face-to-face classes (Lee & Combes, 2020). However, there is a gap in our knowledge about applying the COI Framework to gain an understanding of the HEP faculty's perspective on the quality and satisfaction of their online classroom. It is important to gain HEP faculty's experiences and perspectives of the quality of their courses because university-level health science students are utilizing eLearning at an increased rate (Colley et al., 2019). For example, research has indicated that nursing students are no longer willing to attend campus-based courses and programs, rather they want to be offered a more flexible way to obtain their education (Richter & Schuessler, 2019). Thus, by utilizing the COI framework to obtain HEP faculty's perspectives and identify barriers to creating a quality online class, this information can be used to increase the quality of online HEP classes.

Problem Statement

Teaching online is often appealing to faculty due to the ability to teach from any location. However, transitioning to teaching online requires the faculty to learn new skills to design, develop, and carry out a high-quality class (Olesova & Campbell, 2019). Tannis (2020) suggests that online learning requires instructors to find strategies to support a quality learning experience. However, there are some circumstances, such as the 2020 Novel Coronavirus pandemic, that required educators to quickly adapt to online teaching (Bowles & Sendall, 2020). As a result, HEP faculty, who had only taught faceto-face courses, were suddenly expected to transition pedagogies, and teach online (Seymour-Walsh et al., 2020). Regardless of circumstances, it is the obligation of the instructor to encourage students and encourage learning (McBride & Kanekar, 2015). However, the need for support and resources during the quick transition to online learning made it challenging for most instructors (Sinacori, 2020). Additional factors such as the instructor's health, wellness, and safety, concerns of job security, and the uncertainty of the pandemic all impacted expectations, delivery, and effectiveness of online HEP courses (Hughes et al., 2020).

Purpose of the Study

The purpose of this general qualitative study was to explore the perceptions and experiences of HEP faculty at multiple universities, in the organization and facilitation of their online course, communication between instructor and student, and assessment of the students. This research followed the COI framework, including teaching presence, social presence, and cognitive presence and how they are influenced by perceived behavioral control to gain an understanding of what HEP faculty require to provide a high-quality online class, especially when they are required to transition quickly to online learning. Understanding the perspectives of faculty can help faculty transition to online learning that goes beyond just uploading pre-existing material from a traditional classroom (Bowles & Sendall, 2020).

Research Question

Research Question 1 (RQ1): What are HEP faculty's experiences with online teaching?

Research Question 2 (RQ2): How do HEP faculty align their online class with the areas of responsibility and competencies for health education specialists?

Research Question 3 (RQ3): How do HEP faculty describe factors that affect their teaching, social, and cognitive presence in their online classes?

Theoretical Framework

The theory of planned behavior (TPB) is a model that is used to predict an individual's intention to perform a behavior. This prediction is based on the individual's attitude towards the behavior, subjective norms, and perceived behavioral control. Control belief is how the individual perceived the presence of factors which may hinder the ability to engage in that behavior (Ajzen, 1991). An individual's intention to act on a behavior is influenced by factors such as opportunities, resources, knowledge, and selfefficacy (Ajzen, 2002). TPB has been used in higher education to examine factors that influence instructors to make decisions in online settings, such as using technology. Understanding these factors can help understand the instructor's attitudes and selfefficacy towards technology, as well as barriers to incorporating technology in the class (Li et al., 2016). Chu and Chen (2016) found that perceived behavioral control, or the level of difficulty of transitioning online, affect the decision to transition to online learning. Hence, an instructor who is unmotivated and receives little resources is unlikely to transition to eLearning compared to an instructor who has a positive attitude and procured the necessary resources. Thus, by examining the perceived behavioral control of the HEP faculty when transitioning to online platforms, barriers that impede the quality of the class can be identified. I provide and in-depth review of the literature surrounding the TBP in Chapter 2.

Conceptual Framework

The COI is often used as a framework for research involving online and blended learning (Garrison, 2017). COI was introduced by Garrison, et al. (1999) to establish prerequisites for a successful experience with online classrooms in higher education. The three components that are needed to create a successful experience include teaching, social, and cognitive presence. Design, facilitation, and direction are concepts that make up teaching presence. Concepts of social presence include how the instructor communicates, both effectively and openly, as well as group cohesion. Lastly, exploration, integration, and resolution of cognitive challenges are constructs that make up cognitive presence (Garrison et al., 1999). When all three elements are present in an online class, there is opportunity for an enhanced learning experience (McClannon et al., 2018).

The COI has been used to support transitioning from face-to-face learning to fully online. When an instructor is transitioning to online, networks are useful to help guide the faculty to acquire the skills and knowledge of online learning. Additionally, using networks creates an environment where faculty can discuss and develop their own online pedagogy (Peacock & DePlacido, 2018).

The importance of having teaching, social, and cognitive presence in online HEP classes were focal points of the research questions for this study. Moreover, the conceptual framework along with the research questions reflect the need to acquire knowledge on the perspectives of HEP faculty on their teaching, social, and cognitive presence as well as other factors that affect their presence in their online classes. The

importance of understanding the experiences of HEP faculty is crucial for promoting this qualitative research framed by the COI. I provide an in-depth overview of the current literature of the COI in Chapter 2.

Nature of the Study

The nature of this study was a qualitative with a generic qualitative approach. The generic qualitative approach has been adapted by researchers to increase the quality of their empirical studies (Liu, 2016). Moreover, qualitative research seeks to gain an understanding of individual's experiences in the world while making a meaning of their experiences regarding a specific phenomenon (Ravitch & Carl, 2016). Focusing on the perspectives of HEP faculty provided a deeper understanding of factors that affect their teaching, social, and cognitive presences, which impacts the quality of their online class. The data for this investigation was derived from semi structured interview questions and the COI survey. To increase the reliability and the validity, the interview questions align with the research questions (Yeong et al., 2018). The semi structured interview questions were based off the COI survey which was originally validated by Arbaugh et. al (2008). The participants completed a modified version of the COI before the individual interviews took place. Data were analyzed via indictive thematic coding.

Definitions

Health Educator: An individual who is professionally trained to serve in a variety of settings to apply the appropriate strategies and methods to facilitate the development of policies, procedures, interventions, and systems conductive to the health of individuals, groups, and communities (Cottrell et al., 2018).

Health Education and Promotion (HEP): Process of enabling individuals to increase control over and improve their health (World Health Organization, n.d.).

Teaching Presence: Teaching presence includes design, facilitation, and direction (Garrison, Anderson, & Archer, 1999).

Social Presence: Social presence includes effective communication, open communication, and group cohesion (Garrison et al., 1999).

Cognitive Presence: Cognitive presence includes exploration, integration, and resolution of cognitive challenges (Garrison, et al., 1999).

Perceived Behavioral Control: An individual's perception of their ability to perform a behavior (Ajzen, 1991).

Assumptions

Due to the nature of qualitative research, which is focused on individual's experiences, it is assumed that all the participants will be honest throughout the process (see Ravitch & Carl, 2016). This includes that the participants were honest about their eligibility via the criteria survey regarding their status as an online educator in a HEP program. To establish data credibility, member checks were utilized. Thus, assumptions were made that participants were honest with their choice whether to send or not send feedback. These assumptions were made to develop a respect for both the research and the participants.

Scope and Delimitation

This study focused on HEP faculty members and their perspectives and experiences with the quality of their online HEP classes. It has been suggested that instructors who transition from face-to-face learning to online learning require the support and resources to make such a transition (Sinacori, 2020). Thus, this supports the decision to focus on HEP faculty that have transitioned to online learning. Since previous research had limitations on focusing on one college or university, this research focuses on collecting diverse data by including participants from multiple universities. Additionally, I am a HEP doctoral student at Walden University which gave me access to this population.

In defining boundaries, I chose the COI framework supported by the construct of perceived behavioral control from the TBP. While a construct of TPB was utilized in this study, it was not chosen as the main theoretical foundation itself for several reasons. The TPB assumes that the best predictor of a behavior is determined by the attitude towards the behavior and social perceptions regarding the behavior (Glanz et al., 2015). TBP has been utilized to understand the attitudes and self-efficacy of instructors towards technology (Li et al., 2016). However, TPB is used as a predictive model, which would be appropriate if this study examined whether instructors would make the transition to online learning (Chu & Chen, 2016). Whereas the COI framework provides a framework to define quality of online classrooms in terms of teaching, social, and cognitive presence, the TPB can help identify factors that affect the quality of an online classroom. Accordingly, TPB did not provide a broad theoretical lens to understand how HEP faculty perceive the quality of their online classroom.

Limitations

Due to the nature of qualitative research, definitive conclusions are not produced; rather, themes of individual's experiences are produced indicating that generalization is a limitation of qualitative studies (Ravitch & Carl, 2016). Often, limitations of online research include the sample population being derived from only one class or one institution (McCutcheon & Lohan, 2018). To broaden the data collected, I used HEP faculty from multiple universities to collect my data. However, due to this, recruitment of my participants was time-consuming and a rigorous process. An additional limitation includes being able to identify HEP faculty that would dedicate an hour, plus time to complete a presurvey, while teaching during a pandemic. Bowles and Sendall (2020) indicated that instructors adapted to this new learning environment due to the pandemic so the students can complete their education in HEP. Thus, instructors may not have had the time to participate in extra work outside of teaching.

Qualitative research focuses on understanding individual experiences. Unlike quantitative research, qualitative research is not focused on producing conclusions which can be applied to various settings. Hence, transferability and dependability can be a limitation (Ravitch & Carl, 2016). While qualitative research does not produce generalized statements, the descriptive, context-related statements may be applied to broader contexts if it maintains the context-specific richness (Ravitch & Carl, 2016). To establish transferability in this investigation, details on the participants and the data collection methods are clearly outlined (see Maxwell, 2020). This includes describing the experience and behavior, as well as, providing context so it has meaning to an outside reader (Korstjens & Moser, 2018).

The stability, or consistency, of the data is considered dependability (Ravitch & Carl, 2016). Dependability can be achieved through an audit trail. This is where each step is described, in detail, from the start to the development of the findings (Korstjens & Moser, 2018). To achieve this, I outlined a detailed map of the research plan which is included in the audit trial. Additionally, reflective memos were kept identifying my positionality and biases throughout the investigation (Ravitch & Carl, 2016).

Lastly, in qualitative research, there is opportunity of researcher bias due to the researcher being the main instrument. A key to achieving validity is reflecting on biases and challenge interpretations (Ravitch & Carl, 2016). Since I am an online instructor myself, it is imperative that I acknowledge my bias. To achieve this, I kept descriptive memos and noted any biases and ideas that I had throughout the process.

Significance

Since the World Health Organization declared the Novel Coronavirus a pandemic on March 11, 2020, there have been global behavior changes (Pears et.al, 2020). The suspension of in-person, higher education classes was among these changes. This pandemic has posed a challenge to educators, especially in the health field, to provide quality education and training to their students during an unprecedented time (Pears et.al, 2020). It is essential that students who are preparing to be health educators receive a quality education during their academic career. The use of an online learning platform can help prepare students and increase their technology skills for their future careers as health educators (Yeliz et al., 2019). However, it is important that the HEP faculty understand the training, resources, and support needed to create and maintain a highquality online class. Moreover, lack of training or underestimating the demands of an online class can have an impact on the overall quality of the online class (Brinkley-Etzkorn, 2020). This project is unique because it focused on the instructor's perspective which is under-researched in higher education and in HEP (Barberà et al., 2016). The results of this study provided insight into how HEP faculty view the organization and facilitation of their online course, communication between instructor and student, assessment of the students and the influences of the perceived behavioral controls of time, technological resources, training, and previous experience of the HEP faculty. Insights from this investigation should assist health educators to increase the quality of their online classrooms which is imperative since online education has become more prevalent in the last 10 years (Burcin et al., 2019). Furthermore, there are no signs that the growth in online education is going to slow down. Thus, health educators must provide the best quality online education to support the academic success of their students (Steele & Holbeck, 2018).

Higher education institutes have a unique opportunity to create positive social change within the institution. One way to create positive social change in higher education is to provide students the opportunities to expand their knowledge and master skills needed for their future careers (Johnston, 2011). Online instructors face a challenging, yet critical, role in creating an online environment that encourages the students to interact and engage while promoting critical thinking (Shoepe et al., 2020).

More than 6 million students participate in online classes in higher education which indicates that online instructors have a commitment to enhance learning by creating a quality class (Miller et al., 2020). Therefore, this study sought to create positive social change by increasing teaching, social, and cognitive presence in online classrooms and thus, increase the quality and learning experience for future health educators.

Summary

In this qualitative study, I addressed the gap in understanding the perspectives of HEP faculty on the quality of their online classes in terms of teaching, social, and cognitive presence. The study utilized the COI framework as well as perceived behavioral control, a construct of the TPB. Semi structured interview questions, derived from the COI survey, were used to gain an understanding of the HEP faculty. The findings of this study helped identify the factors and barriers that impede on the quality of teaching, social, and cognitive presence in HEP online classes. In Chapter 2, I provide an in-depth review of the literature and address the gap that produced the research questions for this inquiry.

Chapter 2: Literature Review

HEP faculty have the responsibility to bring their experiences into the classroom and prepare their students for practical application (Green, 2016). However, when HEP faculty transition from face-to-face learning to online learning, the instructors must adapt a different pedagogy, which can be challenging. Ultimately, if the instructor does not receive proper training on the skills and knowledge needed for online learning, it could result in lower quality classes (Seymour-Walsh et al., 2020). Therefore, the purpose of this research was to explore the perceptions and experiences of HEP faculty of their online courses in teaching presence in terms of design and facilitation, social presence in terms of communication and feedback, and cognitive presence in terms of assessment.

As disciplines, health education and public health have seen a progression as a profession over the past several decades (Blavos et al., 2020). Higher education institutions that offered undergraduate public health degrees increased from 83 in 2013, to 271 in 2016, with most of the degrees in public health and education (Resnick et al., 2018). Additionally, many programs have seen HEP programs align with public health programs bringing an opportunity to collaborate various health education and public health specialties (Blavos et al., 2020). Additionally, over the past 20 years, online education, or eLearning, has been an opportunity for colleges and universities to reach students that are unable to attend face-to-face classes (Lee & Combes, 2020). However, according to Pinahs-Schultz and Beck (2016), the National Survey of Student Engagement reported that 71% of students spent their time just memorizing material, which is not the goal of higher education. Moreover, the use of the pedagogy of lectures

and exams contributes to a disengaged student that cannot apply the course content to real-world scenarios. The Heart Research Associates (2015) suggested that only 23% of recent college graduates could apply their knowledge to real-world situations. Additionally, 44% of employers believed recent graduates were not well prepared, or not prepared at all. Thus, courses, especially in HEP and public health, should challenge students to not only learn material, but create an opportunity to apply the material to reallife situations (Pinahs-Schultz & Beck, 2016).

Nelson-Hurwitz & Lee (2020) believe that public health programs need courses that build students' skills and include experimental opportunities. Courses should include firsthand experiences of public health educators, use of media sources, such as video or audio clips, and focus lectures and discussion on current events. Glanz (2017) shares that some health education instructors have concern that classroom teaching is becoming irrelevant due to the internet and social media. Online learning provides an opportunity for HEP courses to engage students while preparing them to be future health educators (Glantz, 2017).

While teaching online may be appealing to faculty due to the flexibility of being able to teach from any location, they must learn new skills to design, develop, and execute a high-quality online class. One way to design a high-quality online class, is to work side-by-side with the university's instructional designers. While this partnership is ideal, it is time-consuming and may create anxiety in the faculty (Olesova & Campbell, 2019). However, due to recent events, such as the universal spread of the Novel Coronavirus (COVID-19), educators were forced to adapt quickly to teaching online (Bowles & Sendall, 2020). Seymour-Walsh et. al (2020) notes that HEP programs were not immune to this transition and were forced to switch to online platforms. As a result, HEP faculty that were only familiar with face-to-face pedagogies had to transition to online pedagogies. Often, these educators found the transition difficult, which resulted in lower-quality online lectures and classes (Seymour-Walsh et al., 2020). Regardless of circumstances that result in teaching online, all instructors have an obligation to engage students and encourage student learning. Specific to HEP, instructors should design classes that include community-based learning projects that promote their students to apply theoretical concepts with the intention to improve the community (McBride & Kanekar, 2015).

Health education is crucial in preventing diseases in individuals and improving health within a community (Liyanagunawardena & Aboshady, 2018). Health educators play a critical role in improving the health of individuals especially as the world faces global health threats. However, health education and promotion has evolved over the years to support developing skill practitioners via eLearning (Warwick-Booth et al., 2019). eLearning can resolve challenges, such as, content delivery, high costs, and access to quality health education classes (Liyanagunawardena & Aboshady, 2018). Higher education institutions are embracing the use of eLearning, although this requires the institution to support faculty in design and delivery of courses, as well as frequent updates. Thus, faculty must require a range of technological skills and pedagogical knowledge that is often hard to achieve (Scoppio & Luyt, 2017). Willett et. al (2019) found that 42% of students believed that online courses are beneficial only if instructors have the desire to teach online, have been trained, and have properly constructed the course to fit an online format.

In 1990, the first certification for health education specialists was administered via the National Commission for Health Education Specialists (NCHES). The framework for health education model of professional practice included seven areas of responsibility with 36 competencies which is further divided into 258 sub-competencies (Berlin et al., 2019). Furthermore, in 2020, an additional responsibility was verified by the 2020 Health Education Specialist Practice Analysis II. The eight areas of responsibility for health education specialists include assessment of needs and capacity, planning, implementation, evaluation and research, advocacy, communication, leadership and management, and ethics and professionalism (Society for Public Health Education, 2021).

Health education and public health students learn in their studies that science is not static. Thus, instructors must teach their students how to communicate scientific findings strategically, effectively, and delicately to the community and public (Mandelbaum, 2021). Communication is one area of responsibility for health education specialists, and health educators should be able to determine communication objectives, develop the message, determine methods and technology to deliver the message, and successfully deliver the message (Society for Public Health Education, 2021). However, with the rapid transition to an online learning platform as result of the COVID-19 pandemic, it is essential to reflect and evaluate on the effectiveness and benefits of using online platforms. Since HEP courses should incorporate the appropriate areas of responsibilities for health specialists, it is essential to reflect on how instructors incorporate these responsibilities in their courses (Merzel, 2021).

eLearning is suitable for students interested in health sciences and continuing education (Colley et al., 2019). Richter & Schuessler (2019) suggest that students who are enrolled in nursing programs are no longer willing to travel to a campus for traditional face-to-face classes. However, students want to continue their education and thus need a more flexible way to advance their education. Additionally, Sinacori (2020) agrees that nursing students need flexibility in their education, indicating that eLearning is a viable option for individuals with time constraints. The increase in online courses require competent faculty to facilitate them. This means faculty must receive training before, during, and after transitioning to online classrooms.

In unprecedented events, instructors may be forced to make an unforeseen transition to online learning. The 2019 Novel Coronavirus created a situation in which universities had to quickly adapt to an online format to continue educating their students, however, instructors could not simply move their pre-existing material to an online format (Bowles & Sendall, 2020). Cutri et. al (2020) found that instructors who were forced to transition rapidly online during the Novel Coronavirus pandemic had to do so with little or no training and under traumatic circumstances for both the instructor and students. Harper & Neubauer (2020) suggest that higher education institutes should adopt health education and promotion practice of trauma informed principles and apply it to health promotion pedagogy. Results of the pandemic can have negative, cognitive, emotional, and physiological effects on both instructors and students. This challenges planning, decision making, creativity, and learning. Furthermore, the faculty members felt apprehensive about leaving their previous teaching method to develop a new pedagogy, as well as a fear of failure if they had little experience with online instruction (Cutri et al., 2020). Adedoyn & Soykan (2020) argue that effective online education is the result of careful planning of course design, teaching, and learning. Thus, as result of the pandemic, the transition to online resulted in a crisis-response migration, and instructors lacked planning skills needed to produce an effective online course. However, this situation presented them an opportunity to embrace teaching online and to navigate ways to increase the quality of their online course (Adedoyn & Soykan, 2020).

Chapter 2 provides a review of research literature relevant to online learning and perceptions of Health Education and Promotion faculty on the quality of their online classroom. This literature review was guided by how HEP faculty had to transition pedagogies from face-to-face to online with little time to develop the knowledge and skills needed to create a successful and engaging learning environment (Yu-Hui et al., 2018). The literature review begins with the prevalence of online learning in higher education, as well as the impact of the 2019 Novel Coronavirus on online education in Health Education and Promotion programs. Next, the chapter reviews the conceptual framework, Community of Inquiry, and the Theory of Planned Behavior. The chapter also discusses factors that online educators may face that may affect their teaching, social, and cognitive presence, which ultimately will affect the quality of their online class. The chapter concludes with supporting literature on the selected qualitative research design.

Literature Search Strategy

The literature search started with a general inquiry in the Walden University online library using the terms online teaching and faculty perceptions. The purpose of this search was to obtain keywords to use for further inquiries. From the published literature, my research problem, and research questions, I narrowed down six keywords including health education, faculty perspectives, online course, higher education, and *course quality*. Next, using these keywords, I started searching for literature using Education Source, ERIC, SAGE, and MEDLINE databases via EBSCOHost. For current and peer-reviewed literature, filters were utilized including searching articles from 2015 to the present. Once I located a relevant resource, I recorded pertinent information such as the citation and additional keywords and created a Word document to organize all resources. Additional keywords were obtained including *covid-19*, *Community of Inquiry*, teaching presence, social presence, cognitive presence, direct instruction, facilitating dialog, curriculum design, course design, affective expression, open communication, group cohesion, and cognitive exploration. However, with the acquisition of additional keywords, searches included little or no resources. If no resources were found, I would broaden my search. Instead of searching three keywords I would search two. On the other hand, broadening the search terms, at times, resulted in thousands of results. If this occurred, I narrowed down dates from 2015-present, to 2017 or 2018 to present. This ensured I was collecting the most up to date research. The goal of this literature review was to provide and analyze current research of the quality of online health education and promotion programs within the framework of Community of Inquiry.

Theoretical Foundation

The theory of planned behavior (TPB) is a model that predicts an individual's intention to perform a behavior based on their attitude towards the behavior, subjective norms, and perceived behavioral control. Within the model, control belief is how an individual perceives the presence of factors that may hinder their ability to engage in certain behaviors (Ajzen, 1991). Ajzen (2002) implies that a major factor in predicting intentions is perception. Factors such as opportunities, resources, knowledge, and selfefficacy are crucial to an individual's intention to act on a behavior (Ajzen, 2002). The Theory of Planned Behavior is commonly used in Health Education and Promotion to identify factors that influence an individual intention to perform an action (Jeong & Kim, 2016). However, TPB has also been utilized to examine factors that influence instructors to make certain decisions in an online setting, such as utilizing technology. TPB can assist in understanding instructors' attitudes towards technology, self-efficacy with technology, and barriers to incorporating technology (Li et.al, 2016). Moreover, Chu & Chen (2016) utilized the Theory of Planned behavior to predict eLearning adaptation, specifically technology adaption. Perceived behavioral control is the level of difficulty, or ease in transitioning to eLearning and the technology that accompanies this transition. Thus, an instructor who is unmotivated or has limited resources, may be unlikely to transition to eLearning compared to an individual that has a positive attitude and the resources to support their transition to an online format (Chu & Chen, 2016). Dalvi-Esfahani et. al (2020) suggests that individuals may not perceive themselves as qualified in using the technology needed for online instruction, even if they possess a positive

attitude of technology, and so perceived behavior control is significant in determining whether an instructor transitions to teaching online. Thus, utilizing the construct of perceived behavioral control, this research identified factors that hinder the HEP instructor's ability to create a quality online classroom.

Conceptual Framework

In early research of online learning, a strong emphasis was placed on social presence, however, in 1992, attention was brought to cognitive presence, which paved the way for Garrison, Anderson, and Archer to create the community of inquiry (CoI) framework (Garrison & Arbaugh, 2007). COI was introduced by Garrison, Anderson, and Archer (1999) to establish prerequisites for a successful experience in higher education. Three essential components create a successful experience including teaching, social, and cognitive presence. Teaching presence includes design, facilitation, and direction. Social presence, which is critical for communication, includes both effective and open communication, as well as group unity of the class. Cognitive presence, which is vital for critical thinking, includes exploration, integration, and resolution of cognitive challenges. When all three elements of COI are present in an online class, opportunities arise for communication, collaboration, and relationship building which can result in an enhanced learning experience for the student (McClannon et al., 2018).

The COI is considered one of the primary frameworks for research in online and hybrid learning. Moreover, research has shown that COI supports that collaborative inquiry and can be supported in online learning. Furthermore, the development of the COI survey instrument provides an opportunity for further research to gain insight into

online and blended learning (Garrison, 2017). While the COI survey instrument allows for the collection of large quantitative data (Garrison, 2017), Maher and Prescott (2017) utilized COI in a qualitative study to help rural and remote online faculty develop and create quality programs for their students. It was concluded that while faculty realized they needed professional development to create a quality class; time, distance, and travel were often obstacles that interfered with completing additional training. However, online training will instructors collaborate and develop quality programs. Additionally, Peacock & DePlacido (2018) used the COI framework to support transitioning from face-to-face learning to fully online. To support faculty that were transitioning, a network, or community, was created to guide them to develop the necessary skills and knowledge of online learning. By creating this network, the study found that faculty had an avenue to discuss and develop their own knowledge of online pedagogy. However, the study also found that being a part of this community was time-consuming thus the faculty lacked the enthusiasm necessary to share best practices. By creating a support community, faculty have an outlet where they can be supported during their online transition, especially if they are new to online learning.

The COI framework can be utilized in an online or blended learning environment (Amemado & Manca, 2017). However, there is limited research on the application of COI in health education and promotion online programs. Evans et. al (2017) explored teaching presence in an interprofessional education facility consisting of instructors from occupational therapy, physiotherapy, social work, nursing, dietetics, speech pathology, and psychology. While this research focused on online instruction for interprofessional education at one institution, it provides a framework that can be applied to explore the teaching presence in health education and promotion online classes. Additionally, this research included HEP faculty from multiple health education and promotion programs resulting in diverse data focusing on teaching, social, and cognitive presence in their classes which are key variables to define the quality of their class.

Key Variables and Concepts

Teaching Presence

Social networking is part of basic human needs. Individuals have positive outcomes when they have a sense of community and belonging. One of the leading causes of attrition and poor performances in online classes is the feeling of isolation and disconnection (McClannon et al., 2018). However, an instructor's teaching presence can help bridge the gap of physical distance between instructor and student. Teaching presence is not one dimensional, which means, there is not one set method that is applicable to all instructors to demonstrate availability and support in their online class (Orcutt & Dringus, 2017). Gurley (2018) suggests that how instructors are prepared to teach, impacts the quality and teaching presence of their online class. Traditional methods of teacher preparation are not sufficient in preparing online educators since it requires a different pedagogical approach.

Teaching presence contains three elements including course design, facilitation, and monitoring cognitive and social processes to meet learning goals (Majeski et al., 2018). Technology is the backbone of eLearning. Thus, when designing online courses, there is the opportunity to have a more dynamic and interactive class compared to faceto-face classrooms (Elkaseh et al., 2015). In higher education institutions, instructors play a vital role in the planning of their online courses (Kibaru, 2018). Burrell et. al (2015) states that course design should take into consideration learning outcomes and the assessment that goes beyond the pedagogy approach that instructors experience in faceto-face classrooms. Nelson-Hurwitz et. al (2018) examined the pedagogical approaches to developing three introductory public health courses at the University of Hawaii. Faculty concluded that quality classes should address the diverse learning styles of the students. Also, learning should occur through repetition, scaffolding, and application of concepts. Bistritz et. al (2015) found that scaffolding the curriculum increased the relevance to students' own personal lives as well as their future role as health educators. They could not only reflect on their own health, but also apply this knowledge to fictional patients or clients.

Jeffery & Ahmad (2018) believe that quality course development occurs when instructors focus on core learning outcomes that consists of the expectations of the knowledge students should acquire upon completion of the class. Santoso et. al (2016) found that quality course design comes from utilizing multiple learning materials such as PowerPoint slides, multimedia files, audio files, and web links. Jeong et. al (2016) found that 80% of students in their study believed that video lecture resembled in-class lecture helped the students learn in a general science class. In addition to video lectures, Self et. al (2018) suggests that implementing discussion boards in the design of the course may impact a student's performance. However, in quality courses, discussions are created to engage students that are relevant. Garrison & Arbaugh (2007) believe that in addition to the design of the course, facilitating dialogue and direct instruction, are important for the instructor to create a teaching presence. Chiu & Hew (2018) support the importance of instructors facilitating dialogue within their online classrooms. Instructors that actively comment on discussion forums find an increase in student learning and performance (Chiu & Hew, 2018). However, Richardson et al. (2018) suggests that there are many roles' instructors have when interacting with students in a virtual class. Instructor interaction can impact student learning outcomes. Moreover, from the student's perspective, they seek instructors that provide timely feedback, listen to the student's concerns, and guide them through the course activities (Richardson et.al, 2016).

Direct instruction suggests that instructors present context, or questions, then confirm the student's understanding through assessment, while providing feedback (Kilis & Yildirim, 2019). Traditional face-to-face teaching methods do not allow enough time for the instructor to provide both lectures on content and hands-on-activities which can result in not meeting the learning needs of all students (Turan & Goktas, 2016). Thus, educators seek pedagogical styles that support meaningful learning experiences, especially in public health where the demands and knowledge of skilled practitioners are constantly changing (Berić-Stojšić et al., 2020). There has been an evolution from a teacher-centered approach, which requires teaching objectives, to a student-centered approach with learning outcomes. Thus, this has changed the role of the student from passive to active, resulting in instructors focusing less on what they know to focusing more on student learning (Guerrero-Roldán & Noguera, 2018). Gurley (2018) describes three main ways instructors conduct direct instruction including actively participating with students in discussion boards, providing constructive feedback, and guiding students through active learning assignments.

Challenges of Creating Teaching Presence

Course design is the first opportunity an instructor must create a quality class; however, instructors are often left to create content without having the knowledge and skills needed to create a quality class. Additionally, they must acknowledge that creating a quality, online class is time-consuming (Kibaru, 2018). Elkaseh et. al (2015) suggests that one of the most common barriers instructors faces when designing a course is the lack of knowledge in creating appropriate materials both in pedagogy and technology.

According to Kibaru (2018), there is some concern with communication in large classes. In these classes, instructors must dedicate more time to providing quality feedback, and may not have the opportunity to create a virtual relationship with their students. Furthermore, Alhosban & Ismaile (2018) question the use of learning management systems, such as Blackboard, for facilitating dialog or assessment. Some learning management systems lack the ability to support interaction or the personalization of material which could be a barrier to the online instructor. The attitude of the instructor can have an impact on how often they communicate with students. Additionally, their attitude towards technology can have an impact on instructor-student communication (Villarreull et al., 2019).

Discussion boards provide instructors the opportunity to replace face-to-face conversations that occur with asynchronous learning. Thus, online courses are centered

around student interaction to encourage learning (Champion & Gunnlaugson, 2018). While discussion boards can increase teaching presence in an online class, some instructors find it time consuming to respond to students. Moreover, compared to face-toface classes, students are more likely to misunderstand feedback or discussion boards in online classes (Nistor & Comanetchi, 2019).

Social Presence

Adult learning is supported by instructor-student interaction and connection. However, online courses lack face-to-face interactions where instructors can answer questions on content, assignments, and even have personal conversations with the students (Jackson, 2019). Social presence, which is essential in an online classroom to prevent students from feeling isolated, is reliant on the frequency, type, and quality of interactions between the instructor and student (Richardson & Lowenthal, 2017). Garrison & Arbaugh (2007) suggest that an instructor's social presence is defined by three components including affective expression, the ability to translate real emotion into text, interactive, which enhances open communication, and group cohesion, the sense of union and commitment of the group.

Affective expression is one indicator of social presence. Instructors can utilize simple things such as humor, continuing a discussion thread, and providing information about yourself to express emotion to create affective expression (Rolim et al., 2019). Higher education has seen an increase in the use of mobile instant messaging to create affective expression. This method provides opportunities for instructors to have features such as private and group chats, emoticon, stickers, and provide audio messages. Oneway instructors are using MIM to create social presence is using WhatsApp to send a welcome message to their students each semester (Tang, & Hew, 2019; Tang, & Hew, 2020).

Almasi & Chang Zhu (2018) found that medical students appreciated using WhatsApp for group discussions due to the ability to add emoticons, which includes instructor personality, making the students feel like they were together even when they were physically apart. Additionally, Wang et.al (2016) found that online instructors appreciated using the mobile WeApp, for group discussion to create affective expression and personal messages. Additionally, instructors believe that this type of social presence was important during the first week to create a positive rapport with the students. However, Kim et. al (2014) suggests that discussion boards within learning management systems such as Moodle are more effective for promoting interaction compared to instant messaging. Sun et. al (2018) found that when students transitioned from WeChat to a Moodle discussion, there was an increase in knowledge of construction posts, however, when the students transitioned from Moodle to WeChat there were more social interaction posts indicating that both methods can support collaborative learning. WeChat offered a social application that Moodle did not.

A second indicator of social presence is interactive, or open communication. Open communication is a fundamental element of eLearning. Examples of interactive social presence include asking questions, complementing, showing appreciation, and expressing agreement (Rolim et al., 2019). One way the instructor can create interactive, or open communication, is through feedback. Personalized comments on student performance, while asking questions to further the students critical thinking skills, can create this open communication (Ryan et al., 2019). Orlando (2016) found that instructors that utilized audio for communication or feedback created an environment where students felt less isolated and believed the instructor cared about their education.

The third, and final indicator of social presence of an online classroom is group cohesion (Rolim et al., 2019). Since social presence is a basic human need, it is imperative that it extends into our online classrooms. Social presence is closely linked to group cohesion. Group size can have a direct impact on group cohesion. Cohesion is a sense of commitment and closeness among students in groups, or in the entire class (Akcaoglu & Lee, 2016). Group cohesion is apparently stronger in shortened terms, such as six weeks compared to longer terms of thirteen weeks. This may be because students need to build group cohesion sooner. However, the instructors need to provide opportunities for student collaboration to create this cohesion (Lee, & Huang, 2018). Moreover, Kelsen & Flowers (2018) suggest that personality traits influence group cohesion. Hansen (2016) found that online students in teams, created more of a group cohesion compared to teams of traditional face-to-face classes.

Challenges to Creating Social Presence

The attempt to achieve affective expression via mobile apps or frequent discussion posts, may add stress on the instructor. Constant alerts and notifications of instant messages or posts can make them feel like they must respond immediately, or they may lose the interaction (Tang & Hew, 2020). Moreover, instructors may not know how to successfully create a social presence, with the use of affective expression within their online classroom. The instructor's role is to not only providing content and material, but also facilitating interactions which may be difficult for them (Keengwe et al., 2013).

Cognitive Presence

Of the three elements within the Community of Inquiry Framework, cognitive presence, is the most challenging to develop in an online course (Garrison & Arbaugh, 2007). Cognitive presence describes the learning phases from initial inquiry to the construction of knowledge. This is the process of higher order thinking, as opposed to, individual learning outcomes (Kovanović et al., 2015). Crosta et. al (2016) states that cognitive presence is reliant on how the learning environment encourages deep and meaningful learning. Furthermore, cognitive presence creates meaning through discussion and interaction within the online community. This is accomplished when students can reflect, explore, and eventually apply the learning material into real life situations (Seckman, 2018).

Cognitive presence is rooted in Dewey's 1910 social-constructivist view, indicating that there are four phases of the inquiry learning cycle including triggering an event, exploration, integration, and resolution (Kovanović et al., 2015). Bissessar et. al (2020) found that students believe that an instructor's cognitive presence, in the form of triggering an event, exploration, and integration, is important in an online class. When an event is triggered, a problem is introduced. It is the responsibility of the instructor to introduce a problem for further inquiry (Garrison & Arbaugh, 2007). Holbeck & Hartman (2018) suggest that instructors can increase the cognitive presence in online classrooms by utilizing technologies such as Flipgrid, or Loom, to explore topics within the course material. Flipgrid is a discussion platform that allows students to record their thoughts of specific topics. Moreover, Loom is an extension of Chrome, that allows instructors to record themselves, to provide feedback, or to introduce a new topic for exploration.

Exploration involves the students exploring a problem proposed by the instructor and finding relevant information that can offer an explanation. Exploration begins with the instructor asking thoughtful questions. Discussions can help students consider principles and gain diverse perspectives of the topic (Sadaf & Olesova, 2017). The techniques that instructors use for discussion boards are unique to their own personal preferences and style. However, it is important for them to create an environment where students feel comfortable to state their own ideas and beliefs on a topic, encourage the students to conduct more research, encourage reflection, and summarize main take- aways from the discussions (Covelli, 2017). However, Olesova, et. al (2016) found that students who were assigned roles for discussion boards, such as starter, skeptic, or wrapper, achieved cognitive presence during this exploration and integration indicators compared to the weeks when the students did not have a role within the discussion. Moreover, the study concluded that all three roles were effective in creating cognitive presence in an online classroom.

Once students explored a topic, they engage in integration where they connect ideas and filter out irrelevant information (le Roux & Nagel, 2018). Instructors can help students achieve a high level of cognitive presence by posing problems, or questions, that require students to create solutions. The nature of a task the instructor provides to students, as well as the wording of the question, can have an influence on the student's cognitive presence. Case-based discussions can help students achieve high levels of cognitive presence via integration and resolution (Sadaf & Olesova, 2017). Case-based discussions are useful in the health sciences. These discussions help the instructor guide students through structured and detailed feedback and improved clinical decision making. It also provides students an opportunity to explain their approach to the instructor and allow the instructor to share any experiences and knowledge (Primhak, & Gibson, 2019). Kas-Osoka et. al (2018) examined learning strategies to transition a health and wellness class from face-to-face to a fully online class. After evaluating 1,090 students, they valued the use of real-life examples that could apply in their daily lives, resulting in learning more in-depth course material. Additionally, Wade et.al (2018) found that movies and videos were accepted by both faculty and students in public health programs. Students found that shorter media files were more affective for learning. They believe the use of movies in their course help improve analysis, diversity, relationship building, and communication competencies.

Resolution occurs when there is a solution to the problem or question (le Roux & Nagel, 2018). When this happens, students can take their knowledge and apply it to practical situations (Bissessar et al., 2020). Instructors can utilize various forms of technology to guide students from problem to resolution. The use of video lectures allows the instructor to provide content that accommodates both visual and audio learning styles (Lange & Costley, 2020). O'Regan (2020) suggests that for students to learn and apply the class material, instructors must meet the needs of different learners through technology compared to a one size fits all mentality. Thus, technology can work for

students with diverse learning and communication styles. Colley et.al (2019) suggests that students can achieve resolution through online activities that promote interaction among them.

Challenges to Creating Cognitive Presence

Educause, a U.S. higher education technology research organization surveyed higher ed instructors in the United States and found they did not have a positive attitude about transitioning to online learning, however, they believed that it would make them a better instructor (Ruth, 2018). Moreover, Ciabocchi et. al (2016) interviewed representatives of the American Association of University Professors and found that instructors believe they do not receive quality training to teach online. Additionally, the participants did not believe there is sufficient accountability in an online classroom, leading to a lack of clarity in how to assess students, which is vital for cognitive presence. Grenon et. al (2019) suggests that each educational institution is at a different level, resulting in lack of consensus on the best training strategy to transition instructors to an online format. This can be a challenge for instructors as they attempt to lead their students through the learning cycle.

Review of the literature revealed that there are many barriers that instructors face when transitioning from face-to-face learning to online learning which can impact the quality of their online class. Frazer et.al (2017) claims that with the growing number of online health programs, such as nursing, instructors need to have the knowledge and skills to provide an environment that supports student learning, satisfaction, and achievement. However, there is a gap in the literature of qualitative research that focuses on HEP faculty's perceptions on the quality of their online classroom. Qualitative research seeks to understand the way individuals experience the world and make meaning of their experiences regarding a specific phenomenon (Ravitch & Carl, 2016). Moreover, qualitative research identifies themes and patterns to gain an insight into the individuals experience (Patton, 2015).

Health Education and Promotion and COVID-19

The discipline of Health Education and Promotion prepares individuals to become health educators that assess, plan, implement, and evaluate the behaviors of individuals within a community. Given that health educator's work in a variety of settings and disciplines, health education and promotion programs must provide high-quality classes that will fully prepare future educators (Auld & Bishop, 2015). However, the quality of health education and promotion classes can be disrupted by worldly events, such as pandemics. Shortly, after the novel Coronavirus made its way to the United States, faculty were required to transition all their material to an online format (Hughes et al., 2020). Burke et. al (2020) suggests that public health programs are having difficulty with continuation of health programming and training students with the presence of an infectious disease. Institutions must have a balance of what favors the individual and population, as well as concern for personal health. Hughes et. al (2020) conducted an online survey for faculty on the impact COVID-19 had on their public health and health education classes. While strong conclusions were not drawn from the result of the survey, several patterns emerged including a smooth transition to online learning for those faculty that had previous experience with online classes. Additionally, only three faculty

members had incorporated COVID-19 into the curriculum, indicating that there is more opportunity for public health and health education and promotion faculty to use this pandemic as a teaching opportunity. While this literature did not draw specific conclusions, it did provide an opportunity for additional research into the impact of COVID-19 on the quality of health education and promotion programs in higher education. Online instructors often express skepticism on the ability of online education to help students meet the course objectives and learning outcomes because of the pedagogical and technological challenges (Ibrahim, 2020).

The National Commission for Health Education Credentialing (NCHEC) mission is to enhance the profession of Health Education by promoting and sustaining credentialed Health Education Specialists (National Commission for Health Education Credentialing, 2021). NCHEC certifies health education specialists, encourages professional development, and supports professional preparation and practice to health educators (National Commission for Health Education Credentialing, 2021.). There are eight areas of responsibilities for health education specialists including assessments of needs and capacity, planning, implementation, evaluation and research, advocacy, communication, leadership and management, and ethics and professionalism (Society for Public Health Education, n.d.).

While the field of health education and promotion has expanded greatly since its conception, there is limited research in curricular and pedagogical innovation, including student mastery of health education competencies (Berlin et al., 2019). Bentley & Swan (2018) utilized an undergraduate grant writing course to prepare students for the Certified

Health Education Specialist (CHES) certification. Furthermore, Figueroa et. al (2015) found that the University of Alabama and the University of North Carolina, Wilmington conducted a review of undergraduate courses within the health studies and health education programs. The review focused on assessing the curriculum's coverage and course requirements in health education and promotion concentration and how the courses prepare students to become health education specialists. The review analyzed syllabi, assignments, and summative assessments. The results led to further review and revision of the curriculum via the Department of Health Science and Health Education.

Dawkins-Moultin et. al (2016) suggest that social change is the goal of education, thus, health educators must learn to develop and propose interventions that empower individuals within a community to make positive behavior changes. In general, health education and promotion are critical for disease prevention, however, during health emergencies, or pandemics, it plays a crucial role to the response (Gray et al., 2020). During the 2019 Novel Coronavirus pandemic, health educators played a role in public education, and dissemination of information. Health situations often result in misinformation and perpetuation of information that may be inaccurate, thus health educators need to be equipped to provide the community with evidence-based information (McCutcheon et al., 2020). Alzyood et Al. (2020) believes that while medical professionals and health educators are important during the duration of the pandemic, they are just as important after the pandemic to reinforce proper hygiene and disease prevention habits, such as washing your hands. Given the impact that health educators have during public health emergencies, it is crucial that institutions educate and train health educators, reflect on their curriculum and ensure that students can disseminate scientific findings to the public. Furthermore, this reflects the need for health education and promotion instructors to provide quality classes for future health educators (Mandelbaum, 2020).

Summary and Conclusion

Review of the literature reveals that Health Education and Promotion programs have been increasing over the past two decades (Blavos et al., 2020). Correspondingly, the use of online learning has increased over the past twenty years (Lee & Combes, 2020). HEP programs have been making the transition from face-to-face classes to online, however, the 2019 COVID-19 pandemic has accelerated the process. This resulted in faculty having to transition to a completely different pedagogy with little or no training (Cutri et. al. 2020).

Studies have revealed that when instructors are transitioning from face-to-face to online learning, there are many barriers and challenges. The American Association of University Professors uncovered when transitioning to online learning, faculty do not receive quality training to support creating a quality online class (Ciabocchi et al., 2016). Furthermore, with the public health event of COVID-19, HEP and Public Health instructors are having difficulty continuing with programming and training students (Burke et al., 2020).

Review of the literature reveals gaps in our knowledge, indicating more qualitative studies are needed to understand the perspectives of Health Education and Promotion instructors play on the quality of their online classroom. There is also a gap in the literature that reveals the Community of Inquiry has not been utilized to assess the quality of classrooms, defined by teaching, social, and cognitive presence in Health Education and Promotion programs.

The purpose of this research was to examine HEP faculty's perspectives on the quality of their online classes. Chapter 3 supports the appropriateness of the research method and design. The chapter will describe the alignment of the research design and methodology. It also summarizes plans for qualitative data collection, procedures for recruitment, trustworthiness, and ethical considerations.

Chapter 3: Research Method

The purpose of this general qualitative study was to explore the perceptions and experiences of HEP faculty in the organization and facilitation of their online courses. This chapter presents the methodology that addresses the research questions of this study. The chapter further goes on to describe alignment between the research design and the conceptual framework. Additionally, this chapter will discuss trustworthiness including credibility, transferability, dependability, and confirmability.

Research Design and Rationale

The following three research questions guided this qualitative inquiry:

RQ 1: What are HEP faculty's experiences with online teaching?

RQ 2: How do HEP faculty align their online class with the areas of responsibility and competencies for health education specialists?

RQ 3: How do HEP faculty describe factors that affect their teaching, social, and cognitive presence in their online classes?

Central Concepts of the Study

The main phenomenon of interest is HEP faculty's perceptions of the quality of their online classes within the context of transitioning from a face-to-face pedagogy to an online pedagogy. The conceptual framework follows that of the COI framework. The COI framework is the leading framework for research in online learning (Garrison, 2017). According to the COI framework, there are three essential components that include teaching, social, and cognitive presence (Garrison et.al, 1999). These elements are defined as: *Teaching Presence:* Teaching presence includes design, facilitation, and direction (Garrison et al., 1999). In context, teaching presence was conceptualized as the HEP faculty's course design and how they facilitated the content of the course.

Social Presence: Social presence includes effective communication, open communication, and group cohesion (Garrison et al., 1999). In context, social presence was conceptualized as the HEP faculty's communication methods and the faculty's ability to create a sense of community in the online setting.

Cognitive Presence: Cognitive presence includes exploration, integration, and resolution of cognitive challenges (Garrison et al., 1999). In context, cognitive presence was conceptualized as how the HEP faculty take the students from inquiry to constructing knowledge through discussion and interactions within the online class.

In addition to the COI framework, this study also utilized the construct of perceived behavioral control from the TPB to examine factors that hinder the HEP faculty's ability to create an online classroom. Perceived behavioral control is defined as:

Perceived Behavioral Control: An individual's perception of their ability to perform a behavior (Ajzen, 1991). In context, perceived behavioral control was conceptualized as factors that interfere with HEP faculty's teaching, social, and cognitive presence in their online classes.

Qualitative research is utilized to help understand how individuals interpret, make meaning, and understand their experiences (Ravitch & Carl, 2016). The generic, or basic, qualitative approach allows the researcher to be flexible and tailor-make the research design to be aligned with the research questions and context (Kahlke, 2018). Thus, this

approach is not guided by established qualitative methodologies such as ethnography, grounded theory, phenomenology, or case study. Additionally, the generic qualitative approach seeks to condense raw data into a summary and establish links between the research questions and findings (Liu, 2016). Likewise, this study summarized HEP instructors' descriptions of teaching online into themes to build connections between the themes and research questions.

In determining the generic qualitative approach, I reviewed and rejected alternative approaches including phenomenology and case study approaches. I rejected the phenomenological approach due to the researcher's interest in individuals' lived experiences of a phenomenon (see Ravitch & Carl, 2016). Likewise, a case-study was rejected due to the need to study cases of real-life events that are bounded by time and place (see Ravitch & Carl, 2016).

Role of the Researcher

In qualitative research, the researcher influences all phases of the research (Ravitch & Carl, 2016). The role of the researcher depends on the type of data that will be collected. In qualitative interviews, the researcher conducts interviews to elicit views and opinions of the participants (Creswell & Creswell, 2018).

For this study, I acted like a facilitator and observer. As the facilitator, I designed semi-structured interview questions for the individual interviews of the HEP faculty. Semi-structured interviews require the researcher to have a specific topic to inquire about, then creates questions based on the topic with the intention to ask probing questions (Rubin & Rubin, 2012). Additionally, I was the main instrument for data collection and actively collect data during the interviews while encouraging the participants to be open and honest with their answers while sharing their thoughts, feelings, perceptions, and experiences as online HEP faculty members.

Creswell & Creswell (2018) suggest that a researcher can conduct observations on behaviors and activities of individuals. For this research, I observed and recorded thoughts and emotions of the HEP faculty. Lastly, I was the primary data analyst.

To reduce bias, this study gathered participants that have no relationship with the researcher. However, since there is a limited pool of participants, some of the participants could have been my peers while completing my PhD program at Walden University. It is also possible that potential participants are faculty members at more than one university. Hence, a participant could be a faculty member of Walden University's HEP program. If either case arises, that individual will not be selected to participate in the study.

In qualitative studies, it is important to strengthen rigor and reduce bias. Reflexivity is one way for researchers to establish rigor and trustworthiness of their study (Mackieson et al., 2019). Thus, to reduce bias, steps will be taken before, during, and through the data analysis process. One way to reduce bias is to keep memos throughout the study. Memos should include observations and reflection of interactions with participants, data collection instruments, and ways in which the researcher may be influencing the data (Ravitch & Carl, 2016). Therefore, in this study, I kept reflective memos that detail my position in the study and how I could be influencing the data via my interactions with the participants. Since I am a HEP online instructor, it was important to be aware of my positionality. Lastly, to ensure triangulation, I held individual interviews, as well as collect a survey with the HEP faculty. Data triangulation includes examining data collected at different times, places, and with different people. This helps challenge the researcher's understanding of the participants perspective and experiences (Ravitch & Carl, 2016). I utilized member checks to ensure that the data analysis reflects the true experiences and perceptions of the participants and do not reflect any bias.

Methodology

The generic, or basic, qualitative study is not guided by an established methodology. Data for generic qualitative studies are often collected through semistructured interviews and focus groups (Kahlke, 2014). The primary data collection method for this study is semi-structured interviews, however, data will also be collected via an online survey before the individual interviews.

Data was collected using a modified COI survey. Surveys allow the researcher to gather information on the participants' attitudes, behaviors, and beliefs (Ravitch & Carl, 2016). The COI Survey is a validated instrument that allows researchers to assess the cognitive, teaching, and social presence in online classrooms. The survey utilizes a 5-point Likert-scale. The 34 questions are broken down into three categories including teaching, social, and cognitive presence (Arbaugh et al., 2008). The participants will be asked to fill out a survey, based on the COI Survey, before the individual interviews are conducted (Appendix A). While questions using a Likert-scale are often utilized in quantitative research, the participant's responses will guide the questions and probing questions that I focused on in the individual interview. I chose this method of data

collection so the participants could identify the strengths and weaknesses of their online class, thus allowing for an in-depth conversation during the individual interview.

Semi-structured interviews include specific questions that the researcher asks of all participants, however, the researcher can probe and ask follow-up questions as needed during the interview (Ravitch & Carl, 2016). I chose this data collection method due to the flexibility to probe and ask follow-up questions to HEP faculty regarding their experiences as online instructors. Obtaining data from the COI Survey before the individual interview, provided me the opportunity to see where HEP faculty perceive their strengths and weaknesses in teaching, social, and cognitive presence in their online classroom. This allowed me the opportunity to ask more in-depth follow-up questions based on the results of their COI Survey.

Participant Selection

The participants were individuals who teach at least one online class within the Health Education and Promotion program at several universities (Appendix D). It is common for qualitative researchers to use multiple sampling methods (Gill, 2020). This research started with convenience, or volunteer sampling. A list was created with the contact information of HEP faculty of Online Health Education and Promotion Programs. The universities that were chosen were selected because they were ranked in the top schools for HEP via bestcolleges.com. Twenty schools were chosen to recruit HEP faculty. An excel sheet was created containing the contact information for potential participants from each university. The contact information was obtained through the university's faculty directory via the website. An initial inquiry will be made with each individual HEP faculty.

This research utilized convenient, or volunteer sampling as the main sampling method. However, due to not enough participants, snowball sampling was used to acquire additional participants. Snowball sampling includes procuring additional participants from current participants (Gill, 2020).

Inclusion and Exclusion Criteria

For the participants to be selected for this study, they must be faculty members of a Health Education and Promotion program at any college or university. Additionally, the individual must teach at least one online class within the HEP program. Screening questions to determine whether the participants meet the inclusion criteria was at the beginning of the COI Survey (Appendix A).

Recruitment Procedures

Before recruitment of any participants, I obtained approval from Walden University's Institutional Review Board (IRB). Approval was granted on July 23,2021 with approval number 07-23-21-0987793. After approval, I contacted individual HEP faculty members via email addresses obtained through public sources such as the university's faculty directory. The invitation email is included in Appendix C. Embedded in the invitation email was a link to the Survey Monkey URL, where interested participants completed the inclusion criteria and the COI survey (Appendix A). A consent was included at the beginning of the survey before any data is collected. Once all potential participants were emailed, the Survey Monkey URL was active for two weeks providing that at least 35 individuals completed the survey. Individuals that met the inclusion criteria were contacted to schedule an individual interview. Since there were only ten participants that met the criteria all individuals who met the criteria were selected to complete the study. Once, I had ten individuals that meet the inclusion criteria and consent, the individuals were asked to participate in an interview that did not exceed one hour. The platform in which the interviews will take place was the preference of the participant. Either Zoom or the telephone was utilized. Both these platforms offer the ability to record the interviews, which is required to obtain transcripts.

Qualitative research has no specific rule for determining sample size, however, there must be enough quality data to answer the research questions (Gill, 2020). One way to determine sample size is data saturation, the point at which no new themes emerge from the data from additional interviews (Boddy, 2016). Samples in qualitative research, often, are small due to the samples are purposive. This means that the participants are selected due to their ability to give rich and detailed information on the phenomenon of interest (Vasileiou et al., 2018). Creswell & Creswell (2018) suggest that qualitative interviews have between six to eight participants. Guest et. al (2020) suggests most of the information in the dataset comes from the first five to six interviews. Since I gathered data from both individual interviews and a survey, I conducted ten individual interviews. This allowed me to reach data saturation.

Instrumentation

The COI Survey has been validated as an instrument to measure the cognitive, teaching, and social presence in online education (Stewart, 2019). Arbaugh et. al (2008) originally validated the COI Survey. The survey utilizes a 5-point Likert-type scale. Questions within the survey are broken down into 34 items categorized in three sections including teaching, social, and cognitive presence. The COI Survey is usually used in quantitative inquiries, and for student satisfaction of online courses (Stewart, 2019). The COI Survey is considered an open resource under the Creative Commons License which allows the use, modification, and adaption of the survey to be used and published. The COI survey was completed before the individual interviews, to gather data on the instructor's satisfaction with their online class.

Creswell & Creswell (2018) state that content validity includes the items measuring what they were supposed to measure. Brod et. al (2009) suggest that content validity can be established through individual interviews due to the ability to have direct interactions with individuals to gain their perspectives. Additionally, the interviews should be based on semi-structured questions that result from review of the literature and generation of interest of inquiry. Thus, content validity will be established by connecting the interview questions to the research questions that resulted from the review of the literature. Content validity will also be established through using an established and credible survey instrument, the COI survey.

Stewart (2019) believes that the COI survey has been thoroughly validated. While this validation comes from quantitative inquiries, there is opportunity to modify the survey instrument to be applicable to qualitative inquiries as well. All three sections of the survey align with my research question regarding factors that affect the HEP faculty's teaching, social, and cognitive presence in their online classrooms. Thus, implicating that the COI Survey helped answer my research question.

During qualitative interviews, the researcher has access to individuals' lived experiences, to understand the phenomenon from their point of view. Thus, the researcher and the interviewee work together to construct knowledge (Roberts, 2020). To gain the data needed to answer the researcher questions, the researcher needs to prepare the proper interview questions and guide (Roberts, 2020). Yin (2018) suggests that an interview guide helps the researcher stay focused on the research topic, while constructing probing questions allows the researcher to explore the topic from all angles. Hence, for this study, the instrumentation includes an interview guide (Appendix C) formulated directly from the research questions, to explore the topic further. To increase the reliability and validity of the interview process, the research should ensure the interview questions align with the research questions and receive feedback on interview questions and process (Yeong et al., 2018). Thus, both the interview questions and process were reviewed before interviewing the participants to ensure alignment.

Procedure for Recruitment, Participation, and Data Collection

The three research questions for this investigation focus on the perspectives and experiences of HEP faculty. Therefore, the two methods of data collection are the COI survey and individual interviews. In qualitative research, the researchers are considered the instrument used to collect the data, observe behavior, and interview participants (Creswell & Creswell, 2018). The HEP faculty were asked to complete the COI survey via Survey Monkey before the individual interview. The survey did not exceed five minutes. The HEP faculty also received a copy of the Areas of Responsibility preceding the individual interview.

Interviews were recorded using Zoom or via the telephone, whichever the participant was more comfortable with. Zoom was utilized due to the ability to see the participants face-to-face, to record any observations such as taking a long time to answer or expressions of discomfort or frustration. Any noticeable observation was recorded as a note and memo.

The telephone was utilized as an alternative if a participant did not want to participate in a video interview. A handheld recorder was used to record the interviews. Participants were asked to participate in one interview that did not exceed over 60 minutes.

Following the individual interviews, the recordings were transcribed verbatim. Additionally, memos were recorded directly after each interview. Memos were also written before listening to the recordings, when transcribing the interviews, and during data analysis. Recordings and the transcriptions were completed within two weeks of the individual interviews. Once completed, the participants were emailed a copy and allowed an opportunity to provide feedback or clarification for up to a week after receiving them.

After examination of the collected data, I did not reach saturation of the data. Snowball sampling was utilized to gain the last three participants. Snowball sampling is where current participants help procure additional participants (Gill, 2020). Most Health Education and Promotion departments have multiple faculty members that teach at multiple universities.

Data Analysis Plan

Qualitative researchers have the task of transforming data into findings (Patton, 2015). For this inquiry, data was collected through the COI survey and individual interviews. The transcripts allowed for the creation of codes that focus on the research questions. Additionally, memos that address my emotions, bias, and positionality, helped identify emerging themes and verify the codes, while identifying any discrepant cases.

After data collection of the COI Survey, while there will not be any statistical analysis completed, a table that represents the faculty's perception of their own online classroom regarding teaching, social, and cognitive presence is included. For example, from the survey, I was able to tell how the faculty perceive their strengths and weaknesses while teaching online. Some faculty perceived they have a strong teaching presence, compared to their social presence while other faculty felt their social presence is stronger than their cognitive presence. This information was valuable when analyzing how the faculty view their strengths and weaknesses in their online class and allowed for additional, in-depth questions during the individual interview.

After data collection of individual interviews, inductive thematic coding approach was utilized. The inductive process allows the researcher opportunity to build patterns, categories, and themes while organizing the data into units of information (Creswell & Creswell, 2018). After the data was transcribed, it went go through the first cycle coding method. A code is a word or short phrase that represents a portion of the data (Saldana,

2016). While some qualitative researchers choose to utilize computer programs to code, manual coding was used in this investigation via Microsoft Excel. This allowed me to see the data in a concrete form and interact with the data.

There was an opportunity for pre-coding during the transcription process. This includes any quotes that strike the researcher before the coding process (Saldana, 2016). During the first cycle of coding, I reviewed the transcripts over and over while writing memos of my thoughts as each code emerged. Additionally, during the first coding cycle, codes were be recoded and become more refined (Saldana, 2016). From the first cycle codes, I conceptualized codes and categories. I examined what each code and category represent and if any could be combined to represent similar perception and experiences. During the second cycle of coding, themes were created from the codes and categories identified in the first cycle of coding (Saldana, 2016). Like the first coding cycle, the second coding cycle was reflexive and reviewed several times. This resulted in several major categories, themes, and concepts.

During the first and second coding cycles there were instances of discrepant cases. This is when cases do not fit the pattern or understanding of the data. Identifying these discrepant cases is an important analytical strategy. Thus, the researcher should look for evidence that could challenge the findings (Ravitch & Carl, 2016). These instances were used as a learning opportunity. I recorded memos that reflect the discrepant case and question why this was not viewed as the norm, and challenge if there could be alternative explanations.

Trustworthiness

A characteristic of qualitative inquiries is that it does not seek replicability, such as that of a quantitative study would. However, it is important that the researcher can report their findings with confidence. This is achieved through trustworthiness. There are four criteria that can establish trustworthiness in qualitative data including credibility, transferability, dependability, and confirmability (Stahl & King, 2020). Below, I describe the steps taken throughout my research plan to establish trustworthiness.

Credibility

Credibility is considered an essential indicator for a strong qualitative inquiry (Liao & Hitchcock, 2018). Credibility is related to research design, instrument, and the data. There are specific strategies that researchers can take to help achieve credibility including triangulation, member checks, thick description, and structured reflexivity (Ravitch & Carl, 2016). Data triangulation refers to collecting data from multiple sources to build a justification for themes established (Ravitch & Carl, 2016; Creswell & Creswell, 2018). This investigation collected data from participants from individual interviews, as well as a pre-survey to establish themes based on converging multiple sources of data (Creswell & Creswell, 2018). Once, the data is transcribed, the participants received a copy of the transcript, verbatim. After, their review they had the opportunity to provide additional information, correct, or omit any information they provide (Ravitch & Carl, 2016).

While triangulation contributes to the credibility of the study, it alone does not make the study credible (Ravitch & Carl, 2016). Thus, to increase credibility, member

checks were used to determine the credibility of the findings (Creswell & Creswell, 2018). Member checks allow the researcher to verify that the participant's true and honest perspectives were expressed in the findings (Ravitch & Carl, 2016; Creswell & Creswell, 2018).

It is the responsibility of the researcher to provide thick descriptions of the results so that thick interpretations can be made (Ravitch & Carl, 2016). Thus, to achieve thick descriptions, the participant's responses from the individual interviews were contextualized resulting in the reader's understanding of the contextualized factors in which quotes were presented (Ravitch & Carl, 2016; Creswell & Creswell, 2018).

Structured reflexivity practices, including writing memos and reflection journals, can help make a qualitative investigation more credible (Ravitch & Carl, 2016). Thus, memos and journals were kept after all interviews and throughout examination of the data and transcription process, and the data analysis process. In these memos I noted my bias and positionality (Ravitch & Carl, 2016).

Transferability

The goal of qualitative research is to create statements that are descriptive in relation to the topic, as opposed to generalized true statements. To apply qualitative research to a broader context, without losing the descriptive and specific value, the study must have transferability (Ravitch & Carl, 2016). To establish transferability in this investigation, details on the participants and the data collection methods are clearly outlined (Maxwell, 2020). This includes describing the experience and behavior, as well as, providing context so it has meaning to an outside reader (Korstjens & Moser, 2018).

Thus, this further notes the importance of thick description to establish trustworthiness (Ravitch & Carl, 2016). Additionally, participants were intentionally recruited from multiple colleges and universities within the United States, as opposed to selecting one college or university. This helps increase the transferability of the investigation to other programs and departments.

Dependability

Dependability includes the strength of the data. Dependability entails that the researcher provides a justification for the data that is collected, and the data is consistent with the justification. Additionally, this requires that the data answers the research questions (Ravitch & Carl, 2016). Dependability can be achieved through an audit trail. This is where each step is described, in detail, from the start to the development of the findings (Korstjens & Moser, 2018). To achieve this, I outlined a detailed map of the research plan which will be included in the audit trial. Additionally, reflective memos were kept identifying my positionality and biases throughout the investigation (Ravitch & Carl, 2016).

Confirmability

Qualitative researchers seek to have confirmable data. While qualitative research does not seek objectivity, the findings need to be confirmed (Ravitch & Carl, 2016). This includes establishing findings that are consistent and derived from the data. Reflexivity is one approach to confirmability. This entails the researcher to reflect on their own biases, preconceptions, and preferences (Korstjens & Moser, 2018). To ensure my findings are consistent with the data, and not my preconceptions, triangulation was utilized (Ravitch & Carl, 2016). Additionally, reflexive memos were kept throughout the investigation that defined my role as the researcher and my thoughts and biases (Ravitch & Carl, 2016).

Ethical Procedures

Before participant recruitment, IRB approval was obtained from Walden University. Once approval was, participants were recruited via email communications. In the email I will outline my research and my role in the research. Since, I do not plan to have a relationship with members of the partner organizations, I will not have to disclose any association to the organization.

Once individuals showed an interest in participating in the study, a consent form was provided at the beginning of the COI Survey. The consent form followed the sample consent form provided by the IRB at Walden University. It outlined the nature of the study, risks, and provides my contact information for any questions, comments, or concerns.

The research findings protected the confidentiality of the participants. Names or identifying information will not be associated with the data (Ravitch & Carl, 2016). After each interview, adequate time will be provided to debrief. During this period, the participants had access to my contact information, via the consent form, to provide any additional information or remove themselves from the study. The data will be kept on a password protected computer and destroyed 5 years after completion.

Summary

The use of online learning helps HEP faculty reach individuals and populations that they may not be able to reach with only face-to-face education. However, the quality of the online class HEP faculty provide, is dependent on the training, skills, and knowledge of the faculty member (Seymour-Walsh et al., 2020). It is unclear in the existing literature how HEP faculty view the quality of their classes in relation to teaching, social, and cognitive presence and what factors affect these presences. This study used generic qualitative approach to explore HEP faculty's perspectives on the quality of their online classes in relation to teaching, social, and cognitive presence. The data was collected by using semi-structured interviews and a pre-survey.

To ensure trustworthiness; credibility, transferability, dependability, and confirmability must be established (Stahl & King, 2020). Triangulation, member checks, thick description, and reflexive memos helped establish trustworthiness in this investigation. Walden University's IRB reviewed the recruitment process, confidentiality, and ethical procedures of this investigation. Recruitment and data collection took place only after IRB approval. In the following chapter, I will identify the key findings of this investigation.

Chapter 4: Results

The purpose of this study was to explore the perceptions and experiences of HEP faculty at multiple universities, in the organization and facilitation of their online courses, communication between instructor and student, and assessment of students. This study focused on the COI framework with an emphasis on teaching, social, and cognitive presence. Data for this study included individual interviews and descriptive data via an online survey. The interview questions were centered around the following research questions:

RQ 1: What are HEP faculty's experiences with online teaching?

RQ 2: How do HEP faculty align their online class with the areas of responsibilities and competencies for health education specialists?

RQ 3: How do HEP faculty describe factors that affect their teaching, social, and cognitive presence in their online classroom?

Chapter 4 describes data collection procedures and results including data from the COI online survey and individual interviews, data analysis procedures, and themes that emerged from analysis of the data. Lastly, this chapter explains how the data findings answered the three research questions. The findings are organized in the following way: the research question is stated followed by themes that emerged from the COI survey and the individual interview data. Tables are provided to represent participants responses to the COI survey, while individual responses from the interviews are provided to support the themes.

Setting

This study was conducted during the COVID-19 pandemic; thus, many instructors who had been previously teaching in-person experienced a quick transition to teaching online. The results of the individual interviews indicated that prior to the pandemic, none of the instructors reported they were teaching fully online which resulted in all the participants rapidly transitioning their in-person courses to a fully online course in a matter of about a week. However, results from the COI survey indicated that eight of the 10 participants had previous experience teaching online before 2020.

It was difficult to recruit participants to take the survey. Numerous faculty members were out of the office on vacation, this was indicated by automatic responses that bounced back in response to my invitation email or were too busy preparing for the upcoming fall semester to complete the survey. Initially, the online COI survey was to stay active for 2 weeks; however, due to the timing of this study, the survey remained active for roughly 4 weeks.

One participant made it a point to state during the individual interview that he did not "have time for this interview." He made the statement after he had missed two previous scheduled times to meet. During the time of the study, some schools were preparing to return fully back to campus. It appeared the faculty members who were returning to fully on-campus classes may have completed the COI survey but were then not available to schedule a follow-up individual interview or dropped out of the study completely. Two participants completed the COI survey but did not provide an email to follow-up for the individual interview. Additionally, three individuals completed the survey and provided contact information, but did not respond to two different invitations to participate in the individual interviews. This timing and availability situation made it very difficult to obtain 10 participants in the anticipated 2 weeks and explains why recruitment lasted over a period of about a month.

Demographics

The participants for this study had experience teaching HEP courses at both the undergraduate and graduate levels. All eight universities represented in the sample of participants offer in-person HEP classes; however, the pandemic impacted all the participants resulting in transitioning their classes fully online. Nine of the 10 participants were full-time faculty at their universities while the remaining participant was a part time faculty member. Moreover, nine participants held a terminal degree while one participant held a master's degree. The years of teaching varied in the participants, ranging from 3 years to 31 years in higher education, with the average of 10 years. Nine of the 10 participants have been teaching over 5 years in higher education. Additionally, eight of the 10 participants had experience teaching online before the Coronavirus pandemic. There was a wide range of experience teaching online: total teaching time ranged from 1 year to 13 years with the average of 3 years teaching online. Nine of the participants were teaching HEP classes in either the summer or fall semester at the time of this study (2021). One participant was teaching HEP courses at the time of the pandemic, however, during the time of the study, was only conducting research for the university. A full description of demographics can be found in Appendix C.

Data Collection

Data collection began once Walden University IRB approval was granted on July 21, 2021. I conducted an internet search using the keywords, *top health education and promotion programs higher education*. The result of that search led to Bestcolleges.com (Best Online Master's in Health Education Programs | BestColleges). From the website, 20 universities were selected. These universities were selected because they had a publicly available faculty directory. Also, the list included both large and small universities. The intention was to gain perspectives from faculty from a variety of universities. Once the universities were selected, emails of HEP faculty members were collected via the university's website. An excel sheet was utilized to keep track of the university and faculty members contact information. The total HEP faculty members for all 20 universities were 261 faculty members. After IRB approval, all 261 faculty members were emailed an invitation email. A copy of the invitation email is available in Appendix C.

Within the invitation email the participants were encouraged to click the provided URL which linked them to consent of the study as well as the COI survey. A copy of the consent, inclusion criteria, and COI survey is in Appendix A. Data collection started with the potential participants giving consent by completing a COI survey via Survey Monkey. **COI Survey**

The COI survey included 32 questions using a Likert scale. A Likert Scale allowed the faculty to indicate the extent to which they agreed or disagreed with each statement. The questions focused on the faculty members' perspectives of their teaching, social, and cognitive presence in their online HEP course. The purpose of gathering this descriptive data was to gain an insight into the faculty's perspectives of their online courses which was used to prompt discussion during the individual interviews. For example, a participant responded that she disagreed that as the instructor she reinforced the development of sense of community among the students. This was an important piece of information during the individual interview because we were able to discuss in-depth why she feels she doesn't develop a sense of community, which is essential in online courses.

Once a faulty member completed the COI survey, their responses were saved to a file folder on a password protected computer. The survey data was then removed from Survey Monkey. Analysis of this data included reviewing all the respondents' answers and noting areas where the participant felt their strengths and weaknesses were. This information provided an opportunity to follow-up during the individual interviews. During the individual interviews I had the participants COI survey responses available so I could focus on specific areas.

Fifteen individuals completed the online COI survey. Survey Monkey's data collection tool allowed for privacy and confidentiality of the respondents' answers. Since data collection included a follow-up interview, there was a space for participants to give an email address. Two of the respondents chose not to provide their contact information and thus it was assumed that they did not want to participate in the study any longer.

Individual Interviews

A follow-up individual interview allowed me as the researcher to get detailed information, from their perspective, on why they responded the way they did to the COI survey. Of the 15 faculty members who completed the online COI Survey, 10 participated in the individual interviews. Participants had the choice of completing the interview via Zoom or a phone call. Six of the participants chose to complete the interview via a phone call while four of the participants utilized Zoom. Since the pandemic instructors were forced to use platforms, such as Zoom or Blackboard Connect to teach course material. One faculty member noted that they were in front of a computer screen for eight or more hours a day, so another form of communication was "great". Yet, another faculty member shared that she was able to take a break from her day and talk on the phone as she walked around campus. Two faculty members indicated they were running errands while the interviews were taking place. One challenge to the phone interviews included two instances where two faculty members forgot, and I was marked as a spam call on their cell phone. However, a positive of using phone interviews was that it created more flexibility for the faculty members to participate in the interview, such as being on a break or running to the store. On the other hand, the Zoom interviews allowed me to see their faces and reactions to the questions. However, a negative to using Zoom was the need for internet connection. It was the summertime and there were instances where storms where rolling through, either on my end, or the participants, and it disrupted the internet connection. This became time-consuming because we would have to start from where we left off and go over the responses again.

An interview guide, which is provided in Appendix B, was formed from the COI survey and the research questions. There were eight main questions that focused on the faculty members' teaching, social, and cognitive presence as well as their perspective on the strengths and weaknesses of their online course. Follow-up questions were provided to gather more details on the respondents' answers or to clarify their response. During the interviews, notes were made on the interview guide. Such notes included things like, "this participant seems very aggravated about doing this interview" and "this participant seems distracted by other things right now". During the Zoom interviews there were opportunities to record observations of the participants. Such observations included "there were a lot of non-verbal answers such as shaking her head in disagreement". Another note that was made about the participant included that the participant "talked very fast and was easily off topic, visually the participant seemed to be very fidgety".

Individual interviews were recorded either via Zoom or with a hand- held recorded for the phone interviews. Immediately after the interviews, the interview was transcribed. During the transcription process, notes were made such as, "she really focused on the definition of online learning in her responses" and "he always provided vague responses which required follow-up questions". Once the interview was transcribed, a copy was emailed to the participant for their review and the opportunity to add any additional information. A sample of an interview transcription is provided in Appendix F. None of the participants provided any additional information and agreed that the transcripts reflected their views and opinions. A copy of the transcripts was saved in the same file as the COI data on a password protected computer.

Data Analysis

Data analysis for the COI survey began once the participant completed the survey. COI surveys were first analyzed individually, then collectively, once all the participants completed the survey. Fifteen individuals completed the survey, and only 10 completed the individual interview. The data collected from the five participants who did not complete the interview was used to compare to those participants who completed the individual interview. The 10 participants that completed both the COI Survey and the individual interview will be referred to as "interview participants" and those that only completed the COI Survey will be considered "non interview participants".

Once an individual completed the COI survey, answers were analyzed. Notes were made on the individual survey, such as "this participant does not feel that online is good for communication" and "wow this person either agreed or strongly agreed with all the questions." Once, all 10 interviews were scheduled, an overall analysis of the COI Survey was completed. The COI survey is an opinion survey. Individuals indicate to what extent they "agree" or "disagree" with statements. Thus, this survey is scored based on how the participants rated each statement. From this data, percentages and averages were calculated and used to generate charts to illustrate trends or patterns. This included utilizing SurveyMonkey's chart tools. Bar graphs of each question and respondents' answers were generated for analysis. A high score indicates that there is a consensus among the participants, whether they "agree" or "disagree" or patterns. This included utilizing SurveyMonkey's chart tools. Bar graphs of each question and respondents' answers were generated for analysis. A high score indicates that there is a consensus

Analysis of the COI survey led to certain trends being noted. For example, all the participants indicated they felt comfortable interacting with students online; however, results from the COI Survey varied when faculty members were asked about online communications being a medium for social interaction. Additionally, all the participants agreed or strongly agreed that they created an environment where students could disagree while retaining trust, but when it came to online discussions being valuable in acquiring different perspectives, only seven participants agreed that online discussions are valuable in acquiring different perspectives. This information was valuable when conducting the individual interviews. For instance, since the responses were varied on the topic of online discussions, during the interview participants were asked how they create discussions online. Most of the instructors concluded that utilizing discussion boards were not a productive way to carry-out discussions online. Thus, the descriptive statistics as result of the COI survey helped form the content of the individual interviews.

During the data transcription process, there was an opportunity for pre-coding. Certain words or phrases that were consistent in the participants' interviews were noted. From these notes, pre-codes were defined. Table 1 shows examples of pre-codes.

Table 1

Pre-Codes

Word	Percentage of
	Participants
	with this Code
Experience	50
Consistency	40
Repetition	60
Organization	100
Time	90
Technology	100

Once all the raw data was transcribed, the data went through the first cycle of coding. Patterns were identified and the codes were conceptualized into categories. From the second level of coding, there were commonalities among the categorizes and thus lead to themes. The process will be described in the following section.

Coding manually allowed the researcher to have more control and ownership of the work. While there are multiple ways to analyze qualitative data via technology, it can be advantageous to code manually for smaller studies (Saldana, 2016). For this study, interview data was analyzed via manual descriptive coding. The objective was to summarize the findings while providing a clear representation of the results. The primary and secondary cycles of coding emphasized similarities in developing categorizes and aided in creating themes. The purpose of coding is to help identify patterns in the data (Saldana, 2016).

Results

Presentation of Themes

Garrison and Arbaugh (2007) created the Community of Inquiry to have three

components including teaching, social, and cognitive presence. Thus, data collected via the COI survey and individual interviews were divided into these three components. Each interview question addressed either teaching, social, cognitive presence, or overall quality. To complete the first cycle of coding, an excel sheet was created with the interview question and the respondents' answers. Color coding was utilized to identify common patterns among the participants' responses. The data was reviewed multiple times to ensure that the codes truly represented the participants' responses. Codes were created for the three COI components, as well as overall content. Figure 1 demonstrates the COI components and codes.

Figure 1

COI Components and Codes

Teaching Presence

- Instruction
- Facilitation
- Feedback

Social Presence

- Sense of Belonging
- Comfort of Interacting Online

Cognitive Presence

• Areas and Responsibilites of HEP Specialists

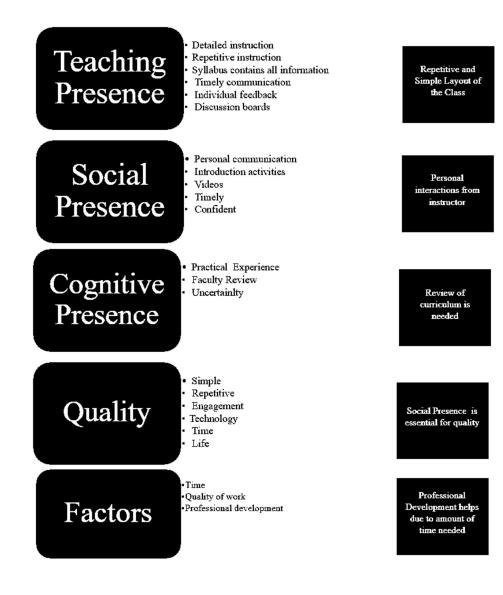
Quality

- Strength
- Improvement
- Factors

From the cycles of coding, themes emerged from the data analysis of components and associated codes for teaching, social, and cognitive presence, as well as overall quality of online classes. Simple and repetitive instructions emerged as a theme for having a quality teaching presence online. Whereas, making a personal social presence emerged as a theme for having a quality social presence online. Curriculum based on practical experience was the theme that emerged for cognitive presence. Lastly, the theme that emerged for quality of online classes included having a strong social presence. These themes emerged from the codes which were result of the interview data. Results of the interview data is provided in the following sections to outline how themes were created. Figure 2 shows the relationship between categories and themes.

Figure 2

Categories and Themes



Research Question 1

RQ 1: What are HEP faculty's experiences with online teaching?

The first research question was answered through the COI survey and questions one through six of the interviews. Results suggest that the participants have had positive and negative experiences teaching online as result of the pandemic. When asked to describe their online teaching experience over the past two years, all the participants indicated that the quick transition provided challenges at first, however allowed for learning opportunities for both the students and faculty members. One participant even stated, "my online presence was just ugly and hard to navigate through Canvas and it didn't work well". Another participant stated that, "A lot of schools did not have Zoom and we were required to use our own Zoom account if we wanted to meet with students for more than 45 minutes". However, several participants noted that having previous experience helped with the quick transition. One participant stated that, "So, for me because I had online experience that was beneficial to me to have". A second participant agreed stating, "I was teaching online prior to COVID, so I had some experience which was beneficial". One participant did not even seem phased by transitioning online by claiming, "Uhh, I think anything I want face-to-face in the classroom; I can do online, however, I have previous experience teaching online".

Theme 1: Repetitive and Simple Layout of Course

Teaching Presence

Teaching presence contains three elements including course design, facilitation, and monitoring cognitive and social processes to meet learning goals (Majeski et al.,

2018). To evaluate teaching presence, questions 12-23 on the COI survey, as well as Questions 2-4 on the interview guide, focused on the design and facilitation of the participant's online course. Data from the COI survey, from the interview participants, suggests that all participants either agreed or strongly agreed that they provide clear instructions and communicate clearly in their courses. This consensus was shared among the nonparticipants as well. Additionally, all the participants felt that they kept students on task so they can learn. However, some interview participants felt that there was room for improvement for creating a sense of community with the students. Feedback was yet another topic where respondents' answers varied even among the non-interview participants. This corresponded with the data from the individual interviews. Table 2 shows the interview participants' answers compared to Table 3, the non-interview participants' answers to the COI survey, when asked to reflect on their teaching presence in terms of feedback, communication, and creating a sense of belonging. Overall, data from the tables reveal that the non-interview participants felt more comfortable with their teaching presence, as shown by answering "strongly agree" compared to the interview participants who "agreed" but did not necessarily "strongly agree".

Table 2

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Provided clear instructions on how to participate in course learning activities	0	0	0	3	7
Clearly communicated important course goals	0	0	0	4	6
Clearly Communicated important due dates for learning activates	0	0	0	3	7
Kept students on task in a way that helped them learn	0	0	0	4	6

COI Survey Results (Interview Participants): Teaching Presence

Table 3

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Provided clear instructions on how to participate in course learning activities	0	0	0	0	5
Clearly communicated important course goals Clearly	0	0	0	0	5
Communicated important due dates for learning activates	0	1	0	0	4
Kept students on task in a way that helped them learn	0	0	0	1	4

COI Survey Results (Non-Interview Participants): Teaching Presence

Interview Q2: As the instructor, how do you provide clear instructions on how to participate in course learning activities?

There was an overall agreement that instructions for online courses need to be "simple" and "repetitive". Responses included terms such as "syllabus" and "provided in Canvas". One participant mentioned that the students prefer "simple directions and technology". The instructor fully admitted that she considered herself to be "very old school" and was hesitant when she was forced to transition to online learning. However, she found out very quickly that the students appreciated this approach. It made her class very easy to follow along. This correlated with another participant that stated that she took a lot of time over the past two years to "simplify" instructions. She converted her instructions into more of bullet point instructions. She also takes feedback from students on how she can make the directions clearer and more direct. She believes that if students do not understand the assignment, it is her fault and she takes time to say "Hey, what don't you understand and let's fix it".

Another participant made the comment that it is important that universities and directors define what they mean by "online". Thus, when we are talking about online classes are the instructions only asynchronous? Or is there a synchronous component where the instructor can have a session via Zoom to clearly outline tasks and objectives. This participant has various online capacities such as fully online, partially online, a hybrid of online and live online lectures. However, she did mention that to provide clear instructions, regardless of what type of online class, the instructions must be clearly outlined in the syllabus.

All the participants agreed that the syllabus is very important in online learning with respect to outlining course activities. One participant mentioned that during the last few years the university "put a lot of time and resources into best practices for online classes and concluded that the syllabus should contain detailed instructions of the different types of assignments throughout the semester".

One participant agreed that the syllabus was important in providing clear instructions for the class but took it one step further by defining it in one word, "repetition". This participant took the entire first class to explain the syllabus and the course activities. Then in the preceding classes, he repeated the course activities and instructions in either an announcement, video announcement, or zoom call. The participant claimed that this helps students stay on track in his class.

While most of the participants stated that the syllabus is the main way to provide clear instructions of the course learning activities, one participant broke down each week for his students with an announcement telling them the course activities for the week. Of course, it is all written in the syllabus; however, he feels that giving the students the extra instructions helped them be successful in this class. If there is a complex assignment for that week, he created an echo 360 where he gave additional details on instructions. Lastly, he provided examples of assignments, completed by previous students, so the students knew what he is expecting in course activities.

One participant was very detailed in how she has adjusted her online course during the pandemic:

I definitely have taken a lot of time to simplify instructions, bullet points work

really well and also, I have been a lot more lenient in the last years just because we have been going through so much but also, I have noticed that people are... if students don't understand something that is my fault and I say that hey you didn't understand it? That is my fault, let's take a second, what questions do you have? What do you need? Ok, great let me fix the instructions, give you a couple more days, and go do it again. Being able to have transparency, like I don't know, I am going through the pandemic too.

Interview Q3: When students have disagreements on course topics, how do you facilitate that dialog?

Health education and public health classes often deal with difficult topics, especially with the looming pandemic. This was an interesting question because it almost always led the topic of discussion boards. The participants were somewhat divided on the use of discussion boards in their online classes. There was certainly no unity in how discussion boards were utilized in the learning platforms. One participant responded that, "You know it is really hard to get people to have real discussions, especially online". She went on to say that in her current summer class, she offered discussion forums on public health issues as an additional way for students to pick up participation points, and not one student used it. Yet another participant claimed that she "really wished her students would participate more on discussion boards, but they don't." Yet another participant used to use discussion boards but learned that the students do not actually enjoy them, and she did not enjoy grading them. She went on to say that she felt like "discussion boards are more busy work, and she does not like to give busy work". On the other hand, some of the participants were enthusiastic about providing discussion boards to their students. One participant utilized discussion boards in a variety of ways including for assignments and just for information. The objective is for the students to provide an answer and then back up their answers with resources. Another participant said that she only used discussion boards in some of her classes, for example, in her summer class she used them as a prompt and response assignment, thus there was not real opportunity for students to have any disagreements.

While there were some diverging opinions on the use of discussion boards, when it came to the participants that had some disagreements in their classes, they all agreed that they all stressed the importance of "respect" for each other. One participant noted that he cautioned his students that we "live in a time where people can be vicious to each other and say negative things to each other", so the students are warned that you can disagree, however, you must respect the other student. He requires the students to be professional and the students will have consequences if they are not. Another participant noted that she would use the social empathy model to facilitate any disagreement on the course content.

One participant went into detail on how she handled disagreements in her course because she believed that she "teaches non-traditional topics such as human sexuality and infectious disease response." She believed that the root of all disagreements is that the "individuals are thinking of the same thing, just from a different viewpoint". For example, there was a disagreement on mask mandates for children. She concluded that when it came down to it, both sides wanted the same thing, healthy children. Several of the participants indicated that they have never had a disagreement on a topic. One participant noted that,

Uhmm, uhmmm. Yeah, I can't say that there was necessary an argument perse, maybe not seeing all the views, coming in with a biased post. You know that they were not disrespectful, and it didn't necessarily come to be a disagreement. You know just making sure I have to reiterate that we are in a situation where you are commenting and going beyond, Oh I agree with that. Like no, we want to have that discussion you want to comment on your peers.

Reinforcing that there were no disagreements, one participant could not recall any major disagreements, only students not seeing all sides. However, students did not show any disrespect.

Interview Q4: How do you provide students feedback on their strengths and weaknesses of the course topics?

Participants noted that feedback was important for a successful online class. Most of the participants provide feedback to the students directly through Canvas's grading tool. About half of the participants provide feedback in live discussions on discussion forums.

One participant dedicated a lot of time to provide feedback to her students. She provided information on what they were doing correct and what they needed to improve on. Additionally, she offered what she called virtual office hours every Tuesday where students could log on and speak to her and receive feedback on their work.

Tuesdays, that what I do I try to keep the days and things like that always

consistent so students will always know but usually on Tuesdays from 2-4 p.m. EST I have what I call virtual office hours in which students can get on at anytime through the virtual, we use blackboard, but anyway they just go in there and then I see when they get on.

She also made a point to mention that she makes herself available on off-hours for students who were not available during the day. Another participant used the "sandwich method" where he commented on something positive then gave very specific feedback. He suggested that he gave a lot of feedback, even for students that were doing well in the class. Another professor agreed that was important to provide feedback to students, even the students that were doing well in the course. She believed that the personalization adds to the success of the students.

I have quite a few writing assignments. Even though I don't grade on grammar, and I don't grade on the technical aspects of the writing I provide a lot of comments on the document itself and in the comment box. Like good job or hey can you write a little more next time or hey this is really interesting. I also, so that it is individual, each Monday, each week I send out announcements and say hey everyone is doing a really good job on this. I would like to see more of this, and I also put messages on the group me. Those are just general messages. If a student is falling behind, then I will reach out to them with feedback like what can I do to get you back on track?

One participant noted that feedback was essential for not only success in his class, however, it also helped students grow and learn the material. Another participant noted that feedback was given on the document itself and was considered essential for creating a teaching presence.

Participants agreed that it is important to provide timely feedback. One participant noted that it was important to give grading and feedback as quickly as possible and usually provided feedback between 24-72 hours. Another participant stated that turnaround time for feedback was "24-48 hours, 72 hours max". While the instructors agreed that feedback was essential, time was a contributing factor that impeded their feedback. An additional participant claimed that while feedback was provided for every post it was tough because there is just too much work to get done between classes and researching for the university and at some point, you just reach capacity. Additionally, it was noted that this participant works every day, it may not be a full 8-hours per day, but work is done every day of the week.

Theme 2: Personal Interactions from Instructor

Social Presence

Social presence includes three elements including affective expression, open communication, and group cohesion (Rolim et al., 2019). Social Presence was evaluated in questions 24-31 on the COI survey and questions 5-6 on the interview guide. According to the COI survey data, interview participants were not as confident in their social presence as they were with their teaching presence whereas non-interview participants showed more confidence in their social presence. Table 4 shows the results of the interview participants COI survey compared to Table 5, the non-interview participants' results when the faculty members were asked to evaluate their social presence. As with teaching presence, the non-interview participants showed stronger confidence than the interview participants when it came to social presence. The noninterview participants were more likely to "agree" or "strongly agree" with the statements whereas the interview participants had answers ranging from "strongly disagree" to "strongly agree".

Table 4

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Provided feedback in a timely fashion	0	1	1	1	7
Online communication is excellent for social interaction	2	2	1	3	2
Provided a sense of belonging in the course	0	1	2	2	5
Online discussions develop a sense of collaboration	0	1	2	4	3

COI Survey Results (Interview Participants): Social Presence

Table 5

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Provided feedback in a timely fashion	0	1	0	0	4
Online communication is excellent for social interaction	0	0	0	4	1
Provided a sense of belonging in the course	0	0	0	4	1
Online discussions develop a sense of collaboration	0	0	1	4	0

COI Survey Results (Non-Interview Participants): Social Presence

Interview Q5: How do you create a sense of belonging within your class?

Majority of the participants agreed that creating a sense of belonging in an online class was important. Most participants described that the sense of belonging started during the first week of class with ice breakers or introduction activities, "You try at the beginning, the start of the course, you know you do those things; the name escapes me, icebreakers". One participant created break-out rooms for students to introduce themselves and get to know some of the other students in the class. Another instructor offered a fun idea of "toasting" her students each week with a welcome message. She gave an example of, "Hello program planners, welcome to another week". Another participant tried to make fun intro activities, such as tell us about your favorite superhero and why.

Videos were also a method of creating a sense of belonging in the online classroom. One participant posted a video about herself to help the students get a sense of who she is. She also, for smaller classes, schedules a 5–10-minute meet and greet with each student during the first two-weeks of the course. One participant focused on being available to his students

I check my email every day. I check my text messages. None of them really call me most of them text. I tell them at the beginning that if you need me to get back to you, I can respond as early as 3 seconds or 72 hours. There are times I may not have access. I try to get back to them within 24 hours.

However, several of the participants felt this was an area where improvement was needed. One participant said that while there is an introduction post and the students were asked about their lives, the instructor does not go out of their way to do that, indicating there is room for improvement. Yet another instructor claimed that while videos were provided to create a sense of belonging, there was no editing done to the videos and it was "recorded once and that was it". Yet another participant shared that there were 86 students in their online class, and while students were placed into breakout rooms to introduce themselves it was hard to manage that many students in break-out rooms.

Interview Q6: How Comfortable do you feel, overall, interacting with your

students in an online class?

Participants overwhelmingly agreed that they felt "confident" interacting with their students online. Most participants attributed that to the professional development they had prior to the start of teaching online. It seems that the more years there were teaching online, the more comfortable they were interacting with students. One participant noted that when she began teaching online, she found it hard to express her enthusiasm, as in-person. However, over the years she has found ways to let them see her personality. This included GIFs or emojis that she found during the week.

One professor stated that with online classes there were always ways to engage the students more and was not really their favorite, but they were comfortable interacting with their students. This participant believes that the best way to have an online class was a mixture of synchronous and asynchronous components. Yet another participant claimed,

Umm I feel pretty comfortable. I feel like over the years I've figured out ways to let them see my personality. I am pretty enthusiastic and energetic, in person which I think when I first started teaching online umm was harder to convey, but I usually post weekly introductions videos each week. I also feel like this is how you make a connection.

Another participant, while admitting that online classes were awful, felt very confident in interacting online with their students because the university put a lot of time and resources into professional development. This was interesting because several of the participants noted how much they missed the interaction of in-person instruction. However, the pandemic had a major impact on the participants' opinions on going back on campus for classes. One participant returned to campus, but his class was so full that he did not feel that it was beneficial to have that many students in one class, not being able to social distance. Another professor was taking the fall semester off because students were required to fully return to campus, and she did not feel like they should return to full in-person instruction yet. Additionally, another participant only said he would return to teach if it were all online and not in-person. So, while the instructors did not necessary believe that online learning was their favorite, there were factors that led them to opting for online instruction.

Research Question 2

RQ 2: How do HEP faculty align their online class with the areas of responsibilities and competencies for health education specialists?

While cognitive presence was addressed in research question one, it also was addressed in research question two. The results indicated that while the participants taught in HEP programs, the curriculum was very rarely aligned with the responsibilities and competencies for health education specialists. For example, out of the ten participants, only three participants suggested that their HEP program strongly aligned with the competencies, or prepared students to take the CHES exam. When questions dug further into how the curriculum aligned, the participants seemed to have some uncertainty. One participant eagerly stated that their programs help students take the CHES exam, but when asked how the curriculum was designed to align with the Areas and Responsibilities of Health Education Specialists, he responded with, "I am a little hazy on that, but we definitely encourage and create curriculum for CHES."

Another participant explained in a little more detail on how the curriculum at her university aligned their curriculum with the Areas and Responsibilities of Health Education Specialists. According to this participant, all the learning objectives were outlined in the syllabus and linked the respective CHES area and responsibility. However, as the university moved more to online learning there were thoughts on linking some of the activities to specific learning objectives and pointing them out to the students. In addition, there would be a faculty review of the assignments to ensure they matched the responsibility. It was noted that when it comes for updates for the material that was up to the faculty member to make those changes as needed.

A third participant relied on personal experience to align her curriculum to CHES and the Areas and Responsibilities of Health Education Specialists. In her courses, she taught the literature and the knowledge but because of her background in HEP, and she had experience working for the state health agency, she tied the literature into real-life experience. She concluded that students are supposed to "know the evidence-based curriculum" however, you need to be able to work it out in the real world.

Some participants reported that they prepare students to optionally take the CHES exam. One participant stated that the curriculum is "not necessarily aligned with the Areas and Responsibilities for Health Education Specialists, however, if the students were interested in taking the CHES exam, faculty members can help prepare them". Two additional participants reported that their university took a similar approach. While, the curriculum was not technically designed specifically for CHES, they did make sure that students would be eligible to take the exam if they took specific classes. It was noted that it was required for their master's program. However, it was then mentioned that "it is more of a recommendation rather than a fact."

Participants indicated some HEP programs had decided to focus their curriculum on other certifications. One participant very strongly reported that their program did not prepare their students for CHES, but rather focused on internship. She further explained that she was not sure if her classes would even help a student prepare for CHES. Another participant reported that their HEP program focused on the physical activity and public health exam from the American College of Sports Medicine. This was a relatively new focus, within the past year.

Two participants were not sure if their programs prepared students for CHES. One participant, who had taken the CHES exam, suggested that he was not sure if the curriculum was officially aligned, however, from personal experience he could say that not one course would specifically prepare the students, rather they would be able to get bits of information from a variety of courses.

Theme 3: Review of Curriculum is Needed

Cognitive Presence

Cognitive presence creates meaning through discussion and interaction within the online community. This is the most challenging presence to create (Garrison & Arbaugh, 2007). Cognitive presence was addressed in questions 31-41 of the COI survey and number 7 of the interview. Questions from the COI survey focused on course content in

general, while cognitive presence during the interview was focused on course content in relation to the areas of responsibility and competencies of health education specialists. Like social presence, data from the interview participants COI survey indicated that the participants believed there was room for growth in cognitive presence in their online class whereas the non-interview participants felt more confident in their cognitive presence. Table 6 shows the interview faculty members' responses compared to Table 7, non-interview faculty members, when asked about cognitive presence in their online course. Once again, the non-interview participants showed more confidence in cognitive presence by answering "agree" or "strongly agree" to most of the statements compared to the interview participants that ranged from "disagree" to "strongly agree".

Table 6

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Students felt motivated to explore content related questions	0	1	1	5	3
Utilized a variety of information sources to explore problems posed in this course	0	1	1	4	4
Provided ways to test and apply knowledge created in this course	0	1	0	1	8
Provided solutions to course problems that can be applied in practice	0	0	1	3	6

COI Survey Results (Interview Participants): Cognitive Presence

Table 7

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Students felt motivated to explore content related questions	0	0	0	3	2
Utilized a variety of information sources to explore problems posed in this course	0	0	0	4	1
Provided ways to test and apply knowledge created in this course	0	0	0	3	2
Provided solutions to course problems that can be applied in practice	0	0	1	2	2

COI Survey Results (Non-Interview Participants): Cognitive Presence

Interview Q7: How do you design activities that relate to the areas of responsibility and competencies for health education specialists?

During the interviews, this question was the one question that made all the participants hesitate. Only two participants reported how they designed course activities to the Areas and Responsibilities for Health Education Specialists. One participant reported that she relied on evidence-based literature and personal experience to create beneficial course activities for her students. The second participant reported that she made updates in-between semesters, where applicable, to her course activities to ensure that her course material was up-to-date and relevant for the competencies.

Whereas the other eight participants reported that their programs either optionally prepared students or did not prepare at all, hence they were not sure how to answer, and just vaguely answered. One participant just simply said "I am not sure". Other participants went into explaining that their program did not necessarily prepare the students for CHES, so "course activities were designed based on the learning objectives for the course". Yet another participant suggested that she was the only tenured CHES faculty member on staff, so course activities were aligned with course objectives specifically for that class, not necessarily for CHES.

Theme 4: Social Presence is Essential for Quality

Quality

Quality of the online HEP courses, from the participant's perspective, were covered in questions eight and nine of the interview. These questions focused on the strengths and weakness of their online class, from their own perspective. *Q8:* What are the strengths of your online class?

All ten participants were eager to answer this question. It seemed as if after the past two years and all the uncertainty, they were eager to share what the strength of their class was, almost as if it was one of their great achievements. One participant eagerly shared,

Personally, I think they (online classes) are fun. I have such a fun time acknowledging the world we live in. Like there is the thing I notice is the big difference in my teaching style than other is just acknowledging that the world is awful. Like are you kidding me? We are living on a rock on fire with hurricanes during a plague where everyone hates each other. Like what? Even if I say you have an assignment due on Sunday it is not the most important thing in your life... but you should learn something. I have tried to take a human centric approach

Yet another participant stated that, "Good teaching is good teaching. Clear audio, clear visual, good directions, excellent feedback are all things that are fundamental to good teaching. The most important thing is to have interesting, relevant, dare I say fun assignments. When you do that, it doesn't feel like work. The students are engaged, it is interesting to them and to you".

Several participants noted that the strength of their class was the way the class was designed and set up. One participant answered this question in just one word, "consistency". Then expanded that each week the modules were set up the same way, and the students knew that every week they had a lecture to watch and assignments to do. Also, this participant noted that it was important to be consistent with feedback. The typical turnaround time for feedback did not exceed 48 hours. Likewise, another participant believed that repetition was the strength of her online class. Like the previous participant, the repetition and consistency of the class material was a benefit to students. Another participant noted that organization was the strength of her online class. Like consistency, the organization of her class made it easy for students to find their weekly lectures and assignments. Still another participant reported that the organization of the classes were not organized, the students become frustrated when they could not find the work for the week.

It was interesting that one participant noted that technology changes were the strength of his online class. He recently made the change to not have the students buy an expensive textbook, rather he found a free online textbook that was applicable to his course content. He further explained that then he was able to provide supplemental material, as needed. Thus, the students did not have to worry about having the reading materials for class.

Interview Q9: Where are the areas of improvement for your online class?

For this question, seven of the ten participants used the term "engagement" in one capacity or another. One participant noted that she wished she could find a better way to keep the class engaged rather than just lecturing at them the entire time. Likewise, another participant wanted more of a handle on newer ways to engage. She gave the example of when students are on- campus they can complete tabletop activities, however, how does that convert to a fully online class? Yet another participant wanted to learn new ways to engage students beyond just commenting on discussion boards. Similarly, another participant felt he needed to engage the students more to make them feel more connected. One way he felt he could do this was by interreacting more on the discussion boards. Lastly, another participant agreed that she felt she needed to engage the students more on the discussion boards. She noted that every semester she felt like she was going to do better than when the semester rolled around, she felt like she was drowning in the class and must work from behind.

The remaining participants really focused on technology for an area of improvement. One participant responded that she was horrible at making videos and told her students that she was "one and done", she would only record videos one time. So, this meant that there may be a dog barking in the background or doors closing. Another participant mentioned that he would like to update his lectures for better sound quality. It was interesting to note that this participant was curious on the best-practice for incorporating technology into his online class. He learned during professional development that it was more beneficial to a student to do multiple 10–20 minute short presentations rather than a long one to one and half hour lecture. However, when he polled his 80 students, the students polled that they would rather have one lecture as opposed to five or six. It appeared that he seemed frustrated with trying to find the best approach.

Research Question Three

RQ 3: How do HEP faculty describe factors that affect their teaching, social, and cognitive presence in their online classroom?

The third research question was answered through interview question 10. Data indicated that time was the main factor that affected teaching, social, and cognitive presence. Participants believed that between the responsibilities at the university and the amount of time it took to create and run an online class, there was very little time to do additional research.

Theme 5: Professional Development is Essential Due to Time Constraints *Factors*

Factors that may impede the quality of an online class were addressed in question ten. This question focused on any factor that may impede the teaching, social, or cognitive presence in an online classroom.

Interview Q10: What factors may impede the quality of your online class?

Throughout the interviews, there were several factors that were noted that affected the quality of the participant's online classes. Time was the one factor that all the participants, except one, reported as the main factor that affected their online class. Two participants reported that they were both instructors and researchers for their universities, however, they were spending so much time dedicated to the design and facilitation of their online class, that it was affecting their research. Yet another participant reported that designing online classes, "were a ton of work at the beginning, however, after you had a strong course set up, it became a little easier". Yet another faculty member stated, Yeah, I think that one thing I would add is it is definitely more time consuming than in person. Everything would have to be recorded then I would download it, then I would have to get it from the cloud, then I would get it on Canvas. You know it was so time consuming to the point where it impacted my research and that is not good. I would say that was probably the most difficult things. There are a number of reasons why I am glad I am not teaching this semester, one being I am not comfortable, but it is so time consuming.

Additionally, it was noted that sometimes it was hard to balance teaching time with family time. One participant just came back from maternity leave and did not have daycare for five months. Thus, her intention to work ahead was impacted by life and she was just working from week-to-week in her class.

Another participant explained time from a different viewpoint. She sympathized with the students who spent their day working, taking care of their family, and then spent their evenings looking at their computer screen completing assignments. She believed that this impacted the quality of the course because by that point, students were tired and just wanted to complete the assignments quickly.

On the other hand, one participant noted that time was not an issue, he noted that all faculty should learn time management, however, he thought that the quality of work of the students affected the quality of the online class. Due to the pandemic, like most universities, he had to quickly transition online. However, he believed that the quality of the student's work was lower than it would be in person.

One factor, that was not specifically mentioned in the participants' answers for

this question, but came up in every conversation, was professional development. Those participants that received professional development, either before or during the pandemic transition, seemed more confident talking about the design and facilitation of their course. For example, one participant expressed great appreciation that the college of human health provided mandatory training for all faculty. They provided templates, feedback, tips for syllabi and inclusivity. It was noted that the university had been supportive. While some participants reported that their training was mandatory, some participants volunteered to take training. Two participants took a professional development class to further increase the quality of their online class.

Prior experience and additional professional development seemed to help participants smoothly transition online during the pandemic. Several participants noted that when the pandemic hit, it was beneficial to have the training and experience of teaching online, so the transition was not as difficult on her and the students. While they did claim they could not just simply copy and paste their face-to-face material to an online platform, it was a consensus that previous experience was very beneficial. One participant exclaimed, "I would not want to be a rookie faculty or a veteran faculty during this pandemic".

According to the Theory of Planned Behavior, a major factor in predicting intentions is perceptions (Ajzen, 2002). Factors such as opportunities, resources, knowledge, and self-efficacy are crucial to individuals' intentions to perform actions (Jeong & Kim, 2016). Results from this study indicate that factors including time, quality of work, and professional development impacted how the participants transitioned and the quality of their fully online class. Perceived behavioral control is the level of difficulty, or ease in transitioning to online learning (Chu & Chen, 2016). Results show that those instructors that had professional development and support from their university had an easier time transitioning to a fully online class compared to those instructors that did not receive professional development or university support.

Discrepant Cases

In this research, discrepant cases arose when participants were asked how their classes align with the areas of responsibility and competencies for health education specialists. Most of the participants did not align their curriculum with the competencies. During the analysis process, these cases were analyzed as to why they do not align their curriculum. Analysis of the data showed that participants prepared their students for other exams such as the American College of Sports Medicine. Additionally, some of the participants did not know if their classes and programs aligned or prepared their students for taking the CHES exam. One participant claimed that there was uncertainty and should probably ask the program director.

Trustworthiness

Credibility

There are specific strategies that a researcher can take to achieve credibility including triangulation, member checks, thick description, and structured reflexivity (Ravitch & Carl, 2016). For this research, data was collected via a COI online survey as well as individual interviews which allowed for data from multiple sources. Since triangulation alone does not make the study credible, member checks were utilized to determine the credibility of the findings (Creswell & Creswell, 2018). Participants were provided a copy of the transcripts and allowed to review the data to ensure that their perspectives were expressed accurately. None of the participants provided any additional information or made any changes to their answers.

The responses from the participants were contextualized to provide thick descriptions. This resulted in the understanding of contextualized factors. Additionally, a reflective journal was kept during the data collection and transcription process to increase credibility. In these memos, positionally and biases were noted. These notes aided in outlining the steps of the research that has already happened and what still needs to be accomplished. Additionally, the memos helped organize patterns and themes that seemed to be emerging in the data. For example, one memo created, stated that the participant really emphasized the importance of keeping all the instructions "simple". The word "simple" was consistent through most of her answers. This helped create pre-codes.

Transferability

To establish transferability, details on the participants and data collection was clearly outlined (Maxwell, 2020). Detailed information on the participants and data collection method was noted and provided for readers in this chapter. Additionally, participants were intentionally recruited from multiple universities in the United States. Participants for this study were from eight different universities, as opposed to just one, to increase the potential transferability of findings from this study to other programs and departments. Likewise, the participants taught from a variety of classes within the HEP program which also increased the transferability.

Dependability

Dependability was the strength of the data, and it requires consistency in the data. Thus, it implied that the data answered the research question (Ravitch & Carl, 2016). This was achieved through an audit trail (Korstjens & Moser, 20018). I created a detailed audit trail for all data, which has been described in the data collection section of this chapter. Additionally, the reflective memos identified my positionality and biases, increasing dependability.

Confirmability

To ensure the findings were consistent with the data, reflexivity was utilized. Reflexivity allowed me to reflect on my own bias, preconceptions, and preferences (Korstjens & Moser, 2018). Additionally, triangulation was used to further ensure the findings were consistent with the data (Ravitch & Carl, 2016). To ensure triangulation, data was collected from multiple sources to justify the themes that emerged. The data from the COI survey correlated with the data from the individual interviews, thus justifying the themes that emerged.

Summary

Analysis of participants responses indicated that for an online instructor to establish teaching presence, there must be clear and detailed instruction provided on both the syllabus and learning platform, such as Canvas. Feedback was also noted as being essential for teaching presence. Instructor feedback typically happened on discussion forums and or Canvas grading tools. Social presence posed more of an issue for online instructors than teaching presence. Most participants felt that there was room for growth when it came to social presence. Time was a major factor that impeded participants' social presence in online classrooms. However, all participants felt comfortable interacting with their students online. Only half of the participants agreed that web-based communication is an excellent medium for social interaction.

While all ten participants taught in a HEP or Public Health program, only three participants could confidently say they align their curriculum with the responsibilities and competencies of health education specialists. These participants expressed that personal experience as a CHES helped to go beyond the textbook and provide the students with information on personal experiences. Further implications of these findings will be discussed in Chapter 5. Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this general qualitative study was to explore the perceptions and experiences of HEP faculty at multiple universities in the organization and facilitation of their online courses, communication between instructor and student, and assessment of the students. This research followed the COI framework, including teaching presence, social presence, and cognitive presence and how they were controlled by perceived behavioral control to gain an understanding of what HEP faulty require in providing a high-quality online class, especially when faculty were required to transition quickly to online learning.

When developing HEP courses, the goal is to create challenging, yet engaging, courses for the students (Gardner et al., 2018). However, when transitioning to online learning, factors such as interest, needs, and learning styles of the students, had to be taken into consideration (Gardner et al., 2018). Faculty are required to employ a new pedagogy when transitioning to online, requiring the instructor to be trained and supported before, during, and after the transition to teaching online (Sinacori, 2020). This was especially prevalent when the world was facing an unprecedented time, such as with the COVID-19 pandemic. Thus, understanding the perceptions of HEP faculty can help support faculty transition to provide quality online learning instead of just uploading preexisting material from a traditional classroom (Bowles & Sendall, 2020).

The literature review, as detailed in Chapter 2, revealed that the quality of online courses can be evaluated using the COI framework, including teaching, social, and cognitive presence. However, due to the universal spread of COVID-19, many educators were forced to adapt quickly to teaching online (Bowles & Sendall, 2020). Often, these educators found the transition difficult, and the result was lower-quality online lectures and courses (Seymour-Walsh et al., 2020). Specifically, HEP educators had to quickly adapt to an online format that exceeded moving their preexisting material to an online format that impacted the faculty's teaching, social, and cognitive presence (Bowles & Sendall, 2020).

As mentioned previously, Chapter 2 provided an in-depth examination of the known literature regarding the history of health education and public health and the progression these professions have seen over the past several decades to include more institutions offering degrees in HEP and public health (Resnick et al., 2018). Additionally, I reviewed the quality of online learning in the context of the COI framework including teaching, social, and cognitive presence, and what challenges each of these categories held. Furthermore, there was a review of the literature of the initial impact of the COVID-19 pandemic on HEP programs.

The results of this study align with the literature review, suggesting that the transition to online instructions during the pandemic impacted the quality of online courses, specifically in teaching social and cognitive presence. A major theme that emerged for the design and facilitation of online courses included the need for course content to be simple and repetitive. This included the lay-out of the class on the learning management system, such as Canvas. Additionally, since the pandemic was a time of isolation for both the instructors and students, a second theme that emerged was the need for personal interactions from the instructor to each student. This could be something as

simple as sending out an email to students to check to see if they were adjusting to the online format. A third theme that emerged was few HEP curriculums were in line with the areas and responsibilities for health education specialist. When it comes to creating curriculum for HEP programs, it was not necessarily focused on preparing students for CHES.

When it came to the faculty's overall perception of the quality of their online course, a theme that emerged was the importance of social presence to ensure quality of online learning. However, there were themes that emerged as factors that inhibited the quality of the HEP faculty online courses including it was crucial that instructors received training or professional development before the transition. Also, it was important that there was continued opportunities for the HEP faculty to learn the newest and best practices for online learning. Lastly, a major theme that emerged was time, and the amount of time it took to transition to a quality online course.

Interpretation of the Findings

Teaching Presence

According to the literature, teaching presence contained three elements including course design, facilitation, and monitoring cognitive and social processes to meet learning goals (Majeski et al., 2018). Thus, in higher education institutions, the instructor has been found to play a vital role in planning their courses (Kibaru, 2018). Additionally, since there are diverse learning styles, students should learn online through repetition, scaffolding, and application of the concepts (Nelson-Hurwitz et al., 2018). The findings of this study confirmed that from faculty perceptions, the students were more successful in their class when the design of the class was repetitive and simple. Additionally, Jeong et. al (2016) suggested that 80% of students believed that video lectures resembled inclass lecture formats and helped the students learn in general science classes. The present study confirmed that videos were helpful to students to learn course material, however, HEP instructors were providing more than just video lectures. Participants indicated that their instructional approaches had extended to introduction videos from both the students and instructor, videos on how to complete difficult assignments, and utilizing videos for group work.

Challenges to Creating Teaching Presence

Kibaru (2018) suggested that the course design is the first opportunity to create a quality class, however, often instructors created an online class without the knowledge and skills needed. Additionally, a quality online class was time-consuming to create (Kibaru, 2018). This study confirmed that creating an online class was very time-consuming, all ten participants confirmed this. Time was the one theme that came up in all ten interviews as a factor that impacted the quality of their online courses. Additionally, all but one participant had received professional development, or training before having to transition to an online platform. This resulted in nine of the participants being very confident that they were able to create a quality online class, in such a short time. One participant who received no professional development stated that it was a very stressful time.

Social Presence

Social presence is critical in online learning to prevent students from feeling isolated. This is reliant on frequency, type, and quality of interaction between the instructor and student (Richardson & Lowenthal, 2017). Affective expression, which is one indicator of social presence, can be formed by the instructors continuing a discussion thread, or providing information about oneself to express emotion or create affective expression. This study found that discussion boards were not a popular way to create social presence in online classrooms. Rather, most of the participants felt that discussion boards did not add to the quality of their classroom, instead it created more work for the professor and just busy work for the students. Additionally, the results of this study indicated that HEP instructors found it difficult to portray their outgoing and bubbly personality in online courses.

Another indicator of social presence was open communication, which was achieved through personalized feedback (Ryan et al., 2019). This study confirmed that HEP faculty perceived that personalized and timely feedback was essential for social presence. All ten participants noted that they provided some sort of feedback to students on all the assignments. Most of the participants stated that they did not like to exceed 72 hours to provide feedback on assignments, indicating that feedback was essential to the students' success in the class.

Challenges to Creating Social Presence

The literature suggested that instructors may not know the best way to create social presence for an online course. Constant alerts and notifications made instructors feel like they must respond immediately to the student (Tang & Hew, 2020). This study found that instructors were constantly connected to their students whether it was emails synching to their phone or providing their cell phone number to the students. Majority of the participants indicated that they worked every day of the week answering students' questions. This was a challenge because it became very time-consuming for the instructor.

Cognitive Presence

Cognitive presence is the most challenging to achieve in an online course (Garrison & Arbaugh, 2007). This is reliant on how the learning environment encourages deep and meaningful learning (Crosta et al., 2016). Often, cognitive presence is developed using technologies such as Flipgrid or Loom (Holbeck & Hartman, 2018). Additionally, cognitive presence can be achieved through student discussions, but it is essential that students feel comfortable interacting in an online discussion (Covelli, 2017). This study confirmed that HEP faculty used technology to create a cognitive presence, such as Echo 360, Google docs, flip grid, and Zoom were mentioned. However, the study disconfirmed that cognitive presence is developed using online student discussions. The majority of the participants noted that it was very hard to engage students in discussions, especially with each other. Most of the time, the discussions did not go further that, "I agree" or "I disagree" with your comment. This was an area where the participants wished they had a better solution, than discussion boards, to create discussion among students. This study measured cognitive presence as alignment of HEP curriculum with the areas and responsibilities for health education specialists. The National Commission for Health Education Credentialing mission is to enhance HEP by promoting and sustaining credentialed health education specialists (National Commissions for Health Education Credentialing, 2021). To accomplish this mission, there is a review of HEP curriculum and how it prepares students to take the CHES exam (Figueroa, 2015). The current study found that while most of the participants were aware of CHES, their curriculum did not necessarily prepare the students to become CHES certified. There were other certifications and internships that the universities' HEP programs focused on rather than CHES, such as the health exam provided by the American College of Sports Medicine. Therefore, there needs to be more research and more alignment of HEP programs and the National Commission for Health Education Credentialing

Challenges to Creating Cognitive Presence

Previous literature suggested that educators in higher education did not have a positive attitude about transitioning to online platforms (Ruth, 2018). Ciabocchi et. al (2016) found that instructors did not believe they received quality training to teach online. Additionally, Grenon et. al (2019) suggested that there was a lack in consensus on best-practices for training educators to transition online. This study disconfirmed that instructors did not believe that they received quality training to transition online, nine of the ten participants were very pleased with the training and support they received from their university. However, there was not a consensus on best-practices, which even became a topic of conversation during the interviews. When talking with the participants

on professional development, it was noted that it was not consistent in "best-practices" through the various trainings.

Theory of Planned Behavior

The TPB is a model that predicts an individual's intention to perform a behavior based on their attitude towards their behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). TPB has been utilized to predict eLearning adaptation, specifically technology adaptation (Chu & Chen, 2016). Ajzen (2002) indicated that perceptions are a major factor in predicting intentions. Factors including opportunities, resources, knowledge, and self-efficacy are important to an individual's intention to act on a behavior. TPB was incorporated into this study because it was believed that perceived behavioral control, or the level of difficulty or ease transitioning to online learning, had an impact on the quality of online courses (Chu & Chen, 2016). Findings from my study confirmed that those instructors who had a positive attitude on transitioning to online during the COVID-19 pandemic, had an easier time and perceived their class to be of better quality, than those instructors who felt they did not receive training or lack resources.

Limitations

The nature of qualitative research is that it does not draw definitive conclusions, rather themes of individual's experiences, indicating generalization (Ravitch & Carl, 2016). To broaden the data collected, I recruited faculty from multiple universities, however, this was a time-consuming process and most faculty were either on summer break or trying to transition to on-campus classes after being fully online for two years.

This resulted in only ten participants agreeing to complete the COI online survey and the individual interview. While saturation was able to be reached, all the participants that agreed to complete the individual interviews were selected, which resulted in lowering the diversity of the participants. Due to the lack of participation, some participants were from the same university as other participants.

An additional limitation was the scheduling of the individual interviews. While participants were quick to complete the COI survey, it was difficult to schedule an individual interview. This became a limitation because some interviews where scheduled when the participants only had a brief break, and usually the participant was multitasking when the interview was being conducted, such as driving or grocery shopping. Due to this, sometimes the responses were brief and required multiple follow-up questions.

Recommendations

The results of this study could be transferred to future research with similar context or could be applied in a variety of contexts, to compare results. Additional research is needed to improve the quality of online HEP courses, specifically focusing on the faculty's perception. More research is needed to use the COI framework to understand and improve HEP instructional programming. Another area of future research could include how and if faculty incorporated COVID-19 into HEP curriculum. Previous research found that very few HEP faculty included COVID-19 into their curriculum (Ibrahim, 2020). The results of this study indicate that there is an opportunity for future growth incorporating the impact of COVID-19 into the curriculum, especially in health education and promotion. Only two participants mentioned that they used this pandemic

as a learning opportunity for their students.

An additional area for further research would be the impact of mental health, from the faculty's perspective on transitioning online, during a pandemic. Participants mentioned that not only where they expected to provide a quality class for their students, but they were also dealing with the mental stress of the pandemic. Several participants noted the mental health of the students, which they believe is at an all-time low, however, the participants made it known that they, too were going through the pandemic and had stress. A qualitative inquiry on the mental health of transitioning online during a crisis can provide additional knowledge to the existing literature.

The qualitative results provided insights to the faculty's perception of the quality of their online classroom, however, the results did not quantify how teaching, social, and cognitive presence impact the quality of online classes, from the faculty's perspective. While the COI framework is the leading framework for research in online and hybrid learning, it is usually conducted from the student's perspective (Garrison, 2017). A quantitative study, utilizing the COI framework from the instructor's perspective, would produce generalized true statements, as opposed to descriptive statements (Ravitch & Carl, 2016).

Implications

Since the start of the COVID-19 pandemic, on March 11, 2020, there have been major global behavior changes. This included the suspension of in-person classes in higher education, and a transition to an online platform (Pears et al., 2020). Due to the nature of HEP courses, faculty had trouble with the continuation of health programming

and training students during an infectious disease pandemic (Burke et al., 2020). Universities were faced with balancing what favors the individual student and population with the concern for personal health (Burke et al., 2020). The discipline of HEP prepares individuals to become health educators that assess, plan, implements, and evaluate the behaviors of individuals within a community (Auld & Bishop, 2015). Thus, it is imperative that HEP students receive a quality education so they can become contributing health educators and make a significant impact and positive social change (Hughes et al., 2020). Consequently, the quality of HEP programs cannot be disrupted, even during unprecedented events (Brinkley-Etzkorn, 2020).

The results of this study could have a positive social change at the organizational level on university's HEP programs by suggesting resources to faculty to develop a highquality online course and providing the support they need to transition from face-to-face to online, even if it is a quick transition. The results of this study show that even though all the participants had to make a quick transition to an online platform, it was those instructors that had previous professional development on evidenced- based pedagogies of online learning that had the most success creating a quality online classroom during a very stressful time. Thus, if HEP programs provide professional development and trainings to all HEP faculty, it could help HEP faculty transition to an online learning environment if needed in the future.

Additionally, to create teaching presence online, it was concluded that instructions needed to be simple and repetitive. This was most achieved through the syllabus and through the set-up of the learning management systems, such as Canvas. The participants who believed they had a strong teaching presence, received a template of the syllabus and examples of how to set up Canvas to be simple and easy to use. While each HEP course is unique, the HEP faulty could work with the universities' Instructional Design department to create templates for syllabi and course design.

All the participants believed that social presence was the most important factor to creating a quality online class, however, all participants also claimed this was the area that needed the most improvement. Having a basic knowledge of what technology is available seemed to help participants feel more comfortable when it came to social presence. Some instructors utilized their own Zoom account to host meetings with students when the university did not provide a meeting platform. Other participants used Google docs to create group assignments, while other participants used Echo 360 to create videos explaining difficult assignments. Those participants who had the most social presence utilized other multimedia methods besides the learning management system.

It was surprising to learn that not many HEP programs align their curriculum to prepare students to take the CHES exam. Health Education and Promotion faculty have the responsibility to bring their experiences into the classroom and prepare their students from practical application (Green, 2016). One way to do this would be to align HEP curriculum with the areas and responsibilities for health education specialists and to encourage students and faculty to become a certified health education specialist. Strengthening academic programs' relationship with the Certified Health Education Specialist credentialing process would further promote social change.

Conclusion

On March 11, 2020, the world changed with the declaration of the Novel Coronavirus pandemic from the World Health Organization (Pears et al., 2020). Higher education experienced the immediate transition of all classes to an online platform. Often when instructors are making the transition from face-to-face to online, there is skepticism that the students will meet the course objectives and learning outcomes due to the pedagogical and technological challenges (Ibrahim, 2020). Typically, when HEP instructors want or are instructed to put their class online, they receive training, resources, and support to create a high-quality online class (Brinkley-Etzkorn, 2020). However, when the instructor lacks training and resources, the quality of the class is greatly impacted including the teaching, social, and cognitive presence (Brinkley-Etzkorn, 2020).

This study offered an insight of HEP faculty's perceptions on the quality of their online HEP course in teaching, social, and cognitive presence. Chapter Five provided interpretations of the findings as well as implications of the study's findings. The findings of this study conclude that professional development is essential when transitioning from face-to-face courses to fully online, especially if transitioning quickly. Social presence, while vital, is hard to accomplish in an online setting. Thus, it is important that instructors constantly look for innovative ways to increase their social presence in their online class.

This study took a qualitative approach to examine the perceptions of HEP faculty on the quality of their online courses in teaching, social, and cognitive presence. The findings can have a positive social change by providing ways to increase the quality of online courses. Higher education institutes have a unique opportunity to create positive social change within the institution, especially HEP programs. One way is to provide students the opportunities to expand their knowledge and master the skills needed for their careers (Johnston, 2011). Online instructors have a critical role in creating an online environment that encourages students to interact and engage while critically thinking (Shoepe et al., 2020). Therefore, it is important for HEP faculty to have quality online classes to prepare future health educators to make a difference in the world.

References

- Adedoyn, O.B. & Soykan, E. (2020, September 2). Covid-19 pandemic and online learning: The challenges and opportunities. *Interactive Learning Environments*. <u>https://doi.org/10.1080/10494820.2020.1813180</u>
- Ajzen, I. (1991, November). The theory of planned behavior. Organizational Behavior and Human Decision Process, 50 (2), 179-211. <u>https://doi.org/10.1016/0749-5978(91)90020-T</u>
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, *32*(4), 665–683. <u>https://doi.org/10.1111/j.1559-1816.2002.tb00236.x</u>
- Akcaoglu, M., & Lee, E. (2016). Increasing social presence in online learning through small group discussions. *International Review of Research in Open & Distance Learning*, 17(3), 1–17. <u>https://doi.org/10.19173/irrodl.v17i3.2293</u>
- Alhosban, F., & Ismaile, S. (2018). Perceived promoters of and barriers to use of a learning management system in an undergraduate nursing program. *International Journal of Emerging Technologies in Learning*, 13(2), 226–233.

https://doi.org/10.3991/ijet.v13i02.8085

Almasi, M., & Chang Zhu. (2018). Students' perceptions of social presence in blended learning courses in a Tanzanian medical college. *International Journal of Emerging Technologies in Learning*, 13(9), 107–122. https://doi.org/10.3991/ijet.v13i09.8566

Alzyood, M., Jackson, D., Aveyard, H., & Brooke, J. (2020). COVID-19 reinforces the

importance of handwashing. Journal of Clinical Nursing, 29(15/16), 2760.

Amemado, D., & Manca, S. (2017). Learning from decades of online distance education: Moocs and the community of inquiry framework. *Journal of E-Learning & Knowledge Society*, 13(2), 21–32.

Arbaugh, J. B., Cleveland-Innes, M., Diaz, S. R., Garrison, D. R., Ice, P., Richardson, J. C., & Swan, K. P. (2008). Developing a community of inquiry instrument: Testing a measure of the community of inquiry framework using a multiinstitutional sample. *Internet & Higher Education*, *11*(3/4), 133–136. <u>https://doi.org/10.1016/j.iheduc.2008.06.003</u>

- Auld, M. E., & Bishop, K. (2015). Striving for excellence in health promotion pedagogy. *Pedagogy in Health Promotion*, 1(1), 5–7.
- Barberà, E., Gómez-Rey, P., & Fernández-Navarro, F. (2016). A cross-national study of teacher's perceptions of online learning success. *Open Learning*, 31(1), 25–41. <u>https://doi.org/10.1080/02680513.2016.1151350</u>
- Baker, D. M. A., & Unni, R. (2018). USA and Asia hospitality & tourism students' perceptions and satisfaction with online learning versus traditional face-to-face instruction. *E-Journal of Business Education and Scholarship of Teaching*, *12*(2), 40–54.
- Bentley, K. M., & Swan, S. A. (2018). Service learning: A useful pedagogy to engage community health education students in a resource management and grant writing course. *Pedagogy in Health Promotion*, 4(2), 83–87.
 https://doi.org/10.1177/2373379917724171

- Berić-Stojšić, B., Patel, N., Blake, J., & Johnson, D. (2020). Flipped classroom teaching and learning pedagogy in the program planning, implementation, and evaluation graduate course: Students' experiences. *Pedagogy in Health Promotion*, 6(3), 222–228. <u>https://doi.org/10.1177/2373379919839073</u>
- Berlin, K., Boling, W., Doss, D., & Nolting, T. (2019). Easy as PIE: A recipe for approaching the areas of responsibility and competencies for health education specialists. *Pedagogy in Health Promotion*, 5(2), 147.
- Bissessar, C., Black, D., & Boolaky, M. (2020). International online graduate students' perceptions of Coi. *European Journal of Open, Distance & E-Learning*, 23(1), 61–83. <u>https://doi.org/10.2478/eurodl-2020-0005</u>
- Bistritz, L., Kovacs-Burns, K., Avdagovska, M., McCargar, L., Olson, K., & Gramlich,
 L. (2015). WellnessRx education initiative: Development and pilot study of
 nutrition and physical activity education for health sciences students. *Pedagogy in Health Promotion*, 1(1), 24–36. <u>https://doi.org/10.1177/2373379914559217</u>
- Blavos, A., Kerr, D., Hancher-Rauch, H., Brookins-Fisher, J., & Thompson, A. (2020).
 Faculty perceptions of certifications in health education and public health:
 Implications for professional preparation. *Pedagogy in Health Promotion*.
 https://doi.org/10.1177/2373379920938823
- Boddy, C.R. (2016). Sample size for qualitative research. *Qualitative Market Research: An International Journal*, *19*(4), 426–432. <u>https://doi.org/10.1108/QMR-06-2016-0053</u>

Bowles, D. C., & Sendall, M. C. (2020). COVID-19: The elephant in the virtual

classroom. *Pedagogy in Health Promotion*, *6*(3), 156–158. https://10.1177/2373379920938419

- Brod, M., Tesler, L. E., & Christensen, T. L. (2009). Qualitative research and content validity: developing best practices based on science and experience. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation*, 18(9), 1263–1278. <u>https://doi.org/10.1007/s11136-009-</u>9540-9
- Brinkley-Etzkorn, K. E. (2020). The Effects of training on instructor beliefs about and attitudes toward online teaching. *American Journal of Distance Education*, 34(1), 19–35.
- Bruess, C. E. (2003). The importance of health educators as role models. *American Journal of Health Education*, *34*(4), 237–239.
- Burcin, M. M., Armstrong, S. N., Early, J. O., & Godwin, H. (2019). Optimizing college health promotion in the digital age: Comparing perceived well-being, and health behaviors, health education needs and preferences between college students enrolled in fully online versus campus-based programs. *Health Promotion Perspectives*, 9(4), 270–278. <u>https://doi.org/10.15171/hpp.2019.37</u>
- Burke, J. G., Egan, J. E., Coulter, R. W. S., Mitchell, S., Olaniyan, A., & Hawk, M. (2020). A compassionate framework for reducing harm in public health higher education: Implications for the COVID-19 pandemic. *Pedagogy in Health Promotion*. https://doi.org/10.1177/2373379920954843

Burrell, A. R., Cavanagh, M., Young, S., & Carter, H. (2015). Team-based curriculum

design as an agent of change. *Teaching in Higher Education*, 20(8), 753–766. https://doi.org/10.1080/13562517.2015.1085856

- Champion, K., & Gunnlaugson, O. (2018). Fostering generative conversation in higher education course discussion boards. *Innovations in Education & Teaching International*, 55(6), 704–712. <u>https://doi.org/10.1080/14703297.2017.1279069</u>
- Chu, T.-H., & Chen, Y.-Y. (2016). With good we become good: Understanding e learning adoption by theory of planned behavior and group influences. *Computers & Education*, 92–93, 37–52. <u>https://doi.org/10.1016/j.compedu.2015.09.013</u>
- Ciabocchi, E., Ginsberg, A., & Picciano, A. (2016). A Study of faculty governance leaders' perceptions of online and blended learning. *Online Learning*, 20(3), 52–73.
- Chiu, T. K. F., & Hew, T. K. F. (2018). Factors influencing peer learning and performance in MOOC asynchronous online discussion forum. *Australasian Journal of Educational Technology*, 34(4), 16–28. https://doi.org/10.14742/ajet.3240
- Colley, P., Schouten, K., Chabot, N., Downs, M., Anstey, L., Moulin, M. S., & Martin, R.E. (2019). Examining online health sciences graduate programs in Canada. *International Review of Research in Open & Distance Learning*, 20(3), 255–267. <u>https://doi.org/10.19173/irrodl.v20i4.4007</u>
- Cottrell, R.R., Girvan, J.T., Seabert, D.M., Spear, C., & McKenzie, J.F. (2018). *Principles and Foundations of Health Promotion and Education*. New York, New York: Pearson.

- Covelli, B. J. (2017). Online discussion boards: The practice of building community for adult learners. *Journal of Continuing Higher Education*, 65(2), 139–145. <u>https://doi.org/10.1080/07377363.2017.1274616</u>
- Creswell, J.W., & Creswell, J.D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage Publications.
- Crosta, L., Manokore, V., & Gray, M. (2016). From an online cohort towards a community of inquiry: International students' interaction patterns in an online doctorate program. *Journal of Interactive Online Learning*, 14(2), 45–57.
- Cutri, R. M., Mena, J., & Whiting, E. F. (2020). Faculty readiness for online crisis teaching: transitioning to online teaching during the COVID-19 pandemic. *European Journal of Teacher Education*, 43(4), 523–541.
 https://doi.org/10.1080/02619768.2020.1815702
- Dawkins-Moultin, L., McDonald, A., & McKyer, L. (2016). Integrating the principles of socioecology and critical pedagogy for health promotion health literacy interventions. *Journal of Health Communication*, *21*, 30–35. https://doi.org/10.1080/10810730.2016.1196273
- Dalvi-Esfahani, M., Wai Leong, L., Ibrahim, O., & Nilashi, M. (2020). Explaining students' continuance intention to use mobile web 2.0 learning and their perceived learning: An integrated approach. *Journal of Educational Computing Research*, *57*(8), 1956–2005. https://doi.org/10.1177/0735633118805211
- Elkaseh, A., Wong, K.W., & Fung, C.C. (2015). A review of the critical success factors of implementing E-learning in higher education. *International*

Journal of Technologies in Learning, 22(2), 1–13.

- Evans, S. M., Ward, C., & Reeves, S. (2017). An exploration of teaching presence in online interprofessional education facilitation. *Medical Teacher*, 39(7), 773–779. <u>https://doi.org/10.1080/0142159X.2017.1297531</u>
- Frazer, C., Henline Sullivan, D., Weatherspoon, D., & Hussey, L. (2017). Faculty perceptions of online teaching effectiveness and indicators of quality. *Nursing Research and Practice*, 2017. <u>https://doi.org/10.1155/2017/9374189</u>
- Figueroa, J. L., Birch, D. A., Rasar King, L., & Cottrell, R. R. (2015). CEPH accreditation of stand-alone baccalaureate programs: A preliminary mapping exercise. *Health Promotion Practice*, 16(1), 115–121. https://doi.org/10.1177/1524839914535778
- Gardner, J. K., Ronzio, C., & Snelling, A. (2018). Transformational learning in undergraduate public health education: Course design for generation z. *Pedagogy in Health Promotion*, 4(2), 95–100. <u>https://doi.org/10.1177/2373379917721722</u>
- Garrison, D. R. (2017). E-learning in the 21st century: A community of inquiry framework for research and practice. New York, NY: Routledge.
- Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2), 87–105. <u>https://doi.org/10.1016/S1096-7516(00)00016-6</u>
- Garrison, D. R., & Arbaugh, J. B. (2007). Researching the community of inquiry framework: Review, issues, and future directions. *The Internet and Higher Education*, 10(3), 157–172. <u>https://doi.org/10.1016/j.iheduc.2007.04.001</u>

- Gill, S. L. (2020). Qualitative sampling methods. *Journal of Human Lactation* 36(4), 579–581. <u>https://doi.org/10.1177/0890334420949218</u>
- Glanz, K. (2017). Scholarship on teaching and learning in health promotion: New and emerging opportunities. *Pedagogy in Health Promotion*, 3(1), 6–8. https://doi.org/<u>10.1177/2373379916689479</u>
- Glanz, K., Rimer, B.K., & Viswanath, K. (2015). health behavior: Theory, research, and practice. San Francisco, CA: Jossey-Bass.
- Green, L. W. (2016). Turnstile careers between academia and practice. *Pedagogy in Health Promotion*, 2(4), 221–238. https://doi.org/10.1177/2373379916673375
- Grenon, V., Lafleur, F., & Samson, G. (2019). Developing the techno-pedagogical skills of Online University Instructors. *International Journal of E-Learning & Distance Education*, 34(2), 1–15.
- Gray, D. J., Kurscheid, J., Mationg, M. L., Williams, G. M., Gordon, C., Kelly, M.,
 Wangdi, K., & McManus, D. P. (2020). Health-education to prevent COVID-19
 in schoolchildren: a call to action. *Infectious Diseases of Poverty*, 9(1), 81.
 https://doi.org/10.1186/s40249-020-00695-2
- Guerrero-Roldán, A.-E., & Noguera, I. (2018). A model for aligning assessment with competences and learning activities in online courses. *The Internet and Higher Education*, *38*, 36–46. <u>https://doi.org/10.1016/j.iheduc.2018.04.005</u>
- Guest, G., Namey, E., & McKenna, K. (2017). How many focus groups are enough?
 building an evidence base for nonprobability sample sizes. *Field Methods*, 29(1), 3–22.

Guest, G., Namey, E., & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *PLoS ONE*, *15*(5), 1–17.

https://doi.org/10.1371/journal.pone.0232076

- Gurley, L. E. (2018). Educators' preparation to teach, perceived teaching presence, and perceived teaching presence behaviors in blended and online learning environments. *Online Learning*, 22(2), 197–220. https://doi.org/10.24059/olj.v22i2.1255
- Hansen, D. E. (2016). Cohesion in online student teams versus traditional teams. *Journal of Marketing Education*, 38(1), 37–46. <u>https://doi.org/10.1177/0273475315594463</u>
- Harper, G. W., & Neubauer, L. C. (2020). Teaching during a pandemic: A model for trauma-informed education and administration. *Pedagogy in Health Promotion*. https://doi.org/<u>10.1177/2373379920965596</u>
- Hart Research Associates. (2015). Falling short? College learning and career success:Selected findings from online surveys of employers and collegestudents. Washington, DC: Association of American Colleges & Universities.
- Harwood, K.J., McDonald, P.L., Butler, J.T., Drago, D., & Schlumpf, K.S. (2018).
 Comparing student outcomes in traditional vs intensive, online graduate programs in health professional education. *BMC Medical Education*, *18*(1), 1–9.
 https://10.1186/s12909-018-1343-7
- Holbeck, R., & Hartman, J. (2018). Efficient strategies for maximizing online student satisfaction: Applying technologies to increase cognitive presence, social

presence, and teaching presence. *Journal of Educators Online*, 15(3), 91–95. https://doi.org/10.9743/jeo.2018.15.3.6

- Hughes, M. C., Henry, B. W., & Kushnick, M. R. (2020). Teaching during the pandemic? An opportunity to enhance curriculum. *Pedagogy in Health Promotion*, 6(4), 235–238. https://doi.org/<u>10.1177/2373379920950179</u>
- Ibrahim, J. (2020). From survive to thrive: Using professional development to advance online teaching. *Journal of Literacy & Technology*, *21*(3), 44–58.
- Jackson, S. H. (2019). Student questions: A path to engagement and social presence in the online classroom. *Journal of Educators Online*, 16(1), 1–7. <u>https://doi.org/10.9743/jeo.2019.16.1.6</u>
- Jeffery, M., & Ahmad, A. (2018). A conceptual framework for efficient design of an online operations management course. *Journal of Educators Online*, 15(3), 112– 125. <u>https://doi.org/10.9743/jeo.2018.15.3.5</u>
- Jeong, S. Y., & Kim, K. M. (2016). Influencing factors on hand hygiene behavior of nursing students based on theory of planned behavior: A descriptive survey study. *Nurse Education Today*, 36, 159. <u>http://doi.org/10.1016/j.nedt.2015.09.014</u>
- Jeong, J., González-Gómez, D., & Cañada-Cañada, F. (2016). Students' perceptions and emotions toward learning in a flipped general science classroom. *Journal of Science Education & Technology*, 25(5), 747–758.

https://doi.org/10.1007/s10956-016-9630-8

Johnston, S. (2011). A golden age for adult education: The collective disorienting dilemma. *College Quarterly*, *14*(4), 7.

- Kahlke, R.M. (2014). Generic qualitative approaches: Pitfalls and benefits of methodological mixology. *International Journal of Qualitative Methods*, 13.
 <u>https://doi.org/10.1177/160940691401300119</u>
- Kahlke, R. (2018). Reflection/commentary on a past article: "Generic qualitative approaches: Pitfalls and benefits of methodological mixology": *International Journal of Qualitative Methods*. https://doi.org/10.1177/1609406918788193
- Kas-Osoka, C. N., Bradley, L. J., Coffman, R., & Orpinas, P. (2018). Developing online modules for a "health and wellness" course: Adapting active learning strategies to the online environment. *Pedagogy in Health Promotion*, 4(4), 254–259. https://doi.org/10.1177/2373379917750167
- Keengwe, J., Adjei-Boateng, E., & Diteeyont, W. (2013). Facilitating active social presence and meaningful interactions in online learning. *Education & Information Technologies*, 18(4), 597–607. <u>https://doi.org/10.1007/s10639-012-9197-9</u>
- Kelsen, B., & Flowers, S. (2018). Personality, Collaboration, Motivation and Engagement in a Cross-Border Online Exchange. *International Journal on E-Learning*, 17(2), 175–198.
- Kibaru, F. (2018). Supporting Faculty to Face Challenges in Design and Delivery of Quality Courses in Virtual Learning Environments. *Turkish Online Journal of Distance Education (TOJDE)*, 19(4), 176–197.
- Kilis, S., & Yildirim, Z. (2019). Posting patterns of students' social presence, cognitive presence, and teaching presence in online learning. *Online Learning*, 23(2), 179–195. <u>https://doi.org/10.24059/olj.v23i2.1460</u>

- Kim, H., Lee, M. Y., & Kim, M. (2014). Effects of mobile instant messaging on collaborative learning processes and outcomes: the case of South Korea. *Educational Technology & Society*, 17, 31–42.
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part
 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1),
 120–124. <u>https://doi.org/10.1080/13814788.2017.1375092</u>
- Kovanović, V., Gašević, D., Joksimović, S., Hatala, M., & Adesope, O. (2015). Analytics of communities of inquiry: Effects of learning technology use on cognitive presence in asynchronous online discussions. *Internet & Higher Education*, 27, 74–89. https://doi.org/10.1016/j.iheduc.2015.06.002
- Lange, C., & Costley, J. (2020). Improving online video lectures: learning challenges created by media. *International Journal of Educational Technology in Higher Education*, 17(1), 1–18. <u>https://doi.org/10.1186/s41239-020-00190-6</u>
- Li, K., Li, Y., & Franklin, T. (2016). Preservice teachers' intention to adopt technology in their future classrooms. *Journal of Educational Computing Research*, 54(7), 946–966. https://doi.org/10.1177/0735633116641694
- Liao, H., & Hitchcock, J. (2018). Reported credibility techniques in higher education evaluation studies that use qualitative methods: A research synthesis. *Evaluation* and Program Planning, 68, 157–165.

https://doi.org/10.1016/j.evalprogplan.2018.03.005

Liu, L. (2016). Using generic inductive approach in qualitative educational research: A case study analysis. *Journal of Education and Learning*, *5*(2), 129–135.

- Liyanagunawardena, T. R., & Aboshady, O. A. (2018). Massive open online courses: A resource for health education in developing countries. *Global Health Promotion*, 25(3), 74-76. http://doi.org/10.1177/1757975916680970
- Lee, D. & Combes, N. (2020, July 14). The effect of online core courses enrollment on student success: The case of university system of Georgia. *American Journal of Distance Education*. <u>http://10.1080/08923647.2020.1768817</u>
- Lee, S.J., & Huang, K. (2018). Online interactions and social presence in online learning. *Journal of Interactive Learning Research*, 29(1), 113–128.
- le Roux, I., & Nagel, L. (2018). Seeking the best blend for deep learning in a flipped classroom - viewing student perceptions through the Community of Inquiry lens. *International Journal of Educational Technology in Higher Education*, 15(1), 1. <u>https://doi.org/10.1186/s41239-018-0098-x</u>
- Luongo, N. (2018, July). An examination of distance learning faculty satisfaction levels and self-perceived barriers. *Journal of Educators Online*, 15(2).
- Mackieson, P., Shlonsky, A., & Connolly, M. (2019). Increasing rigor and reducing bias in qualitative research: A document analysis of parliamentary debates using applied thematic analysis. *Qualitative Social Work*, 18(6), 965–980.
 https://doi.org/10.1177/1473325018786996
- Maher, D., & Prescott, A. (2017). Professional development for rural and remote teachers using video conferencing. *Asia-Pacific Journal of Teacher Education*, 45(5), 520–538.
- Majeski, R. A., Stover, M., & Valais, T. (2018). The community of inquiry and

emotional presence. Adult Learning, 29(2), 53-61.

http://doi.org/10.1177/1045159518758696

- Mandelbaum, J. (2021). COVID-19 Pandemic highlights the need for teaching health communication to public health students. *Pedagogy in Health Promotion*. https://doi.org/<u>10.1177/2373379920957970</u>
- Maxwell, J. A. (2020). Why qualitative methods are necessary for generalization. *Qualitative Psychology*. <u>https://doi.org/10.1037/qup0000173</u>
- McCutcheon, K., O, H. P., & Lohan, M. (2018). Online learning versus blended learning of clinical supervisee skills with pre-registration nursing students: A randomized controlled trial. *International Journal of Nursing Studies*, 82, 30–39. https://doi.org/10.1016/j.ijnurstu.2018.02.005
- McBride, L. G., & Kanekar, A. S. (2015). The scholarship of teaching and learning:
 Origin, development, and implications for pedagogy in health
 promotion. *Pedagogy in Health Promotion*, 1(1), 8–14.
 https://doi.org/10.1177/2373379914557498
- McClannon, T. W., Cheney, A. W., Bolt, L. L., & Terry, K. P. (2018). Predicting sense of presence and sense of community in immersive online learning environments. *Online Learning*, 22(4), 141–159. <u>https://doi.org/10.24059/olj.v22i4.1510</u>
- McCutcheon, V. E., Grant, J. B., & Schulenberg, S. E. (2020). Answering the call of COVID-19: An integrated mental health response considering education, training, research, and service. *Psychological Trauma: Theory, Research, Practice and*

Policy, *12*(S1), S284–S286. <u>https://doi.org/10.1037/tra0000896</u>

Merzel, C. R. (2021). The road to a new normal: Reflecting on pedagogy during a pandemic. *Pedagogy in Health Promotion*, 7(1), 3–4. https://doi.org/<u>10.1177/2373379920988266</u>

Miller, M. E., Newton, K., Stover, S., Miller, B., & Buttolph, J. (2020). Comparing delivery methods of an introductory nutrition course using the community of inquiry. *Journal of Nutrition Education & Behavior*, 52(4), 401–406. https://doi.org/10.1016/j.jneb.2019.09.007

- National Commission for Health Education Credentialing. (n.d.). Continuing education. http://www.nchec.org/continuing-educaiton
- Nelson-Hurwitz, D. C., & Lee, T. H. (2020). Redesigning an undergraduate global health course to increase student engagement and incorporate high-impact educational practices. *Pedagogy in Health Promotion*. https://doi.org/10.1177/2373379920974396

Nelson-Hurwitz, D. C., Tagorda, M., Kehl, L., Buchthal, O. V., Braun, K. L. (2018). Developing an undergraduate public health introductory core course series. *Frontiers in Public Health*,

6, 155. <u>https://doi.org/10.3389/fpubh.2018.00155</u>

Nistor, C. M., & Comanetchi. (2019). Feedback as a Powerful Teaching Tool: Online Versus Face-to-Face. *ELearning & Software for Education*, *2*, 110–115. <u>https://doi.org/10.12753/2066-026X-19-084</u>

Olesova, L., Slavin, M., & Jieun Lim. (2016). Exploring the effect of scripted roles on

cognitive presence in asynchronous online discussions. Online Learning, 20(4),

34-53. https://doi.org/10.24059/olj.v20i4.1058

- Olesova, L., & Campbell, S. (2019). The impact of the cooperative mentorship model on faculty preparedness to develop online courses. *Online Learning*, 23(4), 192– 213. <u>https://doi.org/10.24059/olj.v23i4.2089</u>
- Orcutt, J. M., & Dringus, L. P. (2017). Beyond being there: Practices that establish presence, engage students and influence intellectual curiosity in a structured online learning environment. *Online Learning*, 21(3), 15–35. <u>https://doi.org/10.24059/olj.v21i3.1231</u>
- Orlando, J. (2016). A comparison of text, voice, and screencasting feedback to online students. American Journal of Distance Education, 30(3), 156–166. <u>https://doi.org/10.1080/08923647.2016.1187472</u>
- O'Regan, M. (2020). Learning at a distance but not a distance learner: Meeting the needs of a diverse body of students post covid-19. The All Ireland Journal of *Teaching & Learning in Higher Education*, 12(2), 1–9.
- Patton, M. Q. (2015). *Qualitative Research & Evaluation Methods*. Thousand Oaks, CA: Sage Publications
- Peacock, S., & DePlacido, C. (2018). Supporting staff transitions into online learning: A networking approach. *Journal of Perspectives in Applied Academic Practice*, 6(2), 67–75. https://doi.org/10.14297/jpaap.v6i2.336
- Pears, M., Yiasemidou, M., Ismail, M. A., Veneziano, D., & Biyani, C. S. (2020). Role of immersive technologies in healthcare education during the COVID-19

epidemic. Scottish Medical Journal. https://doi.org/10.1177/0036933020956317

- Pinahs-Schultz, P., & Beck, B. (2016). Development and assessment of signature assignments to increase student engagement in undergraduate public health. *Pedagogy in Health Promotion*, 2(3), 206–213. https://doi.org/10.1177/2373379915606454
- Primhak, R., & Gibson, N. (2019). Workplace-based assessment: how to use case-based discussion as a formative assessment. *Breathe (Sheffield, England)*, 15(3), 163– 166. https://doi.org/10.1183/20734735.0209-2019
- Ravitch, S.M. & Carl, N.M. (2016). *Qualitative research: Bridging the conceptual, theoretical, and methodological.* Thousand Oaks, CA: Sage Publications.
- Resnick, B., Leider, J. P., & Riegelman, R. (2018). The landscape of US undergraduate public health education. *Public Health Reports*, *133*(5), 619–628. <u>https://doi.org/10.1177/0033354918784911</u>
- Richardson, J. C., Besser, E., Koehler, A., Lim, J., & Strait, M. (2016). Instructors' perceptions of instructor presence in online learning environments. *International Review of Research in Open & Distance Learning*, 17(4), 82–103. https://doi.org/10.19173/irrodl.v17i4.2330
- Richardson J. C., & Lowenthal, P. (2017). Instructor social presence: A neglected component of the community of inquiry. *ELearning & Software for Education*, 2, 531–536. <u>https://doi.org/10.12753/2066-026X-17-160</u>
- Richter, S. L., & Schuessler, J. B. (2019). Nursing Faculty Experiences and Perceptions of Online Teaching: A Descriptive Summary. *Teaching & Learning in*

Nursing, 14(1), 26–29. https://doi.org/10.1016/j.teln.2018.09.004

Roberts, R. E. (2020). Qualitative interview questions: Guidance for novice researchers. *Qualitative Report*, 25(9), 3185–3203.

Rolim, V., Ferreira, R., Lins, R. D., & Găsević, D. (2019). A network-based analytic approach to uncovering the relationship between social and cognitive presences in communities of inquiry. *Internet & Higher Education*, 42, 53–65.
https://doi.org/10.1016/j.iheduc.2019.05.001

Rubin, H.J., & Rubin, I.S. (2012). *Qualitative interviewing: The art of hearing data*. Thousand Oak, CA: Sage Publications.

Ruth, S. (2018). Faculty opposition to online learning: Challenges and opportunities. *International Journal of Technology in Teaching & Learning*, 14(1), 12–24.

Ryan, T., Henderson, M., & Phillips, M. (2019). Feedback modes matter: Comparing student perceptions of digital and non-digital feedback modes in higher education. *British Journal of Educational Technology*, 50(3), 1507–1523. https://doi.org/10.1111/bjet.12749

Sadaf, A., & Olesova, L. (2017). Enhancing cognitive presence in online case discussions with questions based on the practical inquiry model. *American Journal of Distance Education*, 31(1), 56–69.

https://doi.org/10.1080/08923647.2017.1267525

Saldana, J. (2016). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage Publications.

Santoso, H. B., Schrepp, M., Isal, R. Y. K., Utomo, A. Y., & Priyogi, B. (2016).

Measuring user experience of the student-centered e-Learning environment. *Journal of Educators Online*, *13*(1), 58–79.

- Scoppio, G., & Luyt, I. (2017). Mind the gap: Enabling online faculty and instructional designers in mapping new models for quality online courses. *Education and Information Technologies*, 22(3), 725-746. <u>http://doi.org/10.1007/s10639-015-</u> <u>9452-y</u>
- Self, S., Fudge, T., Hall, L., & Sullivan, A. (2018). Online class activities: An empirical study of success factors in post-secondary curriculum. *International Journal of Education Research*, 13(1), 55–64.
- Seckman, C. (2018). Impact of interactive video communication versus text-based feedback on teaching, social, and cognitive presence in online learning communities. *Nurse Educator*, 43(1), 18–22.

https://doi.org/10.1097/NNE.00000000000448

- Seymour-Walsh, A. E., Weber, A., & Bell, A. (2020). Pedagogical foundations to online lectures in health professions education. *Rural and Remote Health*, 20(2). https://doi.org/10.22605/RRH6038
- Shoepe, T. C., McManus, J. F., August, S. E., Mattos, N. L., Vollucci, T. C., & Sparks, P. R. (2020). Instructor prompts and student engagement in synchronous online nutrition classes. *American Journal of Distance Education*, 34(3), 194–210. https://doi.org/10.1080/08923647.2020.1726166

Sinacori, B.C. (2020). How nurse educators perceive the transition from the traditional

classroom to the online environment: A qualitative inquiry. *Nursing Education Perspectives*, *1*. <u>https://doi.org/10.1097/01.NEP.00000000000490</u>

- Society for Public Health Education. (2021). Areas of responsibilities, competencies, and sub-competencies for health education specialist practice analysis II. Retrieved from <u>Areas of Responsibilities, Competencies of Health Education Specialists -</u> <u>Society for Public Health Education - SOPHE</u>
- Stahl, N. A., & King, J. R. (2020). Expanding approaches for research: Understanding and using trustworthiness in qualitative research. *Journal of Developmental Education*, 44(1), 26–28.
- Steele, J., & Holbeck, R. (2018). Five elements that impact quality feedback in the online asynchronous classroom. *Journal of Educators Online*, 15(3).
- Stewart, M. K. (2019). The community of inquiry survey: An assessment instrument for online writing courses. *Computers & Composition*, 52, 37–52. https://doi.org/10.1016/j.compcom.2019.01.001
- Sun, Z., Lin, C. H., Wu, M., Zhou, J., & Luo, L. (2018). A tale of two communication tools: Discussion-forum and mobile instant messaging apps in collaborative learning. British Journal of Educational Technology, 49(2), 248–261. <u>https://doi.org/10.1111/bjet.12571</u>.
- Tanis, C.J. (2020). The seven principles of online learning: Feedback from faculty and alumni on its importance for teaching and learning. *Research in Learning Technology*, 28(0), 1–25. <u>https://doi.org/10.25304/rlt.v28.2319</u>

Tang, Y., & Hew, K.F. (2019). Examining the utility and usability of mobile

instant messaging in a graduate-level course: A usefulness theoretical perspective. *Australasian Journal of Educational Technology*, *35*(4), 128–143. <u>https://doi.org/10.14742/ajet.4571</u>

- Tang, Y., & Hew, K. F. (2020). Does mobile instant messaging facilitate social presence in online communication? A two-stage study of higher education students. *International Journal of Educational Technology in Higher Education*, 17(1), 1–17. <u>https://doi.org/10.1186/s41239-020-00188-0</u>
- Turan, Z., & Goktas, Y. (2016). The flipped classroom: Instructional efficiency and impact of achievement and cognitive load levels. *Journal of e-Learning and Knowledge Society*, 12(4), 51-62.
- Vasileiou, K., Barnett, J., Thorpe, S., & Young, T. (2018). Characterizing and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period. *BMC Medial Research Methodology*, 18. https://doi.org/10.1186/s12874-018-0594-7
- Villarreull, J. I. B., Rivera, R. N., & Lima, M. G. B. (2019). Influence of an Instructional Strategy on the Attitudes of University Professors toward Distance Education. *Turkish Online Journal of Distance Education*, 20(3), 73–88.
- Wade, C. H., Barrientos, T., Macarulay, M., Alderson, W., Shibale, P. C., & Le, C. (2018). Student and faculty perspectives on the use of movies in public health pedagogy. *Pedagogy in Health Promotion*, 4(2), 131–139. https://doi.org/10.1177/2373379917715055

Wang, Y., Fang, W.C., Han, J., & Chen, N.S. (2016). Exploring the affordances of

WeChat for facilitating teaching, social and cognitive presence in semisynchronous language exchange. *Australasian Journal of Educational Technology*, *32*(4), 18–37.

- Warwick-Booth, L., Cross, R., Woodwall, J., Bagnall, A.M., South, J. (2019). Health promotion education in changing and challenging times: Reflections from England. *Health Education Journal*, 78(6), 692-704.
- Willett, J., Brown, C., & Danzy-Bussell, L. A. (2019). An exploratory study: Faculty perceptions of online learning in undergraduate sport management programs. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 25. <u>https://10.1016/j.jhlste.2019.100206</u>

World Health Organization. (n.d.). Health promotion. Health promotion (who.int)

- Yeliz, S., Yağmur, S.E., Özlem, C., Sevda, K., & Nuray, C. (2019). Do individual innovation characteristics affect readiness online learning? *Yükseköğretim ve Bilim Dergisi*, 9(2), 342–348. <u>https://10.5961/jhes.2019.336</u>
- Yeong, M.L., Ismail, R., Ismail, N. H., & Hamzah, M. I. (2018). Interview protocol refinement: Fine-tuning qualitative research interview questions for multi-racial populations in Malaysia. *Qualitative Report*, 23(11), 2700–2713.
- Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). Thousand Oaks, CA: Sage.
- Yu-Hui, C., Yu-Chang, H., & Baldwin, S. (2018). Developing online teaching expertise: An analysis of prospective online instructors' reflections. *Journal of Interactive Learning Research*, 29(2), 145–167.

Appendix A: COI Survey

Demographic Items:

What is the name of your fully online class? At which university do you teach? _____ How long have you been teaching in higher education? Do you have experience teaching online before 2020? □Yes □No How long have you been teaching online? What is your gender? \Box Male □Female □Prefer Not to Answer □Other What is the highest degree or level of school you have completed? High school graduate, diploma, or the equivalent \Box Some college credit, no degree □Associate's degree □Bachelor's degree □ Master's degree \Box PhD Are you currently...?

□Full-time faculty

□Adjunct faculty

Please answer the following questions on Teaching, Social, and Cognitive Presence in your online HEP classroom. If you teach multiple online courses, within the HEP department, please select ONE course to answer the questions.

	1-Strongly	2-Disagreee	3- Neutral	4- Agree	5-Strongly
	Disagree				Agree
	1	Teaching Pres	ence	•	1
Design and Organization					
As the instructor					
I clearly communicated					
important course topics.					
I clearly communicated					
important course goals.					
I provided clear					
instructions on how to					
participate in course					
learning activities					
I clearly communicated					
due dates/time frames					
for learning activities.					
Facilitation					
As the instructor					
I was helpful in					
identifying areas of					
agreement and					
disagreement on					
course topics that					
helped students to					
learn.					

Show how strongly you agree or disagree with the questions.

I was helpful in			
guiding the class			
towards			
understanding			
course topics in a			
way that helped			
students			
clarify their			
thinking.			
I helped to keep			
course participants			
engaged and			
participating in			
productive dialogue.			
I helped keep the			
course participants			
on task in a way			
that helped them			
to learn.			
I encouraged			
course participants			
to explore new			
concepts in this			
course.			
I reinforced the			
development of			
a sense of			
community			
among course			
participants.			
Direct Instruction			
As the instructor	 1	1	1
I helped to focus			
discussion on			

relevant issues in			
a way that helped			
students to learn.			
I provided			
feedback that			
helped students			
understand their			
strengths and			
weaknesses			
relative to the			
course's goals and			
objectives.			
I provided			
feedback in a			
timely fashion.			
	Social Preser	nce	
Affective expression			
As the instructor			
I got to know			
course participants			
to provide a			
sense of			
belonging in the			
course.			
I was able to form			
distinct			
distinct impressions of			
impressions of			
impressions of some course			
impressions of some course participants.			
impressions of some course participants. Online or web-			
impressions of some course participants. Online or web- based			

interaction.					
Open Communication				1	1
As the instructor					
I felt comfortable					
conversing					
through the online					
medium.					
I felt comfortable					
participating in					
the course					
discussions.					
I felt comfortable					
interacting with course					
participants.					
Group Cohesion		•	l	1	1
As the instructor					
I created an					
environment where					
students could					
disagree while still					
maintaining a sense					
of trust.					
I created an					
environment where					
all points of views					
were acknowledged					
Online discussions					
helped develop a					
sense of					
collaboration.					
	(Cognitive Pres	ence		
Triggering Event					
As the instructor					

Problems posed increased student interests in course issuesImage: State in the state issuesImage: State issuesCourse activities piqued students curiosity.Image: State issuesImage: State issuesCourse activities piqued students curiosity.Image: State issuesImage: State issuesStudents felt motivated to explore content related questions.Image: State issuesImage: State issuesExploration As the instructorImage: State issuesImage: State issuesImage: State issuesI utilized a variety of information sources to explore problems posed in this course.Image: State issuesImage: State issuesOnline discussions are valuable in helping acquire and appreciate different perspectives.Image: State issuesImage: State issuesI utegration As the instructorImage: State issuesImage: State issuesImage: State issuesI provided learning activities that helped students construct explanations/solutions.Image: State issuesImage: State issuesI provided reflection on course content and discussions to helpImage: State issuesImage: State issues				
interests in course issuesImage: solution of the	Problems posed			
course issuesImage: square	increased student			
Course activities piqued students curiosity.Image: state of the students curiosity.Image: state of the	interests in			
piqued students curiosity.Image: students is the students is the students is the students is the students.Image: students is the students is the students is the students.Students felt motivated to explore content related questions.Image: students is the students.Image: students is the students.Exploration As the instructorImage: students is the students is the students.Image: students is the students.Image: students is the students is the students.Intilized a variety of information sources to explore problems posed in this course.Image: students is the students is the students.Image: students is the students is the students.Image: students is the students.Online discussions are valuable in helping acquire and appreciate different perspectives.Image: students is the students.Image: students is the students.Image: students is the students.Integration As the instructorImage: students is the students is the students.Image: students is the students.Image: students is the students.I provided learning activities that helped students construct explanations/solutions.Image: students is the student is the stu	course issues			
curiosity.Image: second se	Course activities			
Students felt motivated to explore content related questions.Image: content of the second o	piqued students			
motivated to explore content related questions.Image: content explorationImage: content explorationAs the instructorImage: content exploredImage: content exploredImage: content exploredI utilized a variety of information sources to explore problems posed in this course.Image: content exploredImage: content exploredOnline discussions are valuable in helping acquire and appreciate different perspectives.Image: content exploredImage: content exploredImage: content exploredIntegration As the instructorImage: content exploredImage: content exploredImage: content exploredImage: content exploredI provided reflection on course content andImage: content exploredImage: content exploredImage: content exploredImage: content exploredI provided reflection on course content andImage: content exploredImage: content exploredImage: content exploredImage: content exploredI provided reflection on course content andImage: content exploredImage: content exploredImage: content exploredImage: content explored	curiosity.			
explore content related questions.Image: Content related questions.Image: Content related questions.ExplorationAs the instructorI utilized a variety of informationImage: Content related questions.Image: Content related questions.I utilized a variety of informationImage: Content related questions.Image: Content related questions.Image: Content related questions.I utilized a variety of informationImage: Content questions.Image: Content questions.Image: Content questions.I utilized a variety of informationImage: Content questions.Image: Content questions.Image: Content questions.Image: Content questions.Online different perspectives.Image: Content question.Image: Content questions.Image: Content questions.Image: Content questions.I provided reflection on course content andImage: Content questions.Image: Content questions.Image: Content questions.Image: Content questions.	Students felt			
related questions.I will a structorI will a structorI will a structorI utilized a variety of informationI will a structorI will a structorI will a structorI utilized a variety of informationI will a structorI will a structorI will a structorI utilized a variety of informationI will a structorI will a structorI will a structorI utilized a variety of informationI will a structorI will a structorI will a structorI ntegrationI will a structorI will a structorI will a structorI will a structorI provided learning activities that helped students construct explanations/solutions.I will a structorI will a structorI will a structorI provided reflection on course content andI will a structorI will a structorI will a structorI will a structor	motivated to			
ExplorationAs the instructorI utilized a variety of information sources to explore problems posed in this course.Image: Construct on the image: Construct on the image	explore content			
As the instructorI utilized a variety of information sources to explore problems posed in this course.Image: Construct on the source of	related questions.			
I utilized a varietyI utilized a varietyof informationI utilized a varietyof informationI utilized a varietysources to exploreI utilized a varietyproblems posedI utilized a varietyin this course.I utilized a varietyOnlineI utilized a varietydiscussions areI utilized a varietyvaluable inI utilized a varietyhelping acquire andI utilized a varietyappreciateI utilized a varietydifferentI utilized a varietyperspectives.I utilized a varietyIntegrationI utilized a varietyAs the instructorI provided learningactivities that helpedI utilized a varietystudents constructI utilized a varietyexplanations/solutions.I utilized a varietyI provided reflection onI utilized a varietycourse content andI utilized a variety	Exploration			
of information sources to explore problems posed in this course.Image: Construct in this course.Image: Construct in this course.Online discussions are valuable in helping acquire and appreciate different perspectives.Image: Construct image: Construct image: Construct explanations/solutions.Image: Construct image: Construct image: Construct image: Construct explanations/solutions.Image: Construct image: Construct image: Construct image: Construct image: Construct explanations/solutions.Image: Construct image: Construct image: Construct image: Construct image: Construct image: Construct image: ConstructImage: Construct image: Construct image: Construct image: Construct image: ConstructImage: Construct image: Construct image: Construct image: ConstructImage: Construct image: Construct image: ConstructImage: Construct image: Construct image: ConstructImage: Construct image: ConstructI provided reflection on course content andImage: Construct image: ConstructImage: Construct image: ConstructImage: Construct image: Construct	As the instructor			
sources to explore problems posed in this course. Poly and the sources of the source o	I utilized a variety			
problems posed in this course.Image: section of the	of information			
in this course.Image: state of the state of t	sources to explore			
OnlineImage: state of the state	problems posed			
discussions are valuable in helping acquire and appreciate different perspectives.Image: Construct on the second of the secon	in this course.			
valuable in helping acquire and appreciate different perspectives.Image: Construct of the second of t	Online			
helping acquire and appreciate different perspectives.Image: Construct of the second of the	discussions are			
appreciate different perspectives.Image: Construct omegaImage: Construct omegaImage: Construct omegaI provided learning activities that helped students construct explanations/solutions.Image: Construct omegaImage: Construct omegaImage: Construct omegaI provided reflection on course content andImage: Construct omegaImage: Construct omegaImage: Construct omegaImage: Construct omega	valuable in			
different perspectives.Image: Construct of the second sec	helping acquire and			
perspectives.Image: Construct of the second students construct explanations/solutions.Image: Construct explanations/solutions.Image: Construct explanation of the second students construct explanations/solutions.Image: Construct explanation of the second students construct explanations of the second students construct explanation explanations of the second students construct explana	appreciate			
Integration As the instructor I provided learning activities that helped students construct explanations/solutions. I provided reflection on course content and	different			
As the instructor I provided learning activities that helped students construct explanations/solutions. I provided reflection on course content and	perspectives.			
I provided learning activities that helped students construct explanations/solutions. I provided reflection on course content and	Integration			
activities that helpedImage: Construct of the students construct of the	As the instructor			
students construct explanations/solutions.Image: Construct Provided reflection on course content andImage: Construct Provided reflection on Provided reflection on 	I provided learning			
explanations/solutions.I provided reflection on course content and	activities that helped			
I provided reflection on course content and				
course content and				
discussions to help				
	discussions to help			

students understand			
fundamental concepts			
in this class.			
Resolution			
As the instructor			
I provided ways to test			
and apply the knowledge			
created in this course			
I provided solutions to			
course problems that			
can be applied in practice			
Students can apply the			
knowledge created in			
this course to their			
work or other non-class			
related activities			

Please provide an email address to schedule an individual interview:

•

Appendix B: Interview Guide

Materials:

- 1. Consent form for both (a) the participant and (b) one signed to keep on file.
- 2. Notebook and Writing Utensil
- 3. Copy of the interview guide
- 4. Computer with charger

Introduction:

Thank you so much for taking time to participate in this study. I know as educators; you have very limited time and so I appreciate you taking an hour to be here. I am excited to hear about your teaching experiences.

I would like to remind you that this study is part of my dissertation for my PhD in Health Education and Promotion. The purpose of this investigation is to gain a deeper understanding of the perceptions of HEP faulty on the quality of their online classes. This study could influence the quality of future online classes within the HEP program, especially now, as we are experiencing a worldwide pandemic requiring most institutions to turn to online learning.

I expect this interview to take around one hour. However, it may take less time. I will ensure that after fifty minutes have passed, I will wrap up the conversation to ensure you have time to give last minute thoughts and not to exceed 60 minutes.

Lastly, I would like to mention that this interview will be recorded so I can transcribe the interview verbatim. You may request a transcript, and I will provide you a copy. Do you have any questions? Are you ready to begin?

START RECORDING

RQ 2 provide clear instructions on how to participate in course learning activities? (Experience) facilitation of the course (Factors) Facilitation When students have disagreements on course topics, how do you facilitate that dialog? (Experience) facilitation Direct Instruction How do you provide students factors may affect feedback on their strengths What factors may affect impede you providing			148
years? What has been beneficial? What has been difficult?RQMain QuestionProbing QuestionTeaching PresenceDesign and FacilitationRQ 1 RQ 2As an instructor, how do you provide clear instructions on how to participate in course learning activities? (Experience)RQ 3: What factors affect facilitation of the course (Factors)FacilitationRQ 1When students have disagreements on course topics, how do you facilitate that dialog? (Experience)Direct InstructionWhen students students that dialog? (Experience)Direct InstructionHow do you provide students and weaknesses of the	Q 2: How do HEP faculty resence in their online cl Q 3: How do HEP faculty	describe factors that affect their tea ass? perceive alignment of their online cl	ching, social, and cognitive ass with the areas of
RQ Main Question Probing Question Teaching Presence Design and Facilitation RQ 1 As an instructor, how do you provide clear instructions on how to participate in course learning activities? (Experience) RQ 3: What factors affect facilitation of the course learning activities? (Experience) Facilitation RQ 1 When students have disagreements on course topics, how do you facilitate that dialog? (Experience) Vertice of the course topics, how do you facilitate that dialog? (Experience) Direct Instruction How do you provide students factors may affect feedback on their strengths and weaknesses of the What factors may affect impede you providing feedback to your students			rience over the past two
Design and Facilitation RQ 1 RQ 2 As an instructor, how do you provide clear instructions on how to participate in course learning activities? (Experience) (Experience) Facilitation RQ 1 When students have disagreements on course topics, how do you facilitate that dialog? (Experience) Direct Instruction RQ 1 How do you provide students feedback on their strengths and weaknesses of the			Probing Question
RQ 1 As an instructor, how do you provide clear instructions on how to participate in course learning activities? (<i>Experience</i>) RQ 3: What factors affect facilitation of the course facilitation of the course learning activities? (<i>Experience</i>) Facilitation (Factors) RQ 1 When students have disagreements on course topics, how do you facilitate that dialog? (<i>Experience</i>) Direct Instruction How do you provide students feedback on their strengths and weaknesses of the		Teaching Presence	I
RQ 2provide clear instructions on how to participate in course learning activities? (Experience)facilitation of the course (Factors)FacilitationWhen students have disagreements on course topics, how do you facilitate that dialog? (Experience)Jone of the course Direct InstructionRQ 1When students have disagreements on course topics, how do you facilitate that dialog? (Experience)What factors may affect impede you providing feedback to your students 	esign and Facilitation		
RQ 1 When students have disagreements on course topics, how do you facilitate that dialog? (<i>Experience</i>) Direct Instruction RQ 1 RQ 1 How do you provide students feedback on their strengths and weaknesses of the	-	provide clear instructions on how to participate in course learning activities?	RQ 3 : What factors affect the facilitation of the course? (<i>Factors</i>)
disagreements on course topics, how do you facilitate that dialog? (<i>Experience</i>)Direct InstructionRQ 1 RQ 2How do you provide students feedback on their strengths and weaknesses of theWhat factors may affect impede you providing feedback to your student	acilitation		
RQ 1How do you provide studentsWhat factors may affectRQ 2feedback on their strengths and weaknesses of theimpede you providing feedback to your studen	Q 1	disagreements on course topics, how do you facilitate that dialog?	
RQ 2feedback on their strengths and weaknesses of theimpede you providing feedback to your studen	Direct Instruction		
		feedback on their strengths and weaknesses of the	What factors may affect or impede you providing feedback to your students?
(Experience) (Factors) Social Presence			(Factors)

Affective Expression	,	
RQ 1 RQ 2	How do you create a sense of belonging within your class?	
	(Experience)	
Open Communicatio	วท	
RQ 1 RQ 2	How comfortable do you feel, overall, interacting with your students in an online class? (<i>Experience</i>)	What factors affect how you interact with your students online?
	Cognitive Presence	
Triggering Event		
RQ 1 RQ3	How do you design activities that relate to the areas of responsibility and competencies for health education specialists? (Experience)	
	Quality	
RQ 1	What are the strengths of your online class?	
RQ 1	Where are the areas of improvement for your online class?	

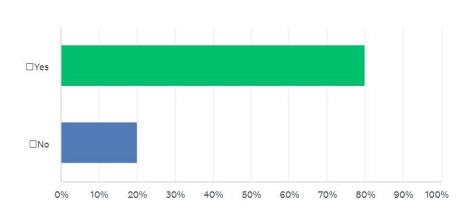
TURN OFF RECORDING

Conclusion

Thank you, once again, for engaging in conversation with me. I have learned a great deal about your experiences with online teaching. Within the next few weeks, I will transcribe this conversation and share the transcripts with you. I encourage you to look over the transcript, and if you feel any additional information is needed, please feel free to email me any additional comments or corrections. Once all the data has been analyzed, I will share the findings with you. Please feel free to email me any questions or comments, you can find my information on the consent form. Appendix C: Demographic and COI Survey Results

How long have you been teaching in higher education?						
3						
5						
7 (3)						
8						
10						
13						
15						
31						

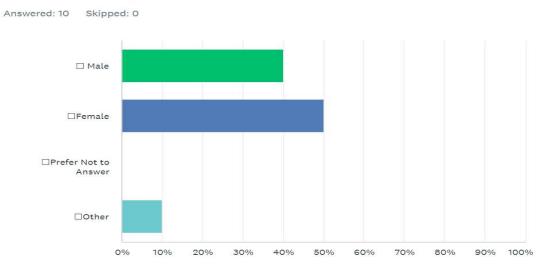
Do you have experience teaching online before 2020?



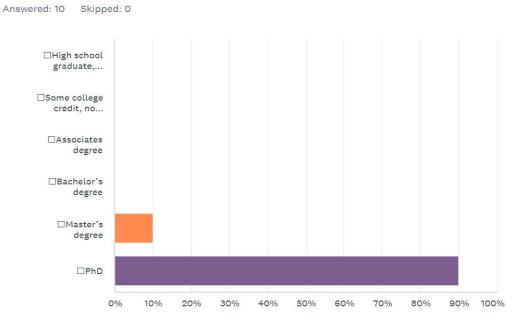
ANSWER CHOICES	▼ RESPONSES	•
▼ □Yes	80.00%	8
▼ □No	20.00%	~
TOTAL		10

	How long have you been teaching online?	
1 year (3)		
3 years		
4 years (2)		
5 years		
6 years		
8 years		

What is your gender?

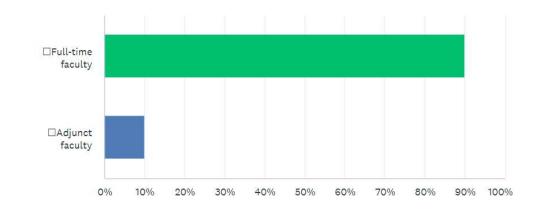


What is the highest degree or level of school you have completed?

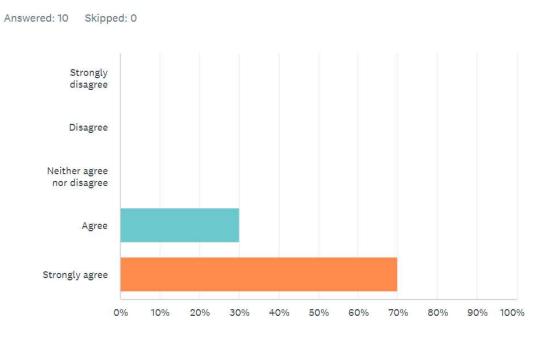


Are you currently ...?

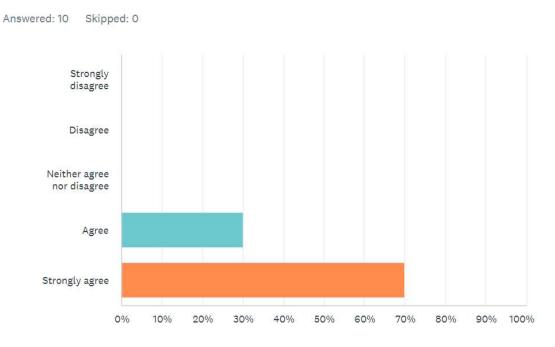
Answered: 10 Skipped: 0



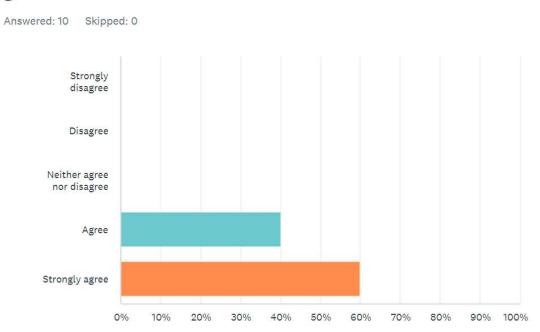
As the instructor: I clearly communicate important course topics.



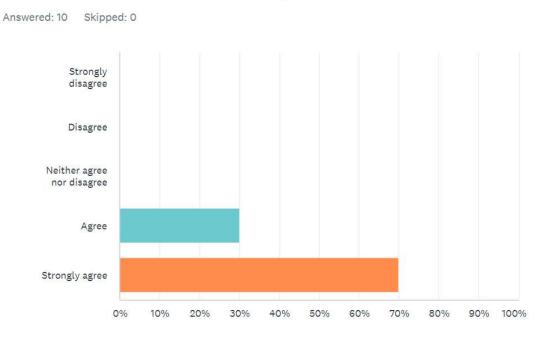
As the instructor: I provide clear instructions on how toparticipate in course learning activities



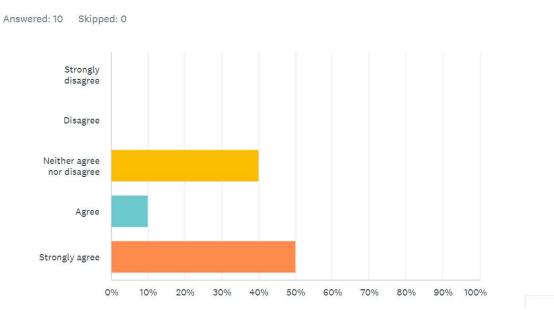
As the instructor: I clearly communicate important course goals.



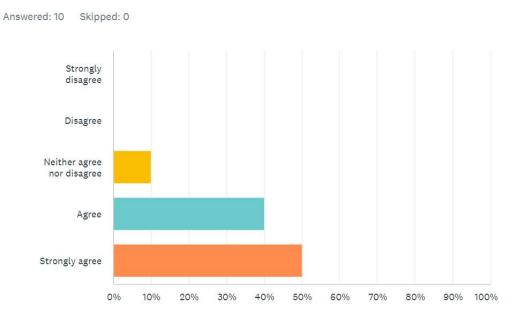
As the instructor: I clearly communicated important due dates/time frames for learning activities.



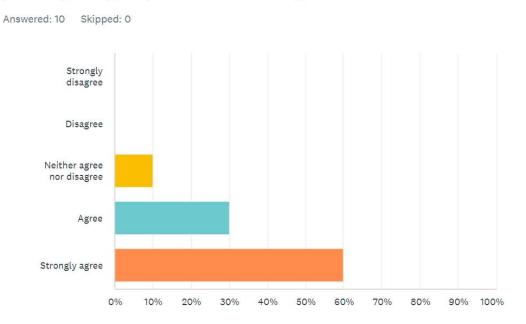
As the instructor I was helpful in identifying areas of agreement and disagreement on course topics that helped students to learn.



As the instructor: I was helpful in guiding the class towards understand course topics in a way that helped students clarify their thinking.

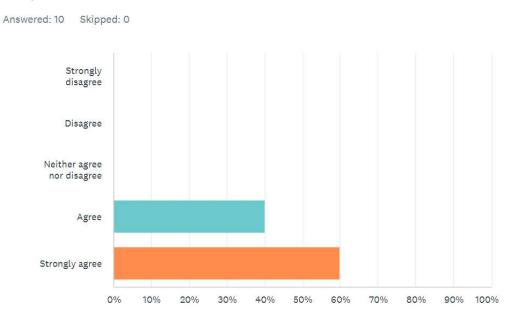


As the instructor: I helped to keep the students engaged and participating in productive dialog.

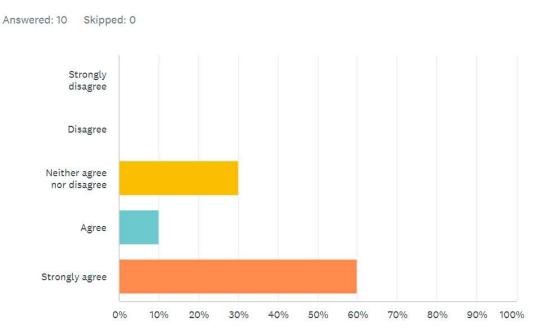


156

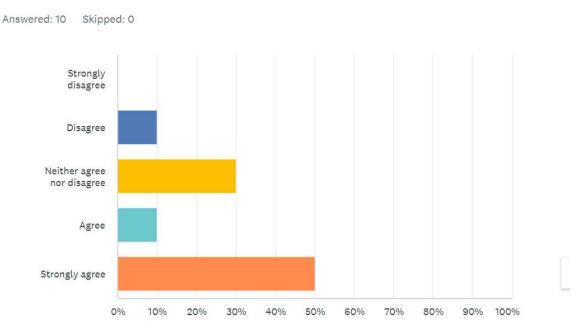
As the instructor: I helped keep students on task in a way that helped them to learn.



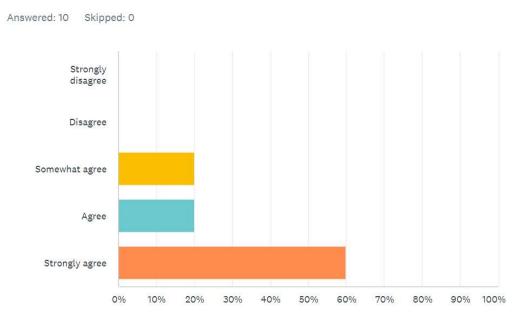
As the instructor: I encouraged student to explore new concepts in this course



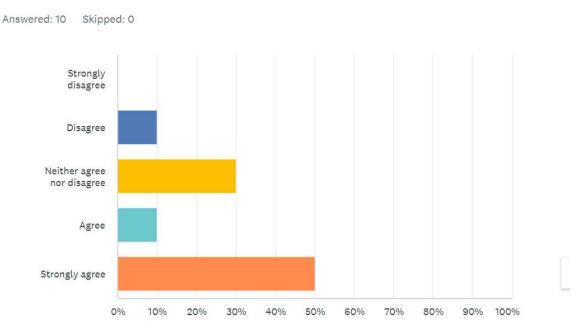
As the instructor: I reinforced the development of sense of community among students.



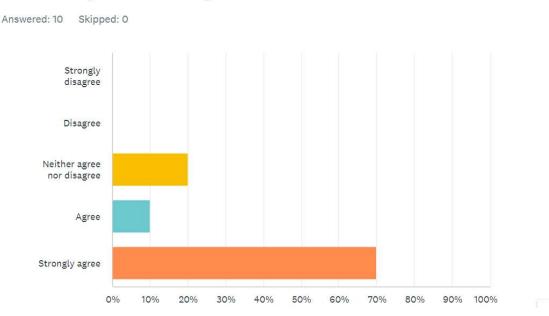
As the instructor: I helped to focus discussions on relevant issues in a way that helped the students to learn.

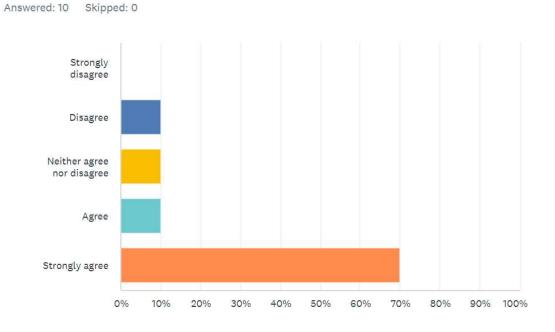


As the instructor: I reinforced the development of sense of community among students.



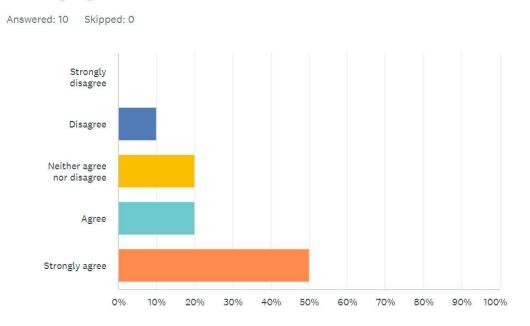
As the instructor: I provided feedback that helped students understand their strengths and weaknesses relative to the course objectives and goals.



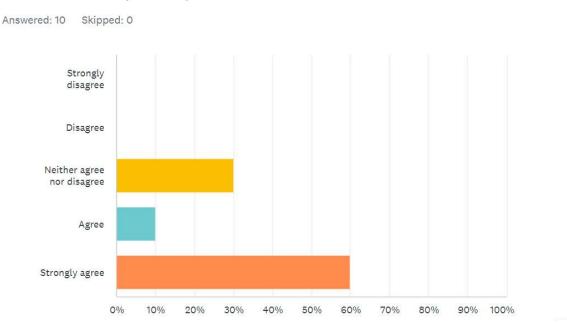


As the instructor: I provide feedback in a timely fashion.

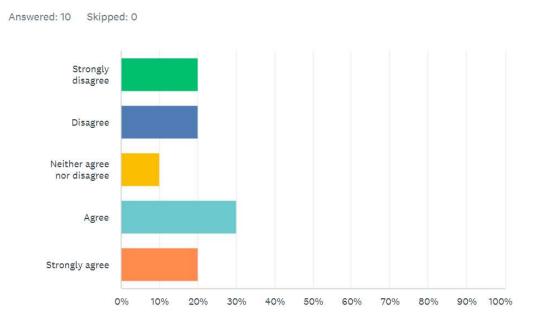
As the instructor: I got to know students to provide a sense of belonging in the course.

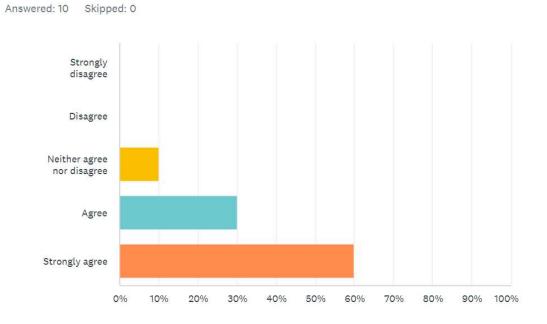


As the instructor: I was able to form distinct impressions of some course participants.



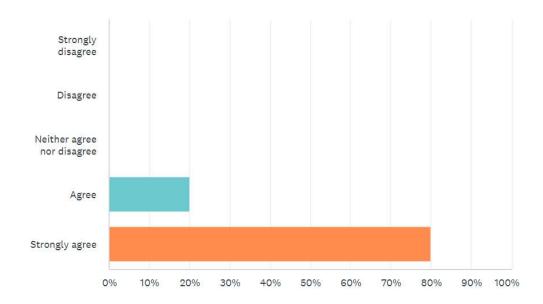
Online or web-based communication is an excellent medium for social interaction.



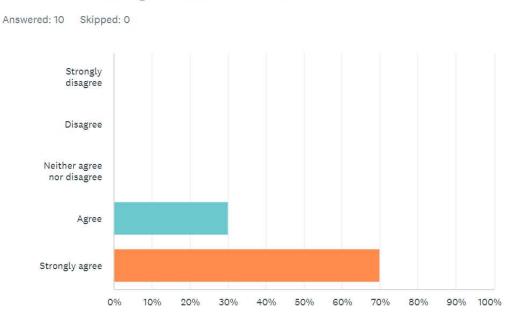


I felt comfortable participating in course discussions.

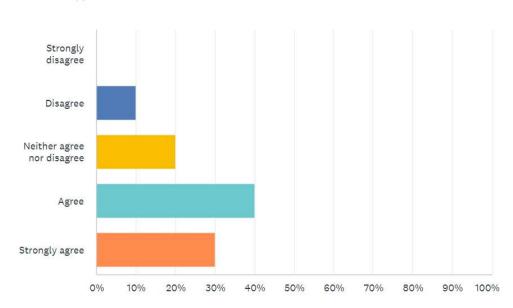
I felt comfortable interacting with course participants

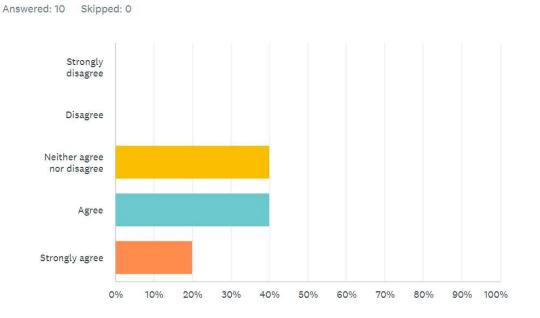


I created an environment where students could disagree while still maintaining a sense of trust.



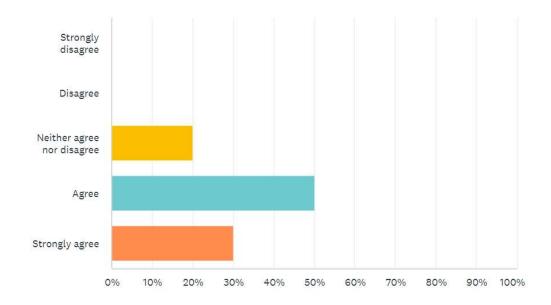
Online discussions help develop a sense of collaboration.

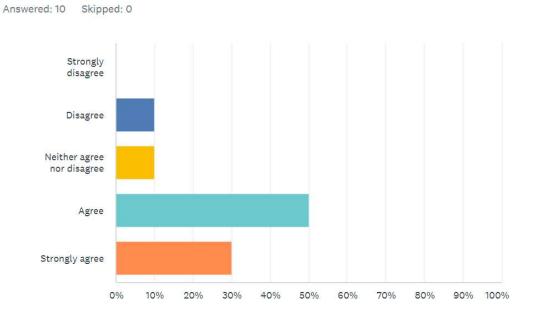




Problems posed increased student interest in course material.

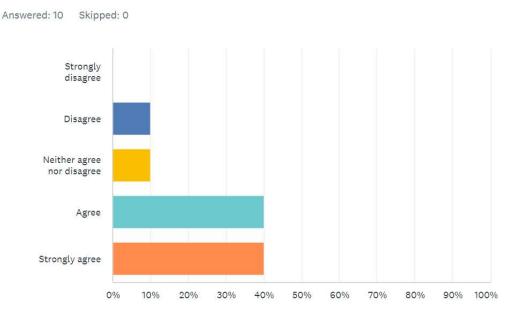
Course activities piqued students curiosity



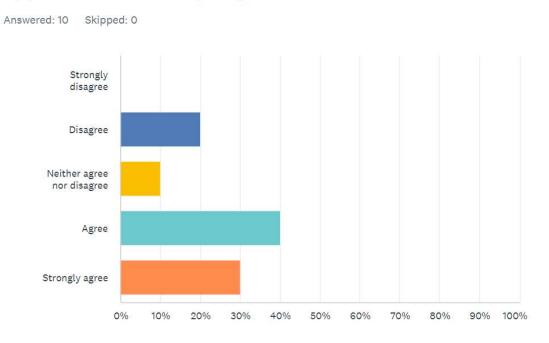


Students felt motivated to explore content related questions

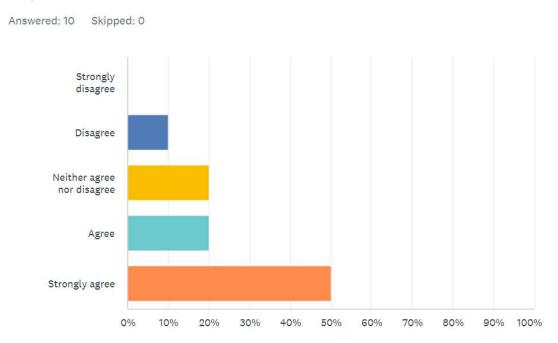
I utilized a variety of information sources to explore problems posed in this course.



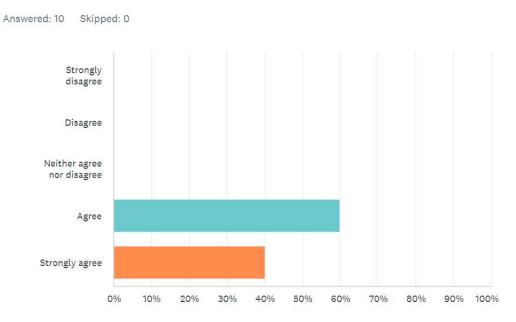
Online discussions are valuable in helping acquire and appreciate different perspectives



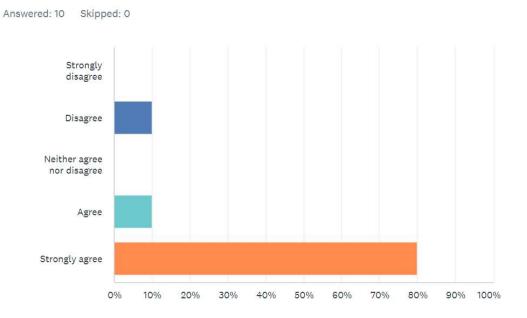
I provide learning activities that help students construct explanations/solutions.



I provide reflection on course content and discussions to help students understand fundamental concepts in this class.

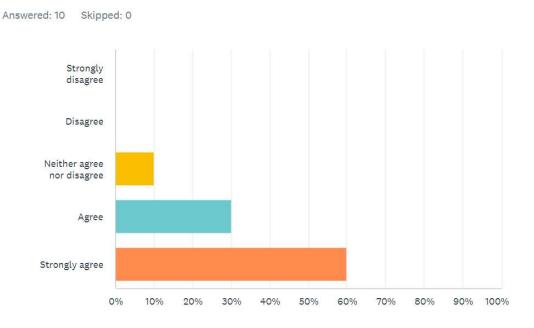


I provide ways to test and apply the knowledgecreated in this course

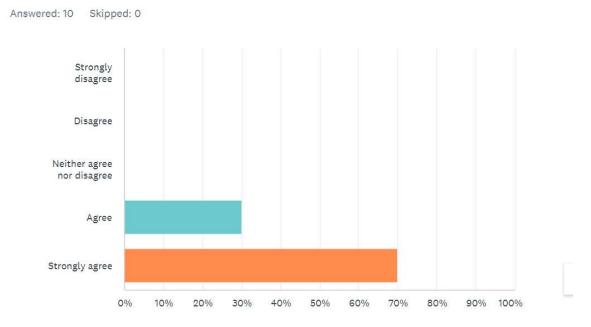


167

I provide solutions to course problems that can be applied in practice.



Students can apply the knowledge created in this course to their work or other non-class related activities



168

Table A1

Can you explain your online teaching experience over the past two years? Follow up: What has been beneficial and what has been difficult?

Theme: Professional Development and experience is important when transitioning to online learning.

1. I was teaching online prior to the COVID pandemic so I had some experience doing it. And I also, through my university, got certified. Took some courses on you know how from the Centers for teaching excellence too oh prepare to develop and teach online courses so for me it was you know kind of an easier process when we had shut down from face-to- face and it kind of move a to online so with online for me what the difficult part is of course the actual development of the course. Once it's developed then it becomes much easier and so that that's the thing you know it's it is easier once it's developed but it is difficult to develop but it takes a lot of work in the forefront.

2. OK, so for me because I had that online experience that was beneficial to have that previous experience. It was really beneficial to my class to avoid having to wear a mask and a shield for my classes. Sometimes we had a choice to teach on the student's preference. My preference, since it was a communication class was to do it fully online. And that was students' preference for the most part as well. So, it was beneficial to continue without too much disruption. The challenge really was engaging the students. 3. Uhh. I think anything I want to face-to-face in the classroom, I can do online. Uhhh the main difficulty is getting students to interact

4. Sure, so let's see over the past two years umm well to be honest 6 or 7 years ago I did teach an online distance college course. But recently due to the pandemic, switching from face-to-face to online that was awkward, and I think stressful for both the students and me. The other experience was purposefully saying I am going to go virtual this semester. Getting permission to do that and developing an online class. That was much better.

5. Sure, so I think there are a couple layers to that. I think first there is the faculty side of things... preparing course work finding innovative ways to activities making sure technology works. There is also the administrative side so how do you actually control quality of all of that, what are appropriate timelines for all of that? What are the resources? And then there is the student component. Which is a lot of engagement and sense of community and different types of learning and how to actually maintain focus especially with everything going on. I mean being online being completely online is awful like I am sure I am not the first person to say it and I am sure I will not be the last. It is umm a challenge to put everything in a palatable online format that maintain that just captures everyone's attention and people can be set up for success. Students whether graduate or undergraduate or doctoral making sure they have everything they need, especially remotely and especially in a more isolated way is pretty difficult. That being said it does create opportunity for revisiting a lot of lectures, syllabus,

inclusivity, there is a lot of awful things that has come in the last year but there have also been opportunities for growth and for that I will say is a positive.

6. Ok well I will start since the pandemic. That was about mid-March where we had a 360 and had to go from campus to a remote situation right there. At that time, a lot of schools did not have Zoom in BB or Canvas and we had to use our own private Zoom unless you did want to pay, you were only allowed 40 minutes max. When the pandemic first hit, I had to figure out. Ok, how am I going to teach students because they had another 6, 7 weeks of school left. I decided to do Zoom but make it optional. Some of my students were living in different areas of the country. Some of my students were living out of the country like halfway around the world where a zoom meeting would be very difficult. Some may not have access to that right there. So, I make it optional. Like I said, we had the 40 minutes, so that is what I did. I gave the students options if they wanted to attend, they still had to do their assignments. They had BB and Canvas. As long as they did what they were supposed to do that was good enough right there.

7. : Sure umm so what I did was I kinda keep everything normal as possible if we had to watch lectures or if we had activities I would put them in break-out rooms. Umm I did get rid of some assignments just to make things easier and for the fall semester2020 I decided to take out more assignments. I knew the student were struggling so I made the assignments shorter or fewer. I would say the easiest part was not having to leave the house or drive in at the same time it is a lot more difficult to engage students. I would say for the most of the part my students were engaged some were not you know just trying to make sure your giving them a quality education. I would also say a difficulty is having everything making sure students are doing ok. For example I had one student in spring of 2020 so when we transitioned. She was a straight A student and then she did not come to class I did not hear from her she was not doing anything. So I reached out to find out what was going on and turns out she was dealing with a serious mental health crisis and didn't know what to do and basically halted and was in a constant state of panic.

8. So nothing was particularly hard for me. I will say that this semester I am doing remote learning. So I am in the classroom and then, so I am teaching my class and then I am interacting with my online world simultaneously and recording it via Blackboard so there is a lot of.. you know I might forget to record or I might forget to share the screen. You know things like that so there is a little bit of a learning curve and when you teach you are trying to establish a flow and get your mojo going and if you have tech glitches it can shake your confidence. I wouldn't want to be a rookie instructor and I wouldn't want to be on the older side where maybe I am not embracing the technology. I think I am at an advantage where I am at I have experience with teaching online ten, twelve years. I am a educator by heart by training. I am not umm I am not risk adverse but I am not adverse to making mistakes I am not adverse to crashing and burning a little bit. I don't think you kinda have to have that attitude a little bit if you are going to be successful trying new stuff. You know I have done some of the Echo 360 and sometimes it gets saved in a funny spot and for example I had I don't know that our university has the latest version of Blackboard and somehow someway there

was a echo 360 virus that I didn't know about that my tech person had to fix and anything recorded before 2021 somehow students couldn't access it.

9. I can't remember it has been 2 or 3 years I switch a class that I had to teach in person planning worksite wellness programs to online that was asynchronous and then obviously due to COVID I last year taught a mix of asynchronous s and umm kind of a hybrid where I would record some of the lectures and then meet synchronous with the students for only about an hour or hour and half about once a week. I have kind of made a move to put all of my course online that is part of our master program to broaden our reach and they will all be asynchronous. So right now I am currently teaching 2 asynchronous online classes.

10. I had previous experience teaching online, so the transition was not too difficult.

Table A2

How do you provide clear instructions on how to participate in course learning activities?

Theme: It is important to provide simple, repetitive instructions in the syllabus

1. CTE they did provide a lot of detailed information on how to actually develop the online courses and so with that they taught you how to the different modules in order since we would have in mind was completely synchronous every online course I teach is asynchronous and so I have to know how to provide the instructions objectives everything to the students so that you know they will have it there in the making up contact me if they have any questions and So what I do is I do provide based on however many week courses I provide step by step instructions in each module. just I

use very simple instruments tools and that's kind of you know what I've learned and what the students have told me that they prefer as well

2. Sure, and I find the term online is very vague and our university is struggling with the term and how do we define "online". We have several variations for online, fully online, partially online you know what it means to teach online. Like I said previously, I was teaching online a combination of synchronous and asynchronous components. For my current issues we were keeping it synchronous we would get together at our regular time and meet via zoom. So that. When you say online, I think that it is important clarification how are people defining online. People say, "Oh I am just doing it via zoom" or are you talking about straight discussion boards leaving the synchronous piece for the students. Which for me is a different type of teaching. You know there are three different types of teaching: you have fully online, synchronous, or a combination of asynchronous and synchronous.

3. A very detailed syllabus. Announcements.

4. Sure, so we use Canvas. So, Canvas is the platform so what I try to do is I try to build in a lot of redundancies into the way I like push out new information. So, I have a home page where the homepage has all the links. So, there is a link to the syllabus, here are the links to the exams, here are the links to the Modules. So really all you have to do is go to that home page and really you find all of the important information. I also have videos.

5. Yeah, that is a really good question. I think that goes back to one of the positives of changing format is actually saying do we all know what is expected or do we not. I will

tell you so in thinking about the design, I consider myself a very organized person. So, for example we use Canvas, and so I have everything for the week in one week. That has been a good map for students to stay on top of things. An hours before every live class I send an announcement with zoom link, so students do not have to search for it. In terms of instruction, I definitely taken a lot of time to simplify instructions, bullet points work really well and also I have been a lot more lenient in the last years just because we have been going through so much but also I have noticed that people are...if students don't understand something that is my fault and I say that hey you didn't understand it, that is my fault let's take a second what questions do you have? what do you need? Ok great let me fix the instructions give you a couple more days and go at it again. Being able to have that transparency like I don't know I am going through the pandemic too. I am trying to figure it out too. Also, every quarter of the class I do an evaluation with me students where they evaluate me and the course and provide feedback what is working what is not working and we go with a live syllabus approach which they seem to like a lot.

6. That is one word. REPETITION

7. So the first thing I did is upload the syllabus so they had everything in writing and then I would go over it in the live session. Then I would also record shorter bits. Like these are the instructions for assignment one lets say. So the students had access to recordings or me live. I also held zoom office hours and which it did actually help too.
8. I have first of all at the beginning of every week I tell them what to do. I have weekly modules and within the modules I have weekly goals. I have specific

instructions within the sub modules. If there is something complex, if I have a complex assignment, I create a echo 360 and I explain everything in great detail and then I provide a example of that assignment that previous student have done. Then if they have issues they can always email me, call me, or video conference.

9. Sure. I would say that has changed hopefully improved over the last few years as our university has put a lot of effort into teaching best practices for this so I have done a lot of PD within our university. So within the syllabus I try to provide detailed instructions of the general types of assignments that we will be doing. Um and try to make sure that it is within the canvas page but also can be downloaded as a PDF and also within the assignment, what I have been doing probably since the spring is providing a description of the assignment and adding to how this assignment is related to the student learning outcomes. You know within the main syllabus so now every assignment also has information on how to submit it, any additional resources and also a grading rubric.

10. Everything is laid out in the syllabus and on Blackboard.

Table A3

How do you facilitate student disagreements on course topics?

Theme: Respect is needed for online discussions

Sub-theme: Discussion boards are moderately used for online discussions

1. Uh, that is a great question. yes yes and yes happens every semester I need you

know with the masters level times where my class is my classes usually their second

semester second semester their program and so their first semester is really where they got to know each other that they have to go straight to my class and it's kind of automatically advised so they've got already know each other and they've already started their group work process meaning they had to do group work in their first semester and so they kind of already know each other and so forth and so when they come to my right class I provide them with the opportunity to either stay with their group as they worked well let me know and we'll look at that in a minute we different groups

2. Umhmm, Umhhmm. Yeah, I can't say there was necessary an argument per se, maybe not seeing all the views, coming in with a bias post and you know that they were not disrespectful, and it didn't necessary come to be a disagreement. You know just making sure. I have had to reiterate that we are in a situation where you are commenting and going beyond that "oh I agree with that" like that first level. Like no we want to have that discussion you want to comment on your peers

3. You know it's hard to get people to have real discussions. Like saying you're going to be graded on your initial commentary then on your response. I had the same problem at Walden in the master's program. Ummm so, uhh you know there were guideline for uhhh respectful communication that they use.

4. So, I actually haven't seen really any disagreements that has gone beyond "well I have a different viewpoint". All of the students have been very very respectful and very professional. It was surprising I was expecting more disagreements, but my plan would be to step in and say like "hey lets take a minute

5. So on a discussion board I wish my students participated more, they don't. But defiantly in classes I teach maybe not as traditional content so I do a lot of infectious disease response work a lot of work with human sexuality so there are always a lot of different opinions. For example, I do a lot of infectious disease research and respond with Covid and we have students that don't believe in COVID public health students don't believe in covid. They don't want to get vaccinated they don't understand the changing messages. I always, and I hope it comes through I want to hear it. I want to hear all of it, and I take it as an opportunity. I tell my students what's the core like what the core of the disagreement is because probably you both are thinking about the same thing but coming out in different angles. So, for example this came out in class today. Mask mandates for children. There was a disagreement in class should they be mandates for children? It was interesting because both sides were saying the same thing.. it is not good for children

6. I do give them a caution we live in a time where people can be vicious with comments and nasty one thing I do warn is even though you may not agree you need to respect their view and be constructive on the issue only

7. I do not really do discussions boards.. I did then I did not like it, so I got rid of them

8. have never had any student disagree with anything on DB other than if it is a debate and they are supposed to debate one another.

9. I do not typically have disagreements in my class

10. I find that when students disagree it is just lack of understanding from the other side. I just recently had an incident where one student misgendered another student and it created a problem. I had to point out both sides and say, "hey she just didn't know".

Table A4

How do you provide students with feedback?

Theme: Direct, personalized feedback is beneficial to the students to be successful

1. well, you know assignments are due every Thursday they have so many assignments that they have to do, but the quizzes, the quizzes are ways that I provided in each module. With every module there's a small quiz so that way I know that the students are engaged that they're having to look at all the materials module because this comes from all the materials you know so that way and so it's you know those kinds of grades and then of course the assignment says I'm grading them whenever they do that right there is how I provide information. What they're doing well what they need to improve on. I do have, usually, Tuesdays that I do I try to keep the days and things like that always consistent so students will always know but usually on Tuesdays from 2:00 to 4:00 PM Eastern Time I have that I called virtual office hours in which the students and so that they can get on anytime during that time through virtual we use blackboard but anyway but the length is posted on their course and they just go in there and then when I see that they're on I get on

2. Through the commentary back on the discussion responses. So sometimes I will jump in on that and provide commentary then rather than grade them online. That is

something that is online seen by them, but on the discussion post, you know other can see that.

3. I give them commentary on issues, and I point out if I think they had a special insight or they misapply their concept I will give it to them after the presentation. Even if I think they missed the boat significantly, its its you know I will consider the feedback sufficient remedy and they won't have to do anything else. They do good stuff for the most part. Then I have a rubric for one class the assigned discussions I have a grading rubric and ummm and so there are like 4 criteria, so I just enter the score on that and if and then there is room for comments on Canvas.

4. Uhh so I when they upload their assignments, I have quite a few writing assignments. Even though I don't grade on grammar, and I don't grade on the the technical aspects of the writing I provide a lot of comments like on the document itself and in the comment box. Like "good job" or "hey can you write a little more next time" or "hey this is really interesting". I also. So, that is individual. Each Monday, so each week I send out announcements and say "hey everyone is doing really great on this" umm "I would like to see more of this" and I also put messages on the group me. Those are just general messages. If a student is falling behind and this is one of my policies in the course. If a student is falling behind, then I reach out to them with feedback like what can I do to help get you back on track.

5. Yeah so, I definitely do like the rubrics are built into canvas. I do free comments. I try to. This is something that had interesting feedback from my students. How important feedback was. Just giving a grade, it could have been a 100% it doesn't

matter but the personalization of the feedback it really mattered to them. So, I try to always have some layer of even it is a 100 or 0 I have some sort of hey you I see you and they seem to like that. So, I use the rubric and free form comments.

6. If I. I sometimes say you did an outstanding job. Sometimes with the paper I explain. Especially APA. I find APA is very easy. I am very fussy about plagiarism and citing sources. It is one of the easiest things. Whatever source you are using you put the authors last name and the year. Then you provide a BIB I explain the penalties if they do not cite right.

7. So, I would give feedback live when they were sharing and more of the written type one. For one class I would actually have them do Photovoice instead of written assignments. So, either myself or my TA would provide written feedback and send it back to the students. So, they knew what was great and what they could improve upon.

8.I read every discussion post and I try to do the sandwich method and find something positive. I am corrective about something and then I find them doing something good. I give very specific feedback. Probably more so than they would get with anyone else, that is my perception, anyhow. They are very appreciative of it they give very good feedback. Umm one of the dangers I fear is you give feedback and are they digesting the feedback or is it, ok I got a B+, ok fine. So, the issue is I want feedback on my feedback. But generally speaking, on my evaluations they put thank you so much no one give this much feedback. So, I spend a lot of time on that.

9. Typically within Canvas since I have the grading rubric set up in there. I will go through and if I don't mark them with the top amount of points in that category then I

will provide the reason why. I will give a note why I marked off points and sometimes I will give either additional feedback on the document itself through. If it is for worksite wellness class, they have assignments that build up to their actual final project. So, if they do the assignment and make the corrections that I encourage them to make then essentially they have their end of the semester project. So, I try to go into the document and make detailed feedback there so they can see. Whether they actually look or not.. I am not convinced no matter how many times I tell them. I try to at least make the effort.

10. I provide individualized feedback on their assignments and jump in on discussion boards.

Table A5

How do you create a sense of belonging with your class?

Theme: Creating personal experience for the students.

Sub-theme: The first week is very important to create a sense of belonging.

1. you try at the beginning. The start of the course you know you do those things; the name escapes me. those things this kind of gets old after a while only right classes I teach undergraduate online courses, but I also teach the graduate level graduate level most of the time the student's kind of already know each other OK as they bought the one online course to the other all my classes on my classes they have to get group work

2. You know there is room for growth for that. I will have them introduce themselves. I did something where they shared a poster, no not a poster, an image of there they would rather be, well I can't remember what the title was.

Maybe, making a video, you know for me. Well, that is one sided where I make just a video, but you know.

3. So initially I have some kind of a you know means of introducing themselves. I have a ice breaker I suggest topics. Especially, we are partially back to face-to-face, but I am only online, not just for one class but the entire semester, fortunately. Umm and uh so uh to give them some kind of normal experience to get to know their classmates.

4. Right. So, one of the ways I do that is I post about me videos. I post videos where I describe who I am and about me. I have gotten positive feedback from students about that they appreciate that.

5. For example for program planning I am like Hello Program Planners, and they are like oh I am a program planner and being able to say you're the highlight of my day today how is everyone doing?

6.I check my email every day. I check my text messages. None of them really call me most of them text me. I tell them in the beginning that if you need me to get back to you, I can respond as early as 3 seconds or 72 hours. There are times I may not have access. I try to get back to them within 24 hours.

7. Ok. Umm well I open it up and I do this in person too. Every class I have people introduce themselves. When it was online, I had people do it if they wanted to. I did not force anyone. It was actually good because one of my bigger classes is human sexuality and some of the students' parents did not know they were taking that class. So, umm I did not force students but I would ask them what is your favorite superhero and making it less teachy I guess. Making it less formal I am very informal when teaching I am very conversational and will have a lot of conversations and a lot of the stuff we talk about, you know being in health promotion, people take different sides and I try to make sure everyone has a voice no matter what.

8. Umm you know I have the intro db where I ask them about their lives, and I do have DB where they can interact with one another. I will personally reach out. I will admit that is something I need to improve is a sense of belonging. I don't go out of my way to do that. I have in the past. You know one of the things that happens is whatever the behavior is you have tendency to do what you have done especially in online world. You copy your course your assignments and on the DB I sometimes have them do presentations. They have to watch someone else and that creates a sense of community. Outside of intro post and presentation I don't really have anything to formalized.

9. I think it is somewhat easier because several of the students know each other from other classes. We don't have a massive program umm so I can see in their comments oh it is nice to see you in class again. Also, in one of my classes they are working on a service-learning project. So, hopefully they have the feeling of belonging. I don't know yet. This is my first time teaching this class online.

10. I make myself available and respond to any emails quickly. I have my students do an introduction discussion board.

Table A6

How comfortable do you feel interacting with your class, online?

Theme: Confidence is needed to interact with students.

1. actually because The thing is I let the students know that I let him know I'm old school technology is not my thing and so whenever they submit the document by tell them to please submit it in a Word document send things that that later I will be able to open which times I still do and I had this in an email controller work for me and everything but you know and virtually with the blackboard that we used whenever I need to speak to this the students we just get on the blackboard actual backboard that's the link that I open up the semester all semester long it stays open so whatever time whatever date just go in

2. Fine. I mean fully online there are always ways to engage them more. Umm that is not really my favorite. My favorite is a mixture of asynchronous and synchronous. If you don't have some sort of video. I did that at the end of the semester, and I was like wow you can see their face and see what they are doing. Umm so, I think that that is a way to do it. But I had some student who were middle eastern, and they did not want the camera on them. Which you know there are some cultural issues related to that.

3. Oh I was confident

4. I feel very confident interacting with my students

5. Oh I feel really comfortable.

6. Oh I get back to them that day.

7. I am a person who prefers in person, but I am fine with it now. Now that we have been doing it for so long at this point. Umm I will say that I am actually not teaching this semester and I am very glad that I am not we are going back in person full swing like nothing even happened and I am not comfortable with that. Yeah so, I guess I am comfortable

8. I'm very comfortable. Extremely comfortable.

9. Umm I feel pretty comfortable. I feel like over the years I've figured out ways to let them see my personality. I am pretty enthusiastic and energetic in-person which I think when I first started teaching online umm was harder to convey but I usually post weekly introduction videos each week. I also feel like hey this is how you make a connection. So yeah, I like to GIFs or emojis that I see that makes me laugh and I hope it makes them laugh. I don't know if it does or not. I sometimes would make jokes in person and students wouldn't get it because they wouldn't get my old references because I am older that what I think.

10. Very comfortable

Table A7

How do you design activities that relate to the areas of responsibilities for health education specialists?

Theme: Faculty review is important for curriculum alignment

Sub-theme: More alignment is needed to prepare students for CHES

1. well honestly so that is my my masters and my doctoral degree is in that area so it you know so in before that I worked before I went to academia I actually worked in the the health department in the will be called the headquarters but anyways by you know writing grants and developing programs and things like that for the state of South Carolina and so I have not only the the background in you know that the what the literature says you know what books say and things like that but I have the practical experience so for me a lot of the work the activities are things that I do in my courses you know contains a lot of information from the textbook and what the literature says and that sort of thing but I also tend to bring in a lot of examples for the real world examples and that's something that the students really appreciate is that you know you can teach them everything that the book says in a didactic and this is what you're supposed to do in this is you know evidence based however you also need to be able to to work it out the real world right and so so that's a lot of what I have is when you say activities that will things like that is you know I know I look at the I know what the objectives are for my course the competences with the learning objectives are but I tend to use a lot of the information that I use also if I talk about something that's more didactic kind of information I always provide you know real world samples so, yeah.

2. So we have on the syllabi all the learning objectives and we get those directly from the competencies. And so that was sort of the first level. But as we move more to online linking some of the activities to specific learning objectives and pointing them out to the students. Umm and them the other way would be to have faculty review of the assignments to see if they match the objectives. We pick a specific course and an assignment and see if they match. You know through a colleague review to see if they are meeting the objectives.

3. Not applicable

4. No, not really. Not That I know of. We really focus on internship. That is not a specialization like a capstone. My courses are very topical. So, they may or may not be useful.

5. No, we just teach the classes if they want any certification that is on them.

6. There is probably not one course that will prepare you for the CHES there are a variety. I have taken the CHES unfortunate I was not successful, but I found the questions came from several of courses I took.

7. So I am actually the only faculty in my focus area, other than Dr. Spaulding that is CHES. I am the only tenured faculty with CHES. But our I don't think our curriculum was design specifically for CHES, but we did make sure, I helped make sure that students are eligible as long as they take specific classes for CHES. I have actually had several students take it after graduation and now are CHES certified.

8. We have done that when we design and looking at classes to see how it lines up. I have had less interaction with the undergraduate curriculum, so I am a little hazy on that. We definitely encourage and create curriculum around CHES.

9. Umm you know our concentration is more focused on physical activity focus on the physical activity and public health exam that is from the American College of Sports Medicine. That is a relatively new thing that we have been focusing on like in the past year.

10. So our classes can prepare students for CHES, I am actually trying to get our classes to align more now.

Table A8

What are the strengths of your online class?

Theme: Organization of the class greatly affects the quality

Sub-theme: Social Presence

1. my online class one is the way to set up it is set up in a way that the students each week has its own kind of style so that means the students just open up that week open it up everything is in there listed step by step what they're supposed to do

2. Repetition. In that particular case it was a health behavior class. And because we are examining behaviors and went through each week students were able to see how to review each theory each week. At the same time that was kinda the negative because students were kinda like we got it. I am actually thinking about that this week. What changes can I actually make to alter that a little bit. Maybe bring in some cross student discussions and what not. So, the strengths are that there is a consistent format.

3. I was using a printed textbook they couldn't reply on a electronic copy or they would have to buy it. I am now adjusting the course to new textbooks that are free and online and so that students will like me better. Actually, the content is better, but I have to pick and choose these topics and different reading from different resources

4. I would say strength is the organization of the course. I try to make everything easy to find. Again, on the homepage I have a really brief blurb and here are the 3 exams and in the exam title I put the due date of the exam. So, if you click on that it goes to the exam that can also be accessed through assignments.

5. Me, personally, I think they are so fun. I have such a fun time like are you acknowledging the world we are living in? Like there is the thing I notice is a big difference in my teaching style than others are just acknowledging that the world is awful. Like are you kidding me we are living on a rock on fire with hurricanes during a plague where everyone hates each other. Like what. Even if I say you have an assignment due Sunday it is not the most important thing in life but you should learn something. Let's start there. I have just tried to take a human centric approach, it is interesting how communicative the students are, and they are saying I need another day... ok take another day it doesn't matter. You are having the voice to say I need a mental health day I can't do this is more important to me than you meeting a deadline because in the long run that is more important to your health and wellness and life 6. I do not have to leave my house for one. I tell you the traffic in DC is Hell. Umm I

think it is convenient. I am in my house. I have more time to prep. Again, I am a very innovation person. I do not like doing the same things all day. It gets boring and students pick up on that. I look at ways to be innovative

7. Umm I think the strength is that I come up with innovative ways to keep the class engaged and not just talk at them the whole time.

8. Well I think in some way. One of the things I like to tell people is good teaching is good teaching. If you work with people who have disabilities the things you do to enhance their learning that works well for everyone. Clear audio clear visual good direction excellent feedback all these things are fundamental to good teaching. The most important thing is to have interesting, relevant; I dare say fun assignments. When you do that, it doesn't feel like work. The students are engaged. It is interesting for them and for you. It doesn't feel like work for you. You know look at those course evaluations and see what doesn't go well and fix it. The thing I am most proud of is I am always modifying my classes. Always changing stuff.

9. Umm I think just consistency and like how things are set up so that every week there is a module they do. They know there is a few short lectures there is a PowerPoint there are readings for the assignments and it is set up the same way every single week. So, I think that is the strength of the class and I am also passionate about giving feedback quick to students. I typically give turn around every assignment in 1 to 2 days sometimes 3 max just because I feel like when they see that and I try to comment on almost every assignment, depending on how many they have due that week, so they know she is actually reading these things and interacting and that.

10. The organization of the course and how it is set up.

Table A9

Where are areas for improvement for your online class?

Theme: Student-engagement

Sub-theme: Technology

1. I am thinking about what some of the students of course that's sad is that my class too because it is a mandatory course so that means that whether you're getting a bachelor's in public health or taking this course or whether you get a master's in public health and you could be in epidemiology or it's just like science or whatever other public health discipline there is so they have to take this course that many of them don't enjoy because my courses is more of the health planning work a lot of material and they don't enjoy writing they're not into it they don't enjoy it so it is very difficult to keep them kind of motivated if they're not in the health promotion up disappointed that's not what they're seeking it very difficult to keep them motivated and sometimes

2. I think umm the interaction for how best to engage students beyond just commenting on the discussion board. So, you know I have been thinking a lot about, you know what I can do to potentially do that and I think the videos are good and intriguing one because you know they don't have to be done in real time and they can be posted and what not. So, I think an area and room for growth is engagement beyond just posting on a wall.

3. Umm so I need to re-record my lectures to match what I am not using as a textbook. So, newer recordings and a better recording. Some of the recordings came out a little fuzzy like the zoom recordings I am on the little, tiny window where I shouldn't be and that kind of stuff. So the main thing I need to do to improve is to have better recordings and that is time consuming.

4. A drawback is I am horrible at videos. I don't know how-to do-good videos. It is just me reading over a power-point. If I had time, I would like to learn how to make good videos. I am also a one and done with my videos. I explain that to my students like I will record once that is it. If there is a dog barking, there is a dog barking. Like I am literally working 12 hours days I don't have time to edit videos.

5. : I definitely wish I had more of a handle on newer ways of how to engage

6. I have been teaching online since 2015 both distance learning and remote. I went through an extensive BB essential training a year ago last summer. I feel I improve every year. I just learned Canvas.

7. I think I am pretty good at engaging students but you can also was be better

8. I think like you said making student feel more connected that and then within the DB more interaction while it's going on. Those are the two things I need to work on.

9. Yeah, I think one of the major things that I need to do is do a better job interacting with the discussions. Every semester I feel like I am going to do it then every semester I feel like I am drowning in... then I have another kid. I thought I would be better this semester, but I am still not able to get in there in time. Their first post is due Friday at midnight, so I have a lot of students who don't always get in there earlier in the week. their responses are due Sunday at midnight so there is no way now with 3 kids that I can jump on during the weekend like I use to during nap time or downtime. There is no down time with three kids.

10. There are always ways to engage more. Sometimes it takes a lot of time responding to discussion boards.

Table A10

What factors impede the quality of your online class?

Theme: Time-consuming

1. I'm old school I'm not technically gifted at all, right, so we have other professors that they you know come up with these new by this new software that does all these wonderful things and they say "oh it's very easy try this the students will love it" and all this stuff and then they tell me so easy so I try it and I've done that and have uploaded it into my courses and then within a year or two students can't open it and then I have to go through my IT department and then they have to do all this stuff that converted and it just becomes more of a pain and so sure those things I don't like I like that the simpler you know the better and then two is issues with a lot of the information that we post, in that you know where large university, is that we have to go through the you know making sure that we can post these and getting permission and we go through our library

2. I do think there is a lot for room for improvement. When I tell people I teach online they are like ok, so you just post stuff, and I am like no you have prerecorded things students watch and we get together every week at a set time for part of the time and the other part of the time they do umm if they work together on their projects because most of the students work full time. I am there to facilitate that. Umm I have experienced that that is a benefit a really strong online program compared to ok here is what you have to do this week. Personally, I just did a professional development where, so I was a student, so it was a lot of videos, and we had some assignments and things like that but umm I think there is a lot of improvements.

3. I need to do to improve is to have better recordings and that is time consuming.

4. The first I went online it was with Canvas and that was new to me, and my online presence was just ugly and hard to navigate and didn't work well. So, for the next semester that is when I developed the put everything on one page You know try to see what other people were doing. Especially in UDL there is a lot of information on online learning, so I got a lot of tips from people who were using online platform. The combination of a new system was like taking a class that was face-to face and turning it virtual very quickly was not conducive. Time is also an issue this past summer

5. oh for sure. I definitely think that night classes online ugh they are the worse and they do a disservice for both sides it's this new level of I have been in front of a screen all day. That is so hard I feel really bad for the people who are juggling at home life with classes after being on zoom all day because there is cooking dinner pets the family the friends whatever even if it is just, you there is the other layer of exhaustion that comes with classes now

6. I think quality of the work. Time, I mean is like managing a budget. One of the best ways to learn that is in college. You need to find time for class, studies, social time, sports, I mean I did all that and I still got 7/8 hours of sleep. To me quality of work is big to me.

7. yeah I think the one thing I would add is it is definitely more time consuming that in person. Everything would have to be recorded then I would have to download it then I would have to get it from cloud then I would to get in on Canvas you know do it for different as it was so time consuming to the point it impacted my research and that is not good. I would say that was probably the most difficult things. There are a number of reasons why I am glad I am not teaching this semester one being I am not comfortable, but it is so time consuming.

8. Honestly a weakness of mine is I set it up and have impeccable directions and I give feedback on every single discussion post but in the middle, I am probably too absent.

Like I should get involved in the middle but there is too much work to get done, I am a researcher I am full load and we have a doctoral program and at some point you are at capacity. I don't do that; I recognize I should but at some point, you gotta save time where you can.

9. Yeah, I mean I think definitely the time that goes into developing something that looks good plus I have been teaching for three years now and I am even revamping that. I planned on in the summer re-vamping it but I am incorporating pieces that I learn into it now. Umm you know trying to make sure I am updated the things just laying out my assignments with the student learning outcomes. Just the same format in each is something new that I am doing but umm I feel like it is really helpful to the students 10. Time. Definitely. I am a researcher too... and that has been greatly impacted by going online.