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Walden University

College of Education and Human Sciences

This is to certify that the doctoral study by

Jennifer L. Miller

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.

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Walden University
2024

Abstract

The Impact of Communication Apps on College Students' Experiences of Distance Learning

by

Jennifer L. Miller

MA, Quincy University, 2005

BS, Quincy University, 2003

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Educational Technology

Walden University

September 2024

Abstract

Students in online higher education courses face issues with communication with peers and instructors, which often leads to various learner struggles and a less than quality learner experience. The purpose of this project study was to examine the problem of communication in online higher education courses and the role of communication apps in shaping the learner experience. Situated learning theory provided a framework to examine this issue. The research questions explored the perceptions of online college students regarding the use of communication technology apps with instructors and peers and how the use of communication technology apps contributes to communication and learning experiences in courses in a local setting. The qualitative study featured a basic design format to explore the perceptions of students (N = 16) who had taken courses involving communication apps. Participants were interviewed via telephone or videoconferencing or completed an online survey. Responses were analyzed using thematic coding to determine emergent themes. The data analysis emphasized several themes, all of which determined that effective use of communication apps resulted in positive learning experiences for participants. The results informed the development of a professional development course for faculty utilizing the community of practice approach. The professional development course provides a framework for faculty to implement communication apps in the online classroom. Better integration of these apps in online instruction may effect positive change in the student experience by fostering engagement in online courses.

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Dedication

This study is dedicated to my husband, Chadwick Miller. Without your encouragement and support, I would not be able to pursue any of my dreams, including this doctoral journey. Your help in motivating me and reading multiple drafts throughout this process has been invaluable. I am forever indebted to your patience and love, especially when the journey was difficult. Thank you for being my partner and best friend and supporting me in all I do.

This study is also dedicated to my daughter, Jennica, who inspired me to continue this journey and pursue a doctorate. Your bravery as an active military service member keeps me grounded and focused daily. Being your mother has been my most important accomplishment.

In addition, this study is dedicated to my parents and grandmother. Your support and love over the years, even from afar, has allowed me to reach my full potential and accomplish my goals. I would not be where I am today without your love and foundational support.

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I would like to acknowledge and thank my committee chair, Dr. Solano, for being an inspiring mentor who has supported me every step of the way. I am deeply grateful for your support and consistent feedback. Without you, I would have given up on this process a long time ago. Your wisdom, guidance, and assistance throughout this process were invaluable. Taking your class early on in my doctoral journey inspired me to select my final topic and project. Thank you for inspiring me to explore communication in online learning and how to improve the process in higher education. Your expertise inspired me and motivated me to learn more. Finally, thank you for your countless hours of revision, virtual meetings, discussions, explanations, and support. You poured your heart into helping me every step of this journey and I am forever appreciative. Your time and effort helped me grow in ways I could never have imagined on this doctoral journey. Thank you.

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Table of Contents

Section 1: The Problem....1
The Local Problem....1
Rationale....4
Definition of Terms....7
Significance of the Study....8
Research Questions....11
Review of the Literature....11
Conceptual Framework....12
Online Learning in Higher Education....15
Challenges of Learning in Isolation....17
Student Skill Development of 21st-Century Skills....20
Communication Issues in Online College Courses....24
Communication Apps....28
Implications....31
Summary....32
Section 2: The Methodology....33
Qualitative Research Design and Approach....33
Participants....35
Data Collection....37
Data Analysis Results....40
Research Question 1 Analysis Results....41

Research Question 2 Analysis Results 45
Research Question 3 Analysis Results 47
Project Implications 50
Section 3: The Project 51
Introduction 51
Rationale 52
Review of the Literature 54
Community of Practice 54
Professional Development in Higher Education 56
Online Learning Pedagogy 58
Faculty Perceptions on Communication in Online Learning 60
Fostering of Connection in Online Learning 62
Project Description 65
Project Evaluation Plan 66
Project Implications 68
Section 4: Reflections and Conclusions 70
Introduction 70
Project Strength and Limitations 70
Recommendations for Alternative Approaches 71
Scholarship, Project Development, and Leadership and Change 71
Reflection on the Importance of the Work 73
Implications, Applications, and Directions for Future Research 73

Conclusion 75

References 76

Appendix A: The Project 88

Appendix B: Interview Questions 114

Appendix C: Online Survey Questions 115

Section 1: The Problem

The Local Problem

Many U.S. college and graduate students prefer to take online courses due to the ability to fit them into their busy schedules. Online learning allows learners to pursue higher education degrees from anywhere at any time. No longer is there a need to be physically present to participate in course learning. The flexibility and convenience for students is a significant draw and benefit (Ayu, 2020). Students can utilize technology to participate in self-paced learning, leading to a better life and school balance (Tat et al., 2021). The variety of opportunities that online learning makes available to students is a major factor in choosing online learning (Ayu, 2020). Online program leaders of Rolling Hills College (pseudonym) sought to provide excellence in their program offerings yet experienced challenges in fostering productive relationships between online faculty and students.

The problem addressed in this qualitative project study was that many online RHC students did not have sufficient opportunities to use communication apps, which resulted in inadequate distance learning experiences and a less engaged learning experience. Per the college's online learning faculty handbook, the institution's mission in online learning is to be a regional leader. The college, however, faces challenges with online learning, according to a faculty member. These challenges include a lack of communication between students, peers, and instructors as indicated in student course evaluations, another faculty member, who is also a director, shared. A gap in practice

exists because of the lack of communication between online students and instructors, which has resulted in a negative learner experience.

Sugawara et al. (2020) found that the chronically low completion rates of college students in e-learning are affected by the engagement and characteristics of the learner. Sugawara et al. suggested that there is a gap between the design of courses and the learner causing a lack of completion of courses or programs and that this gap can be affected by the instructor's design and influence in the course. Learners who do not have the characteristics naturally to complete online learning courses or programs need support and different methods from instructors to close this gap (Sugawara et al., 2020). The scarcity of communication methods and tools in online learning can negatively impact the learning experience of the student, which often results in lower course completion rates. Improving communication between students and instructors is crucial in the higher education online learning sector and at RHC.

College initiatives to better online learning, course feedback from students, and voiced concerns of faculty indicate improving communication is critical for RHC because there is a lack of communication impacting student experience. College initiatives to improve the online learning environment reflect a need for faculty to include more interaction with students in a virtual manner and indicates an evaluation process to find the issues that exist with this process, according to the director of online learning. Overall student feedback from online courses indicates that there is often a lack of communication with instructors depending on the faculty teaching the course, which is frustrating for students, a faculty member and director shared. Faculty who primarily

teach online have also voiced concerns over the tools available to them to communicate and engage students in their classes, specifically because the learning management system (LMS) at RHC is lacking in this area, according to a different faculty member. Online experiences for students at RHC can be less engaging than in-person courses, which has resulted in RHC not being able to realize its mission of online learning excellence.

Communication and how it influences the online learning experience for students is an issue in higher education in general (Alawamleh et al., 2022). The use of communication apps in online learning can impact the student experience in distant learning in a positive way by allowing for clearer, easy to use lines of communication and the creation of a community in the online learning environment where relationships and connections are made between learners and faculty. Face-to-face courses naturally provide communication and social interaction; online courses do not provide the same opportunity for learners. Alawamleh et al. (2022) argued that asynchronous online learning should provide the same communication and interactions as face-to-face learning, even though online learning does not have the advantage of nonverbal communication to assist in this endeavor. Archbell et al. (2022) found that intentional communication with instructors could reduce student anxiety and improve the learner experience in a positive way, while reduced interactions could result in the opposite. Lim et al. (2021) analyzed instructor presence and how it influences student experiences, finding that great instructor presence leads to greater student satisfaction. Ayu (2020) studied experiences of learners and instructors in online learning. Results showed that a

lack of engagement, motivation, and isolation could result from an absence of connectedness. A lack of connectedness relates to students lacking engagement and in turn the lower percentage of students successfully completing a course (Ayu, 2022).

RHC has a mission to be "a regional leader in online education offering high-quality, accessible, and in-demand educational programs that meet the diverse needs of individuals pursuing advancement in their lives, professions, and communities." To offer high-quality online courses, college leaders need to address the communication concerns indicated in student feedback, faculty concerns, and initiatives. The lack of tools for communication results in a less than quality student experience, despite the intention of being a regional leader in online learning.

Rationale

The problem that many online students at RHC are experiencing is that they do not have sufficient opportunities to build relationships with instructors and peers, which results in inadequate and a less engaged distance learning experience, a faculty member and director noted. Faculty, directors, and students have identified this area as a concern, the faculty member and director added. The director of online learning in conjunction with the online learning advisory committee developed an initiative to improve online learning experiences for students, an indication that this is an issue. An online faculty handbook has been developed and added to the LMS for instructors to access. This document includes a description of the evaluation of courses, in which the director of online learning addresses how faculty can create high-quality online learning experiences by communicating often and effectively, creating opportunities for social interaction, and

incorporating discussions or social presence in each lesson. Part of this evaluation from the college's online learning advisory council includes a requirement that instructors communicate with students and provide learner interaction. How this communication can be improved or developed is not elaborated on, and no training is provided for instructors. Instructors cannot meet criteria in evaluations without including some type of communication and social interaction, but the quality or type of communication and interactions is not specified. This initial attempt implies the direct need to address better learning experiences and communication for students.

Furthermore, course evaluations by students in online courses over the past 2 years indicated that there is a lack of communication and interaction in online courses. In their comments, students noted a lack of interaction with peers and slow response times from instructors, according to a faculty member and director. Several students complained to advisors or program directors about the lack of responses or interaction with instructors because no communication apps or tools were provided besides email. One student noted that successfully completing courses was difficult due to slow response times and no effortless way to discuss or ask questions of instructors or peers, leading to a disappointing student experience, the faculty member and director shared. Online courses are often asynchronous and taught by adjuncts who may check their RHC email or LMS on an infrequent basis. The LMS also does not have a communication app or tool linked to courses. These evaluations indicate that a lack of communication is a primary issue in online learning and the same results are not seen for in-person course evaluations.

Finally, two directors of educational programs at RHC expressed concerns over the communication tools and apps available to or utilized by instructors and a lack of engagement from online students. A full-time professor and newly appointed director of the department of education expressed concerns with online student engagement and a desire to improve in this area by better utilizing tools, communication apps, or approaches. The director and full-time professor of the sports management program also expressed frustration with the lack of engagement in online courses and a general dissatisfaction with being able to provide a positive student learning experience because students do not reply to email or engage well in online discussions. The director felt that using communication apps should be better utilized within the online programs and courses at the college. With some of the programs operating completely online this concern has been expressed in several ways and not yet addressed.

Both directors expressed that students in online courses may not respond via email and may not turn in assignments often, frustrating instructors and concerning program directors. The director of the sports management program identified the need to more effectively use communication apps outside of the LMS. This is a major concern of program directors, especially for those programs that are completely online and for courses that are asynchronous.

Directors of online programs at RHC focus on students completing programs and finishing courses and have found that engagement is critical for this to happen. The director of online learning shared that they had developed, in conjunction with the college's online learning advisory committee, an initiative to improve online learning

experiences for students, an indication that this is an issue. An online faculty handbook has been developed and added to the LMS for instructors to access. This document includes a new evaluation of courses, in which the director of online learning examines courses to determine if high-quality courses are being developed. Part of this evaluation includes a requirement that instructors communicate with students and provide learner interaction. How this communication can be improved or developed is not elaborated on and no training is provided for instructors. Instructors cannot meet criteria in evaluations without including some type of communication and social interaction, but the quality or type of communication and interactions is not specified. The initial attempt to improve the experience of online learners implies the direct need to address better learning experiences and communication for students. The purpose of this qualitative study was to explore the perceptions of RHC students regarding the use of communication apps in online courses and to determine if these apps help to promote effective communication with instructors and peers. This knowledge could help educational leaders to foster a more engaged and positive learning experience.

Definition of Terms

Communication apps: For this study, any digital applications that facilitate communication and social interaction (Tiwari, 2022).

Information and communication technologies (ICT): Technology that allows access to information via telecommunication (e.g., computers, mobile devices, internet, etc.; Koh et al., 2022). In education, these tools are utilized to enhance learning and communication.

Learning management system (LMS): Infrastructure that supports online learning for both learners and instructors and facilitates course learning administration processes (Karjo et al., 2021).

Online learning or distance learning: Learning that takes place via technology in an asynchronous or synchronous format and is not dependent on any physical location (Singh & Thurman, 2019).

21st-century skills: A variety of skills that enable and prepare students to live, work, and interact in 21st-century society (Liesa-Orús et al., 2020).

Significance of the Study

This study has the potential to further understanding of the use of educational technology and to effect positive social change at RHC. This study provides insights on college students' perceptions of how instructor usage of communication tools affects learning experiences at the college. Based on the study findings, I developed recommendations that, if implemented, could affect communication aspects of instructor pedagogy in higher education. RHC leaders can potentially benefit from identifying strategies on how to improve the online learning experience and increase communication with instructors and peers for students.

One way this study may effect positive social change is by furthering understanding of how communication apps may improve the learning experience of online students at RHC. This study provides insights on how the development and use of apps or technologies in the college classroom can potentially further the development of positive peer and instructor relationships. A lack of communication in online learning can

lead to isolation, lack of motivation, and a failure to understand course materials (Alawamleh et al., 2022). By understanding student experiences during distance learning, RHC leaders may be able to develop a more positive approach for learners while reducing negative aspects. Improved online learning experiences may create positive social change, because students can access high-quality and effective learning from any location at any time. RHC leaders may benefit from this understanding and be able to improve experiences for students.

Another way this study may create positive social change is by furthering understanding of how communication can be utilized during higher education experiences. Increasing or improving communication in online courses may help instructors to develop the communication skills of students, at RHC and at similar institutions that are experiencing the same challenges. Fostering students' 21st-century communication skills is critical because it may directly impact their employability (Morsidi et al., 2021). Volkov et al. (2022) explained that employers value soft skills, the interpersonal skills needed to communicate with others. Volkov et al. argued that interpersonal skills are seen by employers as necessary to be successful in a company and career. Excellent communication skills help employees work collaboratively, solve problems, develop relationships, and share ideas effectively (Volkov et al., 2022).

The need to communicate effectively, both online and in person, is critical in today's workforce. Individuals who communicate well in the 21st-century work environment can work with others to develop more innovative ideas and further company goals, a skill employers covet. Communication skills should be highly developed during

the higher education experience (Mittall et al., 2022). The development of these skills is critical for the success of today's college students and their employability in an ever-changing work environment (National Association of Colleges and Employers, 2023). In an environment marked by increased online learning and technology usage in classrooms, RHC faculty may be able to use communication apps to improve communication and effect positive social change. RHC students may benefit in the long term from greater communication in their courses. An understanding of student perceptions may inform efforts to improve online courses.

Finally, this study may inspire social change by providing information that leaders of RHC and similar institutions can potentially use to influence instructor pedagogy regarding online learning. A greater understanding may be gained regarding how the use of technological tools and practices can be used to influence improved pedagogy at RHC. Communication apps and tools are part of college students' everyday lives. How instructors utilize or underutilize these tools affects student usage (Morsidi et al., 2021). By studying student perceptions of communication apps, an understanding was developed of how often and in what ways instructors at RHC may or may not utilize these tools. Local institutions with similar problems may also benefit. This informed better teaching practices at RHC by understanding ways to engage students and model effective communication skills. Instructors at RHC benefit from increased student connection, understanding, motivation, and engagement. This study may positively affect social change by contributing to knowledge that may result in changes around increasing communication and social interactions in distance learning.

Research Questions

To examine the problem at RHC, I explored three research questions (RQs). These questions were developed to gather qualitative data on student perceptions of the problem. I used the data I collected to answer these questions and identify viable solutions for the practice problem.

RQ1: What are the perceptions of online college students at RHC regarding the use of communication technology apps with instructors and peers?

RQ2: How does the use of communication technology apps contribute to communication in courses at RHC?

RQ3: Does the use of communication technology apps contribute to positive or negative learning experiences in courses at RHC?

Review of the Literature

Situated learning theory grounded this study and provided a framework to examine communication in online learning. The literature review includes an examination of the theory and its applicability to this study. Second, the review includes an analysis of relevant literature based on the problem of insufficient opportunities for students to use communications and apps to communicate with instructors and peers during distance learning. I engaged with peer-reviewed articles from education journals that were published during the last 5 years to develop a better understanding of the problem, including challenges in online learning, issues with learning in isolation, and the use of communication apps in higher education. The literature sources were examined after various searches on the databases Education Resources Information Center (ERIC),

Education Source, and Taylor Francis Online. Key search terms included *online learning*, *e-learning*, *distance learning*, *communication*, *communication skills*, *21st-century skills*, *communication apps*, and *college students.*

Conceptual Framework

Situated learning theory was the conceptual framework for this study. Situated learning theory, developed by Lave and Wenger (1991), asserts that learning occurs through a community of practice and is influenced by active engagement of members in the community (see also Mina-Herrera, 2019). According to situated learning theory, learning is a social activity in which discussion, collaboration, and interactions with others result in reflection and learning (Mina-Herrera, 2019). The conceptual model of situated learning theory is defined by active learning in a community of practice, the context or environment in which learning occurs, and the interactions between novice learners and experts (Mina-Herrera, 2019). The context in which learning takes place affects how learning occurs, an important consideration for constructing learning experiences. The interactions between the experts and novice learners are critical to the success of learning because this is where learning will occur.

Lave and Wenger (1991) argued that situated learning includes a process called *legitimate peripheral participation,* which refers to learners' experience of learning through participation in a community. A learner's engagement and learning process happens by becoming a participant in a sociocultural practice. Situated learning also explains the relationship between the learner and expert as a kind of apprenticeship learning process. The apprenticeship process leads to the development communities of

practice. This is a key component of the theory because the interactions, communications, and relationships of those in the learning community impact the learning experience.

One major component of the conceptual framework within situated learning theory is the idea of communities of practice. Wenger (2000) described the nature of learning and understanding as something that has always operated in communities of practice, from prehistory to contemporary times. Communities of practice provide a foundation for social learning systems. Enterprise, mutuality, and shared repertoire are critical components that make up communities of practice. Enterprise encompasses the level of learning in which the community engages. Mutuality consists of how much engagement the community engages in mutually over time, especially the level of interaction and trust among the group members. Repertoire involves all the resources, tools, stories, or ideas communally utilized by the community. A community of practice is defined by how these concepts intertwine. This is an important concept that defines situated learning theory because learning happens within these communities.

The context in which learning occurs and is situated is another principal factor to be considered within a community of practice (Lave &Wenger, 1991). Lave and Wenger (1991) explained that the context in which participation occurs directly influences the learner and their ability to adequately practice within learning. Learning occurs within societal activity, so the situation in which learning takes place must be considered. Learning is always situated in a social context. Participation with others within the community is necessary for learners to develop and understand concepts. Active learning

experiences provide the opportunity for learners to practice. Lave and Wegner argued that social interaction is a crucial component of learning.

The social interactions between the learner and experts within a community are another important part of the conceptual framework of situated learning theory. Lave and Wenger (1991) explored the apprenticeship model within a variety of groups to examine this relationship between the novice and the expert. Within all the variations of apprenticeship, Lave and Wegner found that interactions with others within the community affect the learner's development. An expert–novice relationship is not the sole defining interaction within situated learning experiences. The interactions between the experts and learners within the community further develop the social context for learning. Many experts provide scaffolds for novice participants in the community, who will eventually become experts. This is an important consideration because it emphasizes the importance of the entire community and relationships within.

The conceptual framework of situated learning theory provided a lens to examine the RQs for this study. In this study, understanding the learner's experience in the situation of online classrooms and how the usage of apps influences the experience was the central goal. Situated learning theory provided a framework that emphasized focusing on the relationships between instructors, peers, and students. In addition, the framework provided a lens for examining the situation of learning and how it affects the learning community. During data analysis, I considered the framework and examined the data by focusing on the relationships, community, and learning situation each participating student described.

Online Learning in Higher Education

Online learning is an integral part of the educational landscape in higher education. The availability of online learning, courses, and degree programs have made education more accessible to students worldwide (Morsidi et al., 2021). Online learning has positive and negative impacts on students, a factor that I considered in this study. An understanding of the student experience and nature of online learning in higher education was an important perspective.

Online learning differs from face-to-face learning experiences in a variety of ways. Wright et al. (2023) explained that although online learning provides opportunities for learners from a variety of populations to participate in higher education, it is critical for educators to examine the experience of learners in the online environment. Wright et al. also explained that academic performance and student perceptions of their experience are not the only factors that should be considered in overall student experience. Social interactions, development of peer and mentor relationships, and interactions with instructors are a major component of the online learning experience for higher education students (Wright et al., 2023). These social conditions impact the experience of the learner whether the learning takes place online or in person.

Wright et al. (2023) emphasized the social aspect of learning in the student experience and student satisfaction. Alawamleh et al. (2022) considered the social interaction and communications between instructors and students as a factor that can improve experiences of students. They found that a sense of community and interaction is a necessary component of learning for both face-to-face and online courses. Wright et al.

also argued that the social aspect of learning needs to be examined before a determination is made regarding the effectiveness of any online programs. Online learning, although different from face-to-face courses in many ways, also requires a certain level of interaction with others if students are to have satisfactory experiences.

Other studies also emphasize the importance of the social aspects of learning in the online environment. After examining faculty and student perceptions in a private university, Ayu (2020) argued that online learning courses had potential and pitfalls. A major concern reported by students was a lack of communication and connection with both instructors and students, leading to difficulties in asking questions or getting help. On the other hand, instructors felt frustrated with students' lack of engagement and participation. Du et al. (2018) examined how interactive elements impacted the learning experience of students. According to Du et al., social interaction in online courses depends on varying levels of trust and the selection of what tool is used to communicate is a major decision that can impact the learning experience. Lim et al. (2021) argued that the most important social factor in online learning is instructor presence because this directly correlates with learner satisfaction. More importantly, increasing the social interactions between students and instructors increased engagement and learning for students. For online courses to improve learner experience and outcomes, the instructor must develop social interactions and communications. Not only do the social interactions between instructors and students improve learner engagement, but these interactions can also further develop trust and help students feel they can ask questions and get support.

The social aspect and conditions of online courses were key factors considered in this study.

Challenges of Learning in Isolation

Although online learning is a convenient mode of learning allowing for more accessibility to higher education programs for a wider variety of student populations, learning in isolation comes with challenges. Kulikowski et al. (2021) examined the issues and concerns with the demands of online learning that were emphasized during the COVID-19 pandemic. One of the significant issues for students in online learning involves a lack of communication within courses. Specifically, students in Kulikowski et al.'s study reported a lack of information on what and how to learn and no clear form of reciprocal communication to facilitate discussion or clarifications. Learning in isolation, although flexible and convenient at times, can lead to challenges for students. Without effective communication tools, learners can be more isolated and unsure of the learning process or concepts. Communication is a challenge for students and instructors alike in many of the higher education institutions online learning platforms.

Another challenge in online learning involves communication and its impact on student engagement and the learner experience. Rajabalee and Santally (2021) further explored the challenges of learning online and emphasized quality indicators like student learning experience and student achievement. Rajabalee and Santally found that interactions with both peers and instructors were a major component of engagement which significantly impacts the student learning experience. Engaged learners showed higher satisfaction rates. More importantly, engagement was higher when social presence

and interactions were high in online courses. Similarly, Pacansky-Brock et al. (2020) found that interactions for students with peers and instructors affected learners, especially those from minority populations. With a lack of interaction with instructors especially, students often feel isolated or unsupported, creating a barrier for students from populations who do not easily access academic settings independently (Pancasky-Brock et al., 2020). Increasing interactions and communications can positively influence student engagement in learning, which may make online learning accessible for more students. Without positive peer and instructor interactions, learner satisfaction and experience are often negative. For learners who struggle or find course content challenging, a lack of interaction might be detrimental to their engagement and success.

In higher education, student engagement and satisfaction are intertwined. Interactions and communications online influence both the learner engagement level and satisfaction with online courses. The instructor of a course is at the center of interactions that affect students; fostering effective student–instructor interactions can be a major challenge if communication is lacking. Tarazi and Ruiz-Cecilia (2023) found that student engagement is crucial in online learning and is influenced by tasks that promote interaction. Positive student engagement is dependent on effective interactions between the instructor and students, which is extremely hard to achieve in online learning experiences without intentional planning on the instructor's part, they concluded. Tarazi and Ruiz-Cecilia argued that university leaders utilize ICTs to enhance engagement and support the instructor's ability to create effective interactions. Tat et al. (2021) examined connectivism and how instructor pedagogy and instructional methodologies impact this

relationship. Tat et al. noted that the instructor role is related in a critical way to student satisfaction because students feeling connected to the course and instructor are key factors influencing satisfaction. Faculty, in this regard, can provide a major barrier to how students connect in online learning experiences. Instructors' ability to facilitate interaction, communication, and connectivity for students in the online learning experience is a key factor that must be considered. Without intentional focus on creating environments that facilitate interaction, instructors may not design learning experiences that provide the interactions students need for successful experiences. Instructors often need support or tools to better facilitate these experiences within their online classroom.

Student interactions with instructors, peers, and content are also a vital factor to consider when examining challenges in learning in isolation. Wang et al. (2022) studied how learner-learner, learner-instructor, and learner-content interaction impact the socio-environmental factor that predicts online learning engagement. Findings emphasized the instructor interaction and content interactions learners experience. Kalmar et al. (2022) examined the nature of online learning and the paradox that when students cannot physically meet more social interactions are needed. Their findings indicated that students need vibrant online learning communities to connect and further their thinking, especially when students are challenged with problem solving or design thinking issues. Learning communities and communication channels are key for students to successfully participate in online courses (Kalmar et al., 2022). Learning in isolation means that learners, by circumstance, lose connection with other learners and instructors during the learning process. To account for this loss, online learning communities can assist in

making connections socially. Accessing and understanding the content without support can negatively impact learners in online learning, leading to challenges and issues.

One issue that can be emphasized when communication and interactions are lacking is anxiety. Archbell and Coplan (2022) examined the link between social anxiety and communication in online learning. Online courses should be inclusive and foster quality interactions that reduce social anxiety (Archbell & Coplan, 2022). Ritzhaupt et al. (2022) also examined anxiety in online learning and how online experiences can result in isolation. Findings suggested that instructor and peer communication play a significant role in easing anxiety and positive student experiences (Ritzhaupt et al., 2022). Learning in isolation can create or increase student anxiety. Online learning experiences can be intimidating when learners have no informal communication tool to ask questions or improve confidence. Communication is a factor that impacts student experience, including anxiety.

Student Skill Development of 21st-Century Skills

The National Association of Colleges and Employers (2023) identified eight core competencies that prepare college students to be employees in today's current workforce. Communication is one of the eight core competencies and emphasized students' ability to communicate with people within and outside of an organization in an effective and clear manner. According to the association, a part of the ability to communicate includes active listening to exchange information. In addition, students are expected to be competent at using varied forms of communication tools to communicate with others to meet their ability level. Communication is an important skill within the 21st-century skills students

need to develop. More importantly, the ability to communicate across online formats is part of the 21st century. Utilizing a variety of tools to communicate effectively is a skill that is critical to be employable in today's workforce.

The National Association of Colleges and Employers also discussed best practices for developing skills college students need in the workforce (Linderman & Titlebaum, 2023). Linderman and Titlebaum (2023) emphasized that even though communication globally has increased, the quality of communication has not and instead the points of contact for individuals to communicate are what increased. For college students, this is a pertinent factor because they will need to learn how to effectively communicate with technology for any career path they choose to pursue. Higher education institutions must consider ways in which to increase student abilities, especially in the online environment.

E-learning has varied impacts on the development of 21st-century skills in college students, research shows. Mittall et al. (2022) examined the use of learner analytics in higher education e-learning experiences and how it impacts the employability of students. Higher education institutions must consider how the online learning environment impacts learner skills overall (Mittall et al., 2022). Bozgun et al. (2023) also pointed out the need for higher education institutions to examine how online learning impacts student's 21st-century skills development, especially considering the COVID-19 pandemic. Bozgun et al. (2023) found that preservice teachers struggled with online learning in the college environment during the pandemic due to several factors, but notably due to the lack of communication and social interactions. Communication is a critical 21st-century skill students are expected to develop and then utilize in the workplace. However, in a study

by Bozgun et al. (2023), preservice teachers reported that online learning experiences emphasized a need for improved skills, while not providing any development of these skills in a positive way. Aulia and Utami (2021) also examined the need for 21st-century skill development from the perspective of preservice teachers. In the area of communication, findings suggested that learning activities are crucial to help develop student's ability to communicate effectively online. Online learning experiences can provide a natural environment for students to practice effective communication skills from communicating their thoughts to understanding the thoughts of others. More importantly, developing these skills is beneficial to learners and future employers. A strategic focus on communication within online learning platforms is a key component for future educators to develop.

The ways in which communication is incorporated and developed in online learning impact students' 21st-century skills. These skills are important for employability in today's career landscape. Martínez-Cerdá et al. (2020) examined employability and the 21st-century skills developed by students through online learning. Martínez-Cerdá et al. (2020) noted that a prime factor to consider in employability is the socio-cultural skills needed to be successful. Petrovic and Pale (2021) studied college engineering students' perceptions of the importance of communication and the focus in courses on effective 21st-century communication skills. The researchers emphasized in their discussion of results that course design and instruction could impact students' understanding of the importance of communication skills and improve their skills at communicating (Petrovic & Pale, 2021). Although this study was focused on engineering students, the results

emphasized the importance of providing college students a chance to practice the professional communication skills needed in the workforce after graduation. In an ever-changing landscape, students need the skills to communicate effectively utilizing a variety of technology tools. The use of ICTs to develop these skills in adult learners is an important consideration for higher education institutions.

The use of different tools in online learning also affects the development of 21st-century skills. Volkov et al. (2022) studied how the move to distance learning impacted the soft skill development, like communication, of students. Soft skills, which is the ability to communicate and collaborate, are in high demand from employers after the pandemic (Volkov et al., 2022). The use of technology in education and work has significantly changed due to the pandemic. Volkov et al. (2022) pointed out that possession of interpersonal skills gives employees a competitive advantage, especially if they can utilize technology in the process. Because the focus of higher education online learning includes soft skills, Volkov et al. examined how the LMS impacts this factor. Findings suggested that the use of the LMS as a digital tool can directly impact soft skill development. Liesa-Orús et al. (2020) examined the professor's perspective on how the use of ICTs influences 21st-century skills. Findings of the study emphasized the wide range of professor perceptions, but the general acknowledgement that using ICTs in online learning provides an environment where learners can develop 21st-century skills (Liesa-Orús et al., 2020). It is important to note that these skills include versatile communication that facilitates interpersonal skills (Liesa-Orús et al., 2020). The tools utilized in the online learning environment are important to the development of skills

needed for employment in the 21st century and a post pandemic world. Without tools or an LMS that facilitates quick and easy communication, learners will find challenges in developing communication skills. Tools, like communication apps, should be considered in the discussion of facilitating communication effectively.

When researching communication tools in online learning, the development of 21st-century skills is an important consideration. For higher education institutions, the ability to develop students' employability skills is essential to the college experience. Students expect to develop skills that will help them find jobs and compete in the global workforce. The need to communicate effectively with technology is fundamental to most careers in the 21st century.

Communication Issues in Online College Courses

Communicating with peers and instructors in online learning is a critical component of course design. Due to the nature of online learning, the distance and technology tools utilized are major factors in how communication occurs. Many factors impact communication for students in online courses. Two of the major categories, however, include the infrastructure of courses and the instructor in courses. Infrastructure impacts communication and how students can communicate, reach out for help, connect, or build relationships with both peers and instructors. Instructor decisions, abilities, pedagogy, and willingness to communicate impact the nature of communication within course design and setup.

The infrastructure of online courses impacts student access, but also highly influences communication avenues available to students. Yurdakal (2019) conducted a

qualitative study about the positive and negative aspects of distance education from the perspective of teacher candidates and teaching staff. Results showed that there were concerns with how the infrastructure used for instruction impacted communication. The instructors and teacher candidates reported that teaching and giving feedback to learners was difficult due to the lack of communication tools (Yurdakul, 2019). In addition, with an absence of face-to-face instruction reduced interest in the lessons by students were reported by teachers and teacher candidates. Finally, students in distance learning courses often could not access courses, another major issue expressed by the study participants (Yurdakul, 2019). Infrastructures with useful and efficient communication tools and methods are needed in online learning to make instruction more effective. Without the necessary infrastructure, students face challenges in finding ways to communicate effectively or in having an avenue to communicate. With easily maneuvered and accessible infrastructure, learners are set up to communicate with instructors or peers.

The LMS impacts how communication can occur. Araka et al. (2021) conducted a mixed methods study to explore how students use of the LMS features helped students to manage and engage in learning and what challenges students faced during online learning. The researchers argued that a lack of personal interaction during online learning negatively affects motivation, engagement, success, and student's ability to take control of and monitor their own learning (Araka et al., 2021). Specifically, the results found that the LMS features of forums, chats, messages, and quizzes were most useful in helping students to monitor their own learning. The results of the data analysis also emphasized student concerns with a lack of feedback and personalized communication with

instructors and peers and how this negatively affects the ability to self-regulate learning successfully. The LMS features of discussion forums, chats, blogs, and wikis, were intended to increase connectedness and communication, but were not utilized by students, leading to a lack of connection to instructors and peers (Araka et al., 2021). The inability of communication tools within the LMS to provide avenues of communication that are effective is an issue within online courses, especially for college students. The LMS is one of the most important aspects of the channels for communication. If the tools or features within the LMS are lacking, communication can be impacted negatively.

Another major factor influencing communication issues in online courses is the instructor's approach to communication within the course. Tokareva et al. (2021) conducted a quantitative study to analyze the readiness of higher education institutions to use interactive online courses and social networks in online instruction by determining what predictors indicated readiness. Results showed not only a lack of readiness but frustration from students on the lack of interaction in online courses due to ineffective use of ICTs like social networks or interactive online courses (Tokareva et al., 2021). The authors recommended that universities should focus on developing courses with interactive social features and ensuring teachers know how to effectively use communication tools (Tokareva et al., 2021). Effective use of communication tools in higher education learning is important to learner satisfaction and outcomes. As shown in this study, when ineffective use by instructors occurs online learning can become unproductive. Better use of tools and communication technologies can facilitate better communication.

Sason and Kellerman (2021) analyzed teacher and student interactions and communications during emergency remote learning situations to determine the needs of higher education students in this situation. Findings in this qualitative study indicated that not only do students need interaction with instructors, but they also seek closer interaction, even requesting the use of WhatsApp to communicate more effectively (Sason & Kellerman, 2021). In situations where interactions were lacking, students indicated they would drop out of the course or that they lacked self-regulation skills to complete the course (Sason & Kellerman, 2021). Understanding higher education students' need for interaction with instructors is important because it affects the learning process and learning experience. Communication tools can help learners feel more connected to the learning. Without tools to facilitate communication, learners will be left without the necessary support and communications to persevere in their learning experience.

Vorlíček et al. (2023) examined both student and university instructors' views regarding the inclusiveness of online learning. Communication with both peers and instructors plays a critical factor in these perceptions and the findings show that online environments can be less inclusive than brick and mortar classrooms (Vorlíček et al., 2023). Training and support for faculty are needed to improve communication efforts that promote inclusive environments. Erlangga (2022) found that many issues exist in the online learning environment for students and these issues are directly related to instructor practice. Students struggle with understanding materials, technical difficulties, poor communication, and ineffective learning (Erlangga, 2022). Erlangga (2022) suggested

that instructors must shift their practice to address these issues, including how they communicate and design learning experiences. Shifting instructor practice in how communication occurs in the online classroom environment needs emphasis and training development. Instructors need clear instruction in how they can improve these practices and why increasing communication is necessary and beneficial.

Communication Apps

Communication apps have great potential to impact the student experience and increase teacher and student interactions. WhatsApp is an example of a tool that increased communication in an effective way. Yu and Motlhabane (2022) conducted a mixed methods study to explore WhatsApp's potential use beyond emergency remote teaching in online learning at a University in South Africa. Findings implied that the WhatsApp tool benefited communication and surpassed the use of the LMS and email (Yu & Motlhabane, 2022). More importantly, the quick response time from instructors had great potential for students to experience less uncertainty in online learning (Yu & Motlhabane, 2022). Afful and Akrong (2020) examined the impact of WhatsApp usage by undergraduate students in Ghana on academic performance. Findings from the quantitative study allowed the authors to conclude that WhatsApp had a positive influence on student academic performance and recommended faculty utilize WhatsApp to communicate with students (Afful and Akrong, 2020). As this study points out, communication apps can positively impact academics and support learners when used for the purpose of academic discussions, support, and sharing of resources. Communication apps allow instructors to better facilitate the connection and social interaction learners

need. In addition, increasing communication and response time provides benefits to students.

WhatsApp, as a communication app, has also impacted communication skills in college students. Utilizing communication apps that allow students to practice and apply skills that will be needed in the 21st-century workforce is another way communication apps benefit students. Morsidi et al. (2021) conducted a quantitative study to examine the use of WhatsApp to develop communication skills in university students because a lack of ability to engage with others through technology affects employability for these students. Statistical analysis of the survey results showed a positive correlation between the use of WhatsApp in courses and the improvement in students' competencies in communication (Morsidi et al., 2021). The authors emphasized that WhatsApp provided a place for students to apply and practice interacting with others in an academic area, noting that this intentional use of the app was beneficial (Morsidi et al., 2021). The use of such tools for educational purposes is important to consider. Using tools that are familiar to students or may be tools students already use may improve the frequency and ease of use, which in turn may increase communication.

Communication apps, like WhatsApp, also provide learner support and adjustment to the online learning environment. Makoza (2022) examined the use of WhatsApp and its impact on learner experience among 1st-year students at the University of Technology in South Africa. The qualitative study showed that WhatsApp helped students adjust to a new learning environment and provided support through interactions with peers (Makoza, 2022). Results showed that students used the app to communicate

and share content or information with each other (Makoza, 2022). In addition, the results emphasized how the app gave students a venue to voice concerns or issues with their learning. Verturino and Hsu (2022) examined the use of WhatsApp in distance education in a South African university and found that the use of the app provided support for students that helps them become more successful. The researchers emphasized that more equitable access to learning is an important consideration for the usage of WhatsApp in the online learning environment (Venturino & Hsu, 2022). Communication apps like WhatsApp provide a necessary support system for learners and can increase students' skills to communicate with other students in supportive ways. Utilizing apps that are free or utilized in learners' everyday life allows for more equitable access to communication. In addition, tools like these provide learners with a mode of communication they are familiar with already and can utilize quickly, improving learner experiences and allowing students to feel more comfortable asking questions.

Student and teacher interaction is a relationship that can be impacted by using communication apps, like WhatsApp. Agrawal and Mittal (2019) conducted an exploratory study to examine the use of WhatsApp in the education sector and how the app could impact customer relationship management in higher education institutions, especially the connections and interactions between students and teaching staff or non-teaching staff. The survey results of the study showed that WhatsApp use can develop and maintain relationships among staff, teachers, and students by reducing the interaction gap students report with the university (Agrawal & Mittal, 2019). Results indicate that by using WhatsApp, the higher education sector can increase student satisfaction by

improving interactions between students and staff (Agrawal & Mittall, 2019). The study is an example of how WhatsApp can cross sectors and provide a tool for students to develop communication skills, including developing relationships across technological tools when not face-to-face. This is an important aspect of the 21st-century skills students may need in the future workforce, especially with remote work.

Implications

The review of pertinent literature indicated that communication is related to learning experiences of students in online college environments. In addition, a lack of communication impacts the learner's experience and success. The literature review indicated that communication apps help alleviate the lack of communication and provide a tool that college students utilize well. RHC faces these challenges in the local setting and the literature indicated that improving both instructor understanding of communication in the online environment and providing tools for communication can help solve the challenge and provide better experience for students. A project consists of professional development training for faculty at RHC to learn how to utilize a communication app to increase communication and learner experiences. A deliverable for the project included a professional development training course that could help further develop the mission of RHC to offer excellent online learning opportunities. Based on the literature review, providing faculty support and training could create a positive shift to greater communication in online classes at RHC.

Summary

In the literature review, I explored the nature of online learning in higher education by examining issues in online learning, challenges of learning in isolation, the development of 21st-century skills like communication in learners, communication issues, and the use of communication apps. The literature indicates a need to explore student perceptions at RHC regarding the use and effectiveness of communication apps. In Section 2, I describe the methodology I used for my investigation. Section 3 includes a description of the project study and Section 4, discussion and conclusions from the study.

Section 2: The Methodology

Qualitative Research Design and Approach

The purpose of this qualitative study was to explore the perceptions of RHC students regarding the use of communication apps in online courses and to determine if these apps help to promote effective communication with instructors and peers, which could transfer to a more engaged and positive learning experience. Three RQs underpinned the study. The first question asked about the perceptions of online college students at RHC regarding the usage of communication technology apps. The second question asked how the use of communication technology apps contributed to communication in the online courses at RHC. The final question asked if the use of communication apps resulted in a negative or positive learning experience for students. A basic qualitative design was used because it aligns with the RQs and purpose of the study to understand online students' perceptions and experiences about using a communication app in their courses.

This study took place at RHC. A basic qualitative design approach included collecting local data and analyzing the data for themes (Creswell & Creswell, 2022). Merriam and Tisdell (2016) explained that basic qualitative research is based on the idea that people create knowledge around their perceptions and experiences of phenomena. A basic qualitative study is a basic interpretive study that examines how individuals are constructing reality and meaning in their engagement of the world (Merriam & Tisdell, 2016). Basic qualitative design examines how people interpret their experiences and what meaning they might attribute to an experience (Merriam & Tisdell, 2016). Lichtman

(2023) explained that the generic approach is appropriate for utilizing the essence of qualitative design to examine perceptions around a phenomenon. The use of a basic qualitative design was appropriate for this study because I sought to understand student perceptions of experiences in the use of communication apps in online learning in the local setting.

This study sought to understand the perceptions of RHC students towards the use of communication apps in online learning and by analyzing themes emerging from data, a picture of the problem and issues at RHC was obtained. The problem at RHC is a lack of communication in online learning and by examining the student perspective regarding communication apps, the research data provided understandings of the problem at a deeper level. Creswell and Creswell (2022) explained that qualitative approaches seek to understand the meaning individuals give to a problem in society. Data were collected in the participants' setting and then analyzed to identify themes (see Creswell & Creswell, 2022). An understanding of student perceptions led to the development of a project (see Appendix A) to address issues reported in the themes from the data collected.

In addition, the constructivist nature of this study aligned with qualitative research approaches (Creswell & Creswell, 2022). The constructivist worldview focuses on the belief that individuals bring subjective meaning to the experiences they have in the world (Creswell & Creswell, 2022). This approach was appropriate for the research problem, purpose, and questions because the understanding of perceptions was the goal of the study and the assumption that students' perspectives are subjective to their experience was necessary. The study would not have been as effective with quantitative or mixed-

methods approaches because these would have limited understanding the perspectives and subjective opinions of students regarding the problem.

Other qualitative designs would not have been as effective for this study. Creswell and Creswell (2022) described other qualitative designs as descriptive method, narrative research, phenomenological research, grounded theory, ethnography, and case studies. The descriptive method design requires the researcher to use limited frameworks and interpretation for the data, which did not apply to this study because situated learning theory is a critical lens for viewing the student experience (Creswell & Creswell, 2022). The narrative research design is utilized in the humanities to have participants provide stories of their lives, which also did not apply to the purpose of this study (Creswell & Creswell, 2022). Phenomenological research focuses on experiences of those involved in a phenomenon, which this study was not examining (Creswell and Creswell, 2022). According to Creswell and Creswell (2022), they explained grounded theory design as a method of forming a theory, ethnography as a focus on cultural observations in a natural setting, and case studies as in-depth analysis of one case bound by time and place. These are all designs fitting different purposes and were not appropriate for this study. A basic qualitative design allowed for collection of data regarding the student experience and development of themes, using situated learning theory as a lens to view the data.

Participants

Creswell and Creswell (2022) described one type of sampling for qualitative research as purposeful sampling, where researchers intentionally select participants that will best help them understand the problem. For this study, participants were purposefully

selected because they participated in online courses at RHC that utilized communication apps as a form of communication. Students selected were enrolled in online programs and had experience with both classes that utilize communication apps and ones that did not. This criterion allowed for a better understanding of learner experiences in courses that use or do not use communication apps.

I invited a total of five students to an interview to elicit the perspectives of students across several courses. In addition, an online survey was sent out to all students in courses using communication apps. A total of 11 students responded to the online survey, allowing me to reach saturation in data collection. Creswell and Creswell (2022) emphasized the need to attempt to reach saturation in any sample size. The total of 16 participants allowed for a deep understanding and saturation of the topic, where the data revealed no new themes or understandings.

Gaining access to participants required the approval of the Walden University Institutional Review Board (IRB). Part of this process required approval of the study methodology, ethical considerations, and disclosures that students would receive. All students gave informed consent to participate, and the consent document received advanced approval from the Walden IRB. The Walden IRB also approved all interview questions, the interview setting, and the online questionnaire in advance. Students were then recruited by email based on the criterion. Informed consent was shared, and students were given the choice to participate. No grades or academic incentives were given, per RHC policy, for students to participate. Students were informed of all intentions of the study and were guaranteed protection of their identity. Once selected, students were able

to choose between a neutral college campus location or virtual meeting based on their comfort level. In addition, students had the option of completing an online questionnaire or email interview. As the researcher, my role was to gather and analyze data to explore participants' perspectives on their use of communication apps at RHC and what this meant to them.

Data Collection

Crewell and Creswell (2022) explained that qualitative researchers typically gather multiple forms of data to have a plentiful amount. Inviting several courses of online students who are using a communication app with their instructor and peers provided a large population of possible participants. Data gathered from multiple measures provided data saturation due to the similar repetition of answers from the participants. The data collection instruments were researcher produced using situated learning theory as a framework for constructing the questions. Data collection consisted of interviewing a group of students (see Appendix B) and sending an online survey (see Appendix C) to several classes of online students. Using both interviews and the online survey, there were sufficient data to reach saturation and answer the RQs. The questions for the interview protocol and the online questionnaire were identical, to provide consistency for when the data were analyzed. Once IRB approval was received (approval no. 01-26-24-1085253), I sent a recruitment email to all online students who have instructors using communication apps, to invite them to participate in the study. The email briefly explained the study and provided two options to participate: by interview or online survey. The recruitment email introduced the study and explained what their

options were to participate. Once students selected a method to participate by either interview or online survey, students then arranged a time for an interview by contacting me or chose to complete the anonymous online survey. The online survey included informed consent that students had to review before completing the questions in a second part of the survey. The survey began with the consent form and once the participant agreed to participate, it opened to a second section with the open-ended questions. For those selecting an interview, an email was sent including the informed consent for participants before a time was arranged. Students interviewed were also asked to give their consent before the interview started and were informed they could stop at any time.

The system for tracking data consisted of digital data collection methods. Data were collected in spread sheets and documents and then analyzed separately. All data were kept confidential and protected on a password-protected computer. The data from the interviews were recorded and transcribed using an app to allow for thematic coding. The data from the online survey were collected in spread sheets to organize and analyze the data. All data were digital, which allowed me to search, organize, and retrieve the data easily. Data from both sources were analyzed for codes and themes and then organized under those themes.

RHC has several instructors who both teach online and who utilize communication apps in those courses. Because these instructors' courses fit the criteria of the study, a list of students participating in those courses was developed from the student information system at RHC. Only students who have taken courses from the instructors using communication apps were selected to invite to participate in the study.

Once participants reviewed the informed consent via email, I was contacted by each one selecting to participate to schedule an interview. Interviews consisted of five college students who took online courses at RHC in which instructors utilized communication apps as a form of communication during the course. The interviews were conducted using a videoconference tool, such as Zoom, or via phone for convenience and to allow for the interview to be recorded and transcribed. Each interview was recorded and transcribed for multiple analyses by coding the data and then organizing the codes into themes to answer the RQs.

The online survey was sent to 58 students at RHC who are enrolled in courses with instructors who utilize communication apps as a form of communication during the course. The online survey was available for 2 weeks. After the 1st week, a reminder email was sent to the prospective students to encourage them to complete it. The online survey results were gathered on a spreadsheet for thematic analysis. Both the interview questions and survey were developed by me and received approval from the Walden and RHC IRB before students were recruited.

I am employed at RHC as the director of professional development in the school of education. I help students choose programs, enroll, and problem-solve their concerns. For this reason, I may have had previous limited interaction with some participants. I, however, was not their instructor, and I did not directly work with them on their coursework. I had little familiarity with the adjunct instructors at RHC who used communication apps and did not have any previous interactions that would create bias.

Data Analysis Results

Data were analyzed through thematic coding analysis utilizing situated learning theory, including first and second-cycle coding (Creswell & Creswell, 2022). Themes from the theory were used to guide coding cycles. Data from the interviews and surveys were used to answer the RQs, as well as provide support for the development of a project that benefits the institution where this study took place. There were several steps to the coding process. First, I created initial codes using the concepts from the theory. Next, I read the data multiple times to create initial codes. Then, the codes were grouped together to form themes. Finally, the themes were aligned with the RQs to answer them.

Ensuring accuracy and credibility was important throughout analysis. The first step to ensure this occurs was member checking (Creswell & Creswell, 2022). Two participants received copies of transcripts and the analysis of themes to analyze for accuracy from their perspective. Student participants were given the opportunity to comment on the findings. Utilizing several sources of data also ensured credibility and accuracy in emergent themes (Creswell & Creswell, 2022). Finally, the findings include a clarification of any researcher bias in the findings. Discrepant cases were included in the analysis and discussion, because these cases attest to real life and different perspectives, lending to more credibility for the data (Creswell & Creswell, 2022). Contradictory evidence was reported and discussed in all findings.

Analysis of the data showed that a variety of communication apps were used by instructors at RHC. Participants reported using communication apps like WhatsApp, Remind 101, and GroupMe. The instructor's selection of a communication app and how

it was used influenced the participant's experience. Participants reported more variety in how the app was used if WhatsApp or GroupMe were utilized by the instructor. In the instances where instructors used Remind 101, participants reported the app being used for reminders mostly.

The results from the data analysis showed several emerging patterns that answered the RQs presented in this study. Through the second cycle coding, major themes emerged. The data revealed that communication apps were used either effectively or ineffectively, impacting the student experience. These two themes emerged from in depth analysis and coding of the data from both the online survey and the interviews. First, if communication apps were used effectively in the online classroom, participants reported increased communication, better peer interaction and feedback, easier connection to instructors, and improved academic experiences. Second, if communication apps were used ineffectively in the online classroom, participants reported a lack of communication, lack of connection, and confusion. To better understand the data results, analysis is focused on each of the RQs of the study.

Research Question 1 Analysis Results

The first RQ of this study sought to examine the perceptions of online college students at RHC regarding the use of communication technology apps with instructors and peers. The data results showed that the user experience depended on the communication app and instructor. Depending on how instructors used the communication app, participants' perceptions varied widely. If communication apps were used effectively within the online class environment, then participants shared positive

feedback regarding the experience. On the other hand, when the communication app was used ineffectively as a last-minute reminder or extra unnecessary tool, participants expressed frustration and general dissatisfaction.

Participants who reported that the communication app was used well or effectively in class described how the communication app was used. In these online classrooms, instructors used the apps to form peer groups, communicate assignment expectations, have informal discussions, and as a place for students to ask questions. Participants reported several benefits when the app was used in this manner. The first benefit was increased or better communication with instructors. Participant 16 described the effective use of communication apps as useful. “It made my experiences easier because I did not have to be as worried or procrastinate as much as I did due to my instructors’ willingness to be understanding of us all” (Participant 16). Participant 4 explained that the use of communication apps allowed an informal, more comfortable way to connect with instructors. Participants also reported that it was easier to stay connected with instructors using a communication app versus email (Participants 2, 4, 6, 7, and 10). Participant 4 reported that, “I really liked being able to communicate with my professors not using email.” Communication apps were perceived by some participants as better than communicating via email.

Another benefit of the effective use of the communication apps in an online class that was reported in the data were better peer interactions. Not only was communication increased and made more comfortable, but participants also reported that increased peer feedback or interaction helped them better understand the course. Participant 4 described

peer interactions in most online classes as non-existent or discussion post responses. Participant 4 reported, however, that the usage of communication apps t made it easier to connect with peers because it was “more casual and had less pressure.” Participant 4 also reported that they would not have talked to any peers outside of class without a communication app to do so. Participant 6 also shared that in one class there was an opportunity to communicate with peers and that this was great compared to other classes. Participant 2 stated that communicating with peers via a communication app was helpful, even when the instructor did not create the group chats and students did so on their own. This was beneficial to Participant 2 because talking with peers let them share resources and explanations. Multiple participants noticed improved peer interaction with the use of communication apps.

Another aspect that participants reported as beneficial to the use of online apps was how the learning experience was made easier. Participant 9 explained that online courses were easier because when using communication apps, the participant could ask questions and watch videos as needed. Participant 7 also expressed that the learning experience was easier. First, peers were able to share resources to websites and articles, as well as express their thinking, which provided invaluable resources to those in the class (Participant 7). In addition, instructors providing video resources through the communication app made the participants feel like they were in class (Participant 7). Participant 3 also mentioned that communication apps allowed for differentiation of resources and the needs of each student to get support. Finally, participants reported that getting more information about the course made the online experience straightforward

(Participant 4, 7, 10, and 11). Overall, effective use of communication apps made the learning experience easier for participants.

Participant perceptions were also impacted by ineffective use of the apps in the classroom. Participants described the usage of apps by some instructors as either something extra and not utilized often or as a last-minute reminder tool to hold participants accountable (Participants 1, 2, 5, 7, 8, and 15). Participant 2 reported extreme frustration with how the instructor used the communication app. Participant 2 stated that "I feel like it made it [communication] worse because I was checking multiple platforms except for the group chat because the group chat only had it [the new message posted] 10 min before it was due." Participants reported that when it was used as reminder, in addition to the LMS and email, it became an extra place to check for directions and was not helpful (Participants 2, 5, and 7). Participant 2 added that it could have been beneficial if it were used to share resources or ask questions of peers and the instructor, but especially of the instructor. Participant 5 also felt like it was an extra step that was not any different than what was communicated in email or the LMS, meaning that the participant had to check multiple places for repetitive information. Participant 7 pointed out that the use of the communication app was only helpful if the information was relevant to extra support for the course or daily communication, but because it was not used in this way, it was not helpful.

Participants also reported confusion with where to check for information or where to go with questions in the online environment. When the communication app was optional or not used often by the instructor, it did not contribute well to the participant

experience. Participants felt disconnected from peers and instructors. Methods of communication were not clear for participants, and they reported that often they developed their own text/chat groups to help each other (Participants 2 and 4).

Interactions with peers were also something lacking for participants when the communication apps were not used well. Participant 8 reported wanting better communication in the online courses to interact with peers:

> I do wish I had a Zoom call or Google Meet so that I could get some time to chat and learn with my peers because I enjoy the social aspect of school and hear what others might have to say about topics we are learning about.

Participants reported not feeling connected to peers or not interacting with them at all in online environments (Participants 8, 9, 10, 11, 12, and 14). A lack of connection to peers in online learning was prevalent, especially when the communication apps were not used effectively or well.

Research Question 2 Analysis Results

The second RQ for the study sought to answer how the use of communication technology apps contributes to communication in courses at RHC. Again, the data showed that this depended on how the communication app was used by the instructor. Effective use of the communication app for discussion, instructor communication, clarification and peer interaction contributed differently than if the communication app was used as a reminder tool.

Increased communication was reported by several participants where instructors used the app for group communication, questions, and an informal space for discussion.

Participant 7 reported that the communication app "allowed the class to be more personal, which increased the amount of communication and helped me enjoy responding." More importantly, the opportunity to have increased communication allowed some participants to communicate more. Participant 5 discussed the way the instructor used the communication app:

> [It] made communication more frequent because it opened the door to communicate. In past experiences, I would feel like I shouldn't communicate because it was unwanted. When instructors open that door and invite the communication, it makes me feel like they want to hear from me and help as needed.

The communication app made communication more frequent in these cases because the participant's perceptions led to an increased comfort level with the communication with instructors and peers.

Participants who experienced the communication app being used for reminders or accountability purposes, did not report an increased frequency of communication. Participants shared that email was used more in these instances, and they were frustrated with the time it took for a response to a question (Participants 2, 8, & 17). In addition, participants reported that the app being used in this method led to one way communication. Participants did not respond or discuss in the communication app. Participant 8 explained that "if we used more communication apps the frequency of communication in online courses would increase. If some communication apps were more convenient or accessible (free) for everyone it would increase the amount of

communication.” The use of the apps to communicate between participants and instructors was more productive and used more often if communication felt informal and convenient. When used for other purposes, however, participants noted that it was frustrating but could be helpful if used differently.

Research Question 3 Analysis Results

The final RQ of this study asked how the use of communication technology apps contributed to positive or negative learning experience in courses at RHC. The use of communication apps impacted participant satisfaction and academic performance in either positive or negative ways. Again, this aligned with how the communication app was used by the instructor and how the participant perceived its purpose. When the communication app was used for more frequent informal communication, participants shared positive experiences. However, when communication apps were used in a different way as a reminder or accountability tool, participants felt frustrated, confused, or that it had no impact on their experience.

Academic improvement was the most highly reported positive impact by participants regarding their experience with the use of communication apps at RHC. When the communication app was used for discussion and questions, participants felt that it increased academic success because it made understanding assignments, requirements, or the learning for the course easier and more accessible. Participant 3 reported that it allowed for differentiation more within the class because instructors used different aspects of the communication app differently to support other participants. Several participants reported it made learning online easier and improved academics in this way

(Participants 3, 4, 7, 9, 10, 11, 14, and 16). In addition, some participants suggested that it helped them focus and stay on track in the online environment.

Another aspect that was positive for the participant experience regarding communication apps was the academic support received in the app. Participants that perceived it as helping their academic efforts suggested that the review, clarification, and staying on pace with peers were helpful elements. Participant 7 offered the following explanation:

> My academic efforts increased when I saw expectations and how others interpreted them. It also helped with my pacing because I was often waiting for others to respond or turn in assignments. Communication between faculty allowed me to have specific guidance and persevere through the classes.

Other participants expressed that the opportunity to review videos and ask questions also helped the positive academic experience (Participants 3, 4, 7, 10, 14, and 16). In addition, being able to receive feedback from peers was noted as a positive element of the communication app. Participants expressed positive experiences when the app was used for these purposes and not simply as a reminder tool (Participants 3, 4, 7, 10, 14, and 16).

In addition, participants reported that the use of communication apps increased their academic efforts overall. Participant 10 stated that “the use of communication apps makes me try harder because I am not second guessing what I am doing. I know what the instructor is looking for and what the purpose of the assignment is, and I can put my best work forth.” Participants also expressed that communication apps improved their grades overall (Participant 14, 15, and 17). Participant 14, specifically, explained that the

communication app made it feel more one-on-one with the instructor, improving the participant's grade in the class. Participant 11 explained that their grade improved because assignments were easier to understand when extra information was provided. Effective use of the communication app helped students perform better academically.

Negative learner experiences also occurred with the usage of communication apps at RHC. Instructors who used the communication app to remind participants or to hold them accountable for on time responses or as assignments had a significantly negative impact on participants. Participants reported frustration, disconnection, and confusion with instructors and peers in cases of ineffective use of the communication app (Participants 2, 5, and 7). For Participants 2 and 5, it felt like an unnecessary extra or inconvenience because it was a last-minute reminder or was used in addition to other platforms. Checking multiple platforms for information negatively impacted the participant experience. Overall, if the communication app was not used often or used for a one-way communication tool, participants felt dissatisfied and negative about the experience.

On the participant end, there was some confusion about what a communication app included, indicating that the use of communication apps at RHC has been haphazard and confusing to participants. One case was reported in the data collection where a communication app was not used, as a participant participated in the study having only used Zoom in online classes. Participant 1 had the perception that Zoom was a communication app and because this was the only one used in online courses for the participant, the participant reported satisfaction with communication. Although Zoom is

not a communication app, in the sense of this study, the participant reporting it as such shows the haphazard and general ineffective use of communication apps in online classes at RHC. Instructors are not widely using forms of communication besides email and Zoom, which informs the project for this study because clarification and training on communication app usage might be helpful.

Project Implications

The data results show that effective use of communication apps in online classes at RHC has a positive impact on the participant experience, although ineffective use has a negative impact on participants and their communications. The results informed the project because the use of communication apps in online classes at RHC needs improvement. Instructors need professional development and the creation of a community of practice around how to communicate effectively in online classes. Professional development will not only help instructors understand the need for improved communication using communication apps, but also understand how to use the apps in the classroom effectively. More importantly, the community of practice can help develop a continual conversation among online instructors at RHC to continue to improve the usage of apps and lead to a more streamlined approach.

Section 3: The Project

Introduction

A project can address the participant perceptions of how communication apps are used in online learning. The data results suggest that the faculty at RHC can benefit from professional development training. The professional development training includes a 3-day training for all full-time and adjunct faculty who teach online learning at RHC. More importantly, the 3-day training will be followed-up with monthly meetings and discussions. The follow-up meetings can help develop a community of practice to better implement best practices in online learning communication. In addition, professional development can help streamline the communication methods and apps being used so participants are not using too many different apps. Appendix A includes a full description of the project including the purpose, goals, learning outcomes, timeline of activities, course materials, and learner modules.

The goals of the project are twofold. First, a streamlined approach to utilizing communication apps at RHC should be developed via the project and community of practice meetings. The use of a communication app will help to improve the communication concerns and issues faced by students in online classes at RHC. The second goal of the project will be to provide better training and professional development for faculty at RHC in the use of communication apps. The goal will be to impact the faculty pedagogy at the college in a way that better reflects the unique nature of online learning best practices.

Rationale

The data results showed that a consistent approach to communication in online learning at RHC does not exist. More importantly, the data results and analysis revealed that effective use of communication apps at RHC resulted in more positive student experiences and academic efforts, although ineffective use led to frustration and confusion for participants. The data results show that how the instructor used the apps and the frequency of use influenced student perceptions. With professional development, instructors can develop their purpose for use and align use with best practices for online learning communication.

The benefits of effective use of communication apps are shown in the data results. Participants expressed increased communication, improved academics, better peer interaction, and easier communication with instructors. With so many benefits for students, RHC should see the use of communication apps in online learning as a critically important focus for future instruction. With professional development and continuing support for implementation via a community of practice, instructors can implement effective communication app use (Reedy et al., 2021) Improved practice may benefit the students and increase communication in the online learning environment (Archambault et al., 2022). The project can possible allow RHC to reach these aspirations.

Without clear direction in both the importance of communication in online learning and the effective use of these tools, instructors may continue to utilize the apps in ineffective methods that continue to frustrate students, making online learning harder. In addition, many online instructors may not be using any communication apps at all.

Email may be the only method of contact that the students in online courses or programs may have with instructors (Meletiou-Mavrotheris et al., 2021). The use of communication apps will be an expectation and ongoing practice that online instructors at RHC will be expected to utilize. Utilizing communication apps in all online courses will improve the experience for all students, allowing a quicker more informal way in which to communicate.

Professional development with an ongoing community of practice is the most fitting way to address the communication needs of the online learning environment at RHC. Instructors need to understand the importance of using communication apps and develop methods and best practices around their effective use. Without professional development, instructors will use the apps haphazardly or not at all. In addition, professional development allows for consistent practice and the use of one common tool or app for all courses. This would help improve practice and consistency across courses and programs.

The project addresses the problem in this study by creating a shift in practice and pedagogy for online instructors. The professional development course provides instructors with both the understanding and tools to better communicate in their online courses. The activities and materials will allow instructors to develop their practice over time in a supportive environment. More importantly, professional development experience can address the gap in practice and help instructors improve the online learning communication experience for learners at RHC. The problem and data results align clearly with the project, in this case, because the issue can be directly addressed in a

professional development course. Although a professional development course can have great impact, the ongoing professional development and community of practice can ensure that instructors have continued support in their implementation of communication apps in their online courses.

Review of the Literature

Community of practice social learning theory grounds this project and provides a framework to develop it. The literature review includes an examination of the theory that applies to this project. Second, the review includes an analysis of relevant literature based on communication in online learning in higher education and professional development. Peer reviewed articles from education journals over the last 5 years were used to develop a better understanding of the project, including community of practice, professional development in higher education, online learning pedagogy, faculty perceptions on communication apps, and building connection in online learning. The literature resources were examined after various digital searches on the databases ERIC, Education Source, and Taylor Francis Online. Key search terms included *community of practice*, *professional development in higher education*, *ongoing professional development*, *online learning pedagogy*, *online learning and connection*, and *faculty perceptions in online learning.*

Community of Practice

A community of practice is an important part of the professional development of faculty and in developing new practices in the educational setting. The theory of a community of practice was developed by Wenger in 1998 and has been a prominent

theory impacting social learning theory (Farnsworth et al., 2016). Wenger defined the community of practice as a learning partnership based on domains of practice (Farnworth et al., 2016). Communities of practice have three main characteristics including a shared domain of practice, a community in which relationships are created, and a community where these relationships allow community members to engage in learning (Reedy et al., 2021). The members of the community develop shared resources within their practice (Reedy et al., 2021). Developing a community of practice includes creating a community in which these characteristics can develop.

A unique aspect of the community of practice theory in social learning theory is that the community of practice involves creating an identity in practice (Sarid & Levanon, 2022). Learning takes place with participation and differing viewpoints of participants, allowing for practitioners to refine and better understand their practice (Lai, 2021). Learning happens with the support of peers through a social process (Lai, 2021). Lai (2021) argued that successful communities of practice focus on practice and develop norms of interaction. Developing instructors' ability to improve their practice can be done in communities when norms and clear goals are established.

An important distinction between communities of practice and networks or teams is the purpose and elements involved in the community of practice. Hyder et al. (2021) explained that a community of practice is an environment where practitioners can share stories of positive and negative experiences to further develop a larger practice in the entire community. The authentic nature of the community of practice and the fact that it is grounded in authentic practice, leads to the development of better practices (Hyder et

al., 2021). The discussion around each other's practices becomes a vital resource in the learning community. In addition, communities of practice meet regularly to create the community and examine practice around the domain in focus.

Professional Development in Higher Education

Professional development is a vital component of an educator's practice and encompasses a wide range of activities and experiences. The goal of all professional development focuses on improving instructors' pedagogy and student learning. Professional development, however, does not always have the desired outcome or impact. Sims and Fletcher-Wood (2021) argued that certain characteristics of professional development in higher education result in effective results. These characteristics include that professional development is sustained, collaborative, has participant buy-in, focuses on specific subjects, and is based on practice (Sims & Fletcher-Wood, 2021). Sancar et al. (2021) argued that professional development must also be individualized, collaborative, and based on the instructor's prior knowledge to have maximum effect. The design and structure of professional development determines the effectiveness for participants.

Constructive professional development is sustained over time and not a one-time experience; it takes time for instructors to develop new knowledge (Sims & Fletcher-Wood, 2021). Professional development should also be experienced in a group of peers to help instructors collaborate and develop a community of practice. Professional development participants should also have buy-in with the topic and the opportunity to apply it in practice. The participant's interest and relationship to the subject is important.

More importantly, professional development should result in an impact and improvement in instruction or student learning (Fernandes et al., 2023). Simply collaborating in sustained professional development does not necessarily lead to a change in practice.

The goal of professional development in higher education focuses on increasing instructor competencies and quality of instruction. Professional development, however, sometimes consists of completing a course quickly and simply checking the item off a list as completed. To better engage faculty in the process of professional development several factors can be shifted. Hinojosa-Pareja and García-Cano (2023) described a team-based professional development approach that accounts for the social nature of learning. The development of professional learning communities and learning teams contributes to greater personal reflection, the construction of new learning, and shifts in practice (Hinojosa-Pareja & García-Cano, 2023). Ibrahim (2020) explained that shifts in practice occur when instructors engage in professional development where a community exists in which they can engage with instructors who also teach online. Learning in a team or community environment can improve the results of professional development regarding online learning practices.

The structure of the overall professional development program also impacts the success. Fernandes et al. (2023) examined the best structure of professional development for higher education. Sustained sessions in which active learning occurs are the most effective method for professional development to shift pedagogical knowledge. More importantly, Chaharbashloo et al. (2024) explained that the content of sustained professional development would have a multi-level approach to online teaching. A

technological, pedagogical, procedural, and reflective approach should be adopted in a sustained professional development program over time (Chaharbashloo et al., 2024). This approach should allow for a rich development of the competencies that instructors need to be successful in online teaching.

Online Learning Pedagogy

An important aspect of professional development is furthering the faculty's understanding of online learning pedagogy. For online learning, pedagogy includes the methods or strategies used to teach in the online environment (Archambault et al., 2022). With the increase of online learning courses in higher education, pedagogy must be reconsidered to include methods where the instructor acts as a guide and not a lecturer (Cohen, 2021). This is a major shift in pedagogical thinking for many faculty in higher education. Cohen (2021) argued that shifting lecture-based classroom methods to the online environment is not effective or useful to students. Students are autonomous learners in the online environment and need connection and learning from the faculty leading the course. It is essential for faculty to understand the principles and practices of high-quality online learning and teaching (Archambault et al., 2022). According to West et al. (2024), the greatest shift necessary for online learning is that faculty recognize their role as facilitators versus content delivery. Student-centered instructional methods and strategies are essential to the success of online learning.

Several pedagogical methods should be considered for faculty professional development to improve the learning environment for students in online classes. First, a strong teacher presence, even in asynchronous courses, must exist for students to receive

the necessary guidance, support, and clarifications on learning objectives (West et al., 2024). West et al. (2024) emphasized the importance of social interaction and a sense of belonging for students in the online learning environment for success. Archambault et al. (2022) explained that community development, discussion facilitation, and student-centered practices are some of the most important considerations for online faculty. Practices that focus on students and community create the best learning opportunities for students when learning online. Technological pedagogical knowledge is also necessary for instructors who teach online. Khoza (2022) described this knowledge as the ability to communicate and create material for instruction using technology. These types of best practices and pedagogical knowledge encompass the use of communication apps to achieve a sense of community and collaboration for students in the online classroom.

A final component of online pedagogy is the idea of community and connection in the online classroom. Archambault et al. (2022) explained that a critical component of online learning pedagogy is the connection and community created between educators and students. The creation of community and relationships developed in online communities is an important strategy that instructors must consider. Khoza (2022) explained that utilizing technology for interaction and collaboration among students is a skill needed by faculty and a focus when developing technological pedagogical knowledge. Creating community and collaboration opportunities has great potential in higher education and can be further developed when faculty gains the knowledge to implement these practices. Ren (2024) emphasized that emotional engagement of students in online learning can be impacted when effective pedagogy is used. One key

component identified by Ren (2024) is the use of affectional communications used by instructors to create an environment where the communication and availability of instructors creates positive emotional engagement. The selection and use of digital tools can impact the student experience and emotional comfort in the course, which in turn affects their motivation, engagement, and ability to learn (Ren, 2024). Students learn best when they feel safe, emotionally connected, and feel supported (Ren, 2024). Technology tools and practices that can foster a safe, comfortable, supportive, and emotionally connected environment create the most effective learning environments.

Online learning pedagogy involves the use of digital tools to create environments where students feel safe and supported. Increased communication and interaction are critical elements of pedagogy that cannot be overlooked. Instructors need training and support in developing their knowledge of how to use technology and properly instruct in the online classroom so they can create environments that are student-centered and result in successful learning. Instructors must develop the necessary technological and teaching pedagogy to teach in the online classroom.

Faculty Perceptions on Communication in Online Learning

The perception of faculty members regarding online learning is important to consider, when developing professional development training to engage them in best practices. Faculty perception and understanding of online pedagogy and tools can hinder or support the learning in a course. The goal of professional development is to further develop faculty understanding, but beginning with perceptions and potential bias or concerns is critical for success. Cabrera et al. (2024) emphasized the impact that the rapid

shift to online learning in higher education's classes has greatly impacted universities and colleges everywhere. With such rapid changes, higher education institutions have been placing additional pressure on faculty to adjust teaching methods with little to no professional development or support in how to do so (Cabrera et al., 2024). In addition, these demands do not necessarily fit with faculty perceptions on pedagogy or their teaching practices (Cohen, 2021). Faculty perceptions and practices should be considered in any professional development training.

Faculty understanding of face-to-face learning versus online learning is often very different. Cabrera et al. (2024) studied faculty perceptions and results showed that faculty do not always believe that online learning is appropriate for all students or all disciplines. Despite a class being online or students being enrolled in these courses, faculty perception may be that this instruction is not suitable in the online environment and that the learning will not be successful (Cabrera et al., 2024). Ibrahim (2020) stated that instructors generally "believe" that face-to-face instruction is better than online instruction. Meletiou-Mavrotheris et al. (2021), however, explained that online learning expansion in higher education is an opportunity to change practice and create more engaging learning environments. Faculty expertise and perception do not align with this goal, so there is a discrepancy between best practices and what instruction faculty deliver in online learning environments. When faculty perceives the online environment as not conducive to high-quality learning and believes these courses and programs are subpar, then their efforts in instruction will not match face-to-face instructional efforts (Cabrera et al. 2024). It is critical that faculty perceptions regarding the role of online learning in

higher education are considered and examined before expectations for instruction or best practices are developed.

Another important factor to consider in faculty perceptions of online learning is how they view communication and collaboration in the online learning environment. Communication and collaboration directly impact the student experience. Faculty practice and perceptions are critical to improving the student experience. Lowenthal et al. (2021) examined faculty perception with synchronous video sessions, which closely mimic face-to-face instruction. Faculty express frustration and lack of preparation to teach even when the delivery is synchronous sessions (Lowenthal et al., 2021). The qualitative study described faculty perceptions where instructors felt students were not engaged and there was a large learning curve to effectively use the technology to make class instruction engaging (Lowenthal et al., 2021). Faculty often express concerns with the effort and time required to teach online (Ibrahim, 2020). The learning curve for teaching asynchronously and communicating with students is another concern when considering faculty perception; faculty have expressed concern with the time and effort needed to engage and communicate with students in synchronous courses (Lowenthal et al., 2021). The ability of faculty to successfully communicate in online courses will be impacted by whether it is worth shifting their practices and thinking.

Fostering of Connection in Online Learning

Another aspect to consider when developing faculty's skills in teaching online is focusing on the importance of building connections in online learning. The need to connect cannot be underestimated in the online classroom. Steele et al. (2023) conducted

a study reviewing faculty and student perceptions regarding factors that impact the online classroom experience the most. Several factors connected to building connections with students emerged from both the student and faculty points of view, including faculty engagement with students and feedback with discussion (Steele et al., 2023). Building connection in the online classroom is critical for engagement.

Loneliness and isolation are often an issue for students in online courses; communication and connection with others are key to combat these issues. Kaufman and Vallade (2022) explained that instructors in online courses need to be strategic, aware, and intentional with their communication efforts. When communication is ineffective in online learning, the negative outcomes influence student learning and experiences (Kaufman & Vallade, 2022). Students connect better with instructors who build rapport and connection in the online environment, positively affecting learning (Kaufman & Vallade, 2022). Ahern et al. (2024) described communication and connection as the key factors in mitigating loneliness, isolation, and educational disadvantages in online learning. Connection is a valuable tool to prevent the sense of isolation often associated with online classrooms.

Connectedness impacts the learner and classroom in many ways. Ahern et al. (2024) described connectedness as a feeling of belonging and explained five themes for connectedness including usability, teacher interaction, immediacy, synchronicity, and community. These factors influence student satisfaction, engagement, and success (Ahern et al., 2024). Steele et al. (2023) explained that connectedness is critical because student perceptions of the value of interaction, content, and feedback will determine the amount

of effort and time spent on the learning process, which in turn affects the learning and cognitive experiences of students. Rapport and connection are powerful ways for students to connect with learning (Kaufmann & Vallade, 2022). Kaufman and Vallade (2022) also explained that higher levels of rapport, including positive interactions and personal connection, relate to less isolation and loneliness for students. Strategies to create connectedness and community include course design, communication behavior and tools, and facilitating student interactions (Kaufman & Vallade, 2022). Connectedness influences the learning process in significant ways and must be considered by faculty in course design and communication efforts.

Connectedness in online classrooms can happen in many ways and be impacted by the communication tools used. Stone and Logan (2018) explained how social media and informal channels of communication can be very beneficial in sharing information and creating connectedness. Convenience, speed of response, and privacy of discussions are also benefits to using tools like WhatsApp or other social media (Stone & Logan, 2018). Cronjé and van Zyl (2022) also described WhatsApp as a tool for building community and connection in the online classroom. WhatsApp or other communication apps allow for better collaboration and connection for students and helps academic achievement when classes are not face-to-face (Cronjé & van Zyl, 2022). Nasution and Munandar (2023) also explained how WhatsApp can provide connections and increased communication, a necessary characteristic for higher education online courses. Overall, using tools like WhatsApp or other social media informal tools helps increase connectedness for students.

Project Description

The project for this study includes a 3-day, in-person professional development training for faculty at RHC and follow-up monthly meetings through the 1st year to implement the use of communication apps in online learning. The 3-day professional development training will provide faculty with an overview of why communication apps should be used and how to implement them in online courses (see Appendix A). The follow-up meetings are critical to the success of implementation because these meetings will help develop the community of practice while providing support for the faculty throughout the initial stages.

A few resources currently exist to support the implementation of online learning at RHC. The online learning director and committee can provide valuable expertise and support during implementation of the use of communication apps. RHC is also hiring a curriculum coordinator who focuses on online learning procedures. This new staff member can host the training and facilitate the community of practice meetings throughout the year. Having ample personnel resources for support will help implementation flow more smoothly. The provost also supports improved online learning practices. I will provide training and assist with the presentations in the initial stages and will also participate in the community of practice throughout the year. Acting as a resource to those involved will be my primary role.

Several barriers may exist to the implementation of the training. First, having faculty buy-in and attendance will be critical to the success of implementation. The initial training will develop the expertise of faculty and create a dynamic for a community of

practice, so attendance is of the utmost importance. The provost will also allow for training to take place during the faculty's contracted time, provide a stipend for professional development, house the training on campus, and provide lunch to help encourage attendance and provide solutions for the barrier. RHC has funds for in-house professional development, and these will need to be allocated to the training allotment. Faculty will more than likely attend if these items are addressed.

The timeline for implementation will include the professional development training days and the year-long monthly meetings centered around the community of practice. The initial training should take place during the required August professional development days contracted for faculty. This is an ideal time to introduce the topic, provide time to setup, and create plans for utilizing communication apps in online learning. After the initial training, faculty should meet once a month to discuss and problem solve in their own community of practice. This will allow for the creation of the community of practice and provide support throughout implementation during the 1st year covering fall and spring semesters.

Project Evaluation Plan

Evaluation is an important part of the project implementation when improving communication in online learning. The evaluation for this project will include a formative and summative assessment of faculty understanding of the topics included in the training. Assessing participant understanding is a major step in professional development to ensure the outcomes and objectives are met clearly and succinctly. The assessment will assess faculty knowledge regarding communication in online learning, the use of

communication apps, best practices for communication, social presence theory, and the importance of creating clear lines of communication. The pre-assessment will gauge instructor's current practices and understandings regarding communication in their online courses. The two formative assessments will assess faculty's understanding of the 1st- and 2nd-day learnings, allowing them to respond in short responses and demonstrate their knowledge. In addition, faculty will journal throughout the training and reflect on their own learning. Finally, the summative assessment will assess the faculty's understanding of communication apps, social presence theory, and best practices in online learning regarding communication. These assessments will provide feedback for the trainers regarding faculty perceptions and understanding.

The only way that communication in online learning can improve at RHC is if there is a shift in thinking and practice of the faculty teaching online courses. The faculty must shift their thinking and acknowledge that communication is critical for online learning and that communication apps are a tool that can improve communication. In addition, faculty may need to shift their pedagogical thinking to develop best practices. Assessing and evaluating faculty understanding through formative and summative assessment will ensure that the pedagogical knowledge and understanding aligns with the use of communication apps before implementing use in the classroom. Ensuring the comprehension of faculty also provides a critical foundation for the use of communication apps. The data from this study revealed that simply implementing the use of a communication app is not enough, because faculty need to understand the purpose of

use and how to effectively implement communication tools. The evaluation of faculty knowledge is the appropriate way to evaluate if the project is successful.

The overall goals of the project are twofold. First and foremost, faculty instructing students online at RHC should develop clear pedagogical knowledge regarding best practices and communication in online learning, through both professional development training and the community of practice. Secondly, faculty should develop the necessary skills in ways to use communication apps and an awareness of how to effectively implement communication apps in the online classroom. These goals align with the results of the data to both improve communication in online learning at RHC and effective use of communication apps to help foster positive student learning experiences.

The evaluation goals for the faculty assessments will help all stakeholders ensure that the knowledge base exists for faculty to effectively implement communication apps. The stakeholders include students, faculty, the RNC administration team, and the online learning coordinator. Improving online learning communication helps RHC meet its goal of being a leader in online learning. Ensuring that faculty is capable and has the necessary skills to implement communication apps is the first step.

Project Implications

There are several implications of the project study. First, the study impacts social change. Improving online learning communication and the effective use of communication apps in online classrooms can have positive social change implications. Improving the student experience in online learning can result in more positive learning experiences for students. Positive learning experiences can result in improved student

connection, motivation, and persistence in online classes and programs (Wright et al., 2021). Better communication can support student learning and increase connectedness to grow online learning communities in positive ways. Improving the student experience for online learners at RHC can also have greater implications for other institutions having the same concerns or issues in online learning. Online learning allows many students who could not otherwise attend college to access a college education (Ayu, 2020). Improving the experience and ways in which students feel supported can help more students access learning in this way and be successful.

The project implications also affect the stakeholders at RHC; students, faculty, and RHC administration. An improved experience for students is important for their success in the online classroom. In addition, faculty developing a better understanding and the skills to utilize communication apps can shift their thinking and practice to not only improve their online teaching experience but also possible help them become more comfortable teaching in the online environment. RHC administration can benefit from a better student experience in online learning and faculty development in this area because this can help online programs grow and allow the college to fully become a regional leader in online learning. The project implementation and outcomes at RHC can also impact other colleges and universities by providing a model for implementing communication apps and better practices in online programs.

Section 4: Reflections and Conclusions

Introduction

The reflections and conclusions of the project and work are included for the study. The project has strengths and limitations, which are addressed. In addition, recommendations for alternative approaches can help others in the journey of utilizing communication apps in online learning. A personal reflection and analysis of growth is discussed regarding the processes involved in the study and project. Finally, the impact the work of this study and project might have overall is discussed.

Project Strength and Limitations

The implementation of a new tool can be complicated and have significant positive impact when done well. Although, implementing any new skill or practice takes time and effort. Several factors can impact the project outcomes; including faculty perceptions and prior practice, faculty acceptance or resistance to practices shared, faculty comfort level with communicating with students via a communication app, and faculty commitment to participating in the training and community of practice. Chaharbashloo et al. (2024) explained that professional development for faculty is impacted by their competencies and ability to reflect. The professional development training offered in this project offers both competency development and reflection throughout the training, which is a strength. Faculty limitations, however, may impact project outcomes, as this may determine participation outcomes.

Another strength of the project in this study is the development of a community of practice for the faculty, which can assist them in implementation throughout the school

year. Hyder et al. (2021) explained that communities of practice can greatly impact faculty development in a positive way. Faculty buy-in and participation, however, could limit the outcomes of the project. Clear assessment of preconceptions in the pre-assessment will help overcome any limitations. The coordinator for curriculum and online learning will have to address any preconceptions or concerns that arise throughout formative feedback and journal reflections. The professional development will need to be adapted to the faculty as needed, according to the formative assessment.

Recommendations for Alternative Approaches

The project for this study included professional development training, however other alternative approaches could address the problem in this study. A full evaluation report could assist RHC administration teams on how to best move forward in improving online learning experiences at RHC. In addition, an evaluation could recommend communication avenues that may be available for purchase within the existing systems. This could streamline app usage in an alternative method that may not be done with WhatsApp. Another alternative approach could include a plan to better implement communication in online learning that does not necessarily use a communication app, although this is not an ideal alternative and would only be necessary if professional development is not able to be implemented.

Scholarship, Project Development, and Leadership and Change

The research process and the resulting project provided personal learning, self-growth, and skill development for me personally as a practitioner. The most important process I learned was the steps in the process that lead to the final development of a

project. From the beginning of this process until the development of the project, I learned about the importance of each step and following research procedures accordingly.

A researcher must begin with the research that has come before them. Understanding a local problem and how the problem has existed in other places of the world through other research is critical to first understanding the problem. In this study, understanding communication issues in online learning in other countries helped frame the issue locally. This understanding led to further research on using communication apps, something that I may not have thought of without following the research. Research must be thorough and cover the topic widely for this to happen. The research then guided the development of the study, including the RQs, methodology, and procedures selected.

Another important element I learned was about the collection of data. I did not expect many of the results I received during data collection. Student concerns, perceptions, and feelings were not something I could predict in advance. It was an eye-opening process that allowed for a greater understanding of the problem. This is an important consideration for all researchers because the data results must guide the implications and further work of the study. Researching without bias or prior determination and expectations is important. The data guided the final project, and I was able to develop a project that can address the problem clearly because of the process. Using the research process to aid the development of a project that addresses the issue is the best way to positively impact change, because it is grounded in both prior research and data from a local site.

Reflection on the Importance of the Work

The work on this project and study made it clear that online learning and communication is an important topic that higher education institutions should consider in order to improve the learning experience of students. Students in online learning courses can face isolation, lack of motivation, lack of academic support, and even failure. Better communication and support can positively benefit students when implemented effectively. Faculty often do not understand how to effectively shift teaching to the online learning environment. This study and project provide guidance for RHC and other institutions on how to improve the online learning environment for students, which may result in greater success for students. Online programs and courses provide access for students who may not be able to attend college otherwise. Improving the experience and success of students should be a priority for all institutions offering online courses. The student's experience and their perceptions must be considered to effectively address issues that exist.

Implications, Applications, and Directions for Future Research

The project and study potentially impact social change at the individual, family, organizational, and at a societal level. The completion of college is a critical step for many to improve their circumstances, find better opportunities, and advance their education. Online learning provides access and opportunity for many students because learning can occur anywhere anytime and improving the experience for greater student success impacts social change. Improving communication in online learning at RHC can positively impact individual student experiences and provide better support, connections,

and academic success in coursework. Students being more successful will help them continue and complete their programs in online coursework. More students being successful in college can lead to improved jobs and possibly better living conditions for their families in the future. First generation college students may also benefit from greater support to finish college, and this can impact future generations, because their children would have a model of a parent who completed college. At the organizational level, RHC can benefit from improved online experiences and attract and retain more students in online learning programs and courses. Finally, at the societal level this study may provide more knowledge and examples in the use of communication apps. Improving online learning by increasing communication may result in better experiences and support for students, making students less apprehensive about taking courses online because isolation may be reduced.

Future research and practice should focus on the best practices involved in using communication apps. Little research exists on the use of communication apps in colleges or universities in the United States. Further research and development of practices in the United States can help to develop the best ways in which to implement communication in online learning. In addition, research and development around the apps that can be utilized for communication in higher education would be useful to those looking to implement these practices. Additional studies should also focus on student perceptions and faculty perceptions regarding the use of communication apps in other colleges or universities. Further study can help develop an understanding of the impact of communication in the online classroom.

Conclusion

Online learning is now a foundational element of higher education in general and provides opportunities for students to complete coursework from any location at any time, around their busy schedules. Communication in these courses is critical because it impacts student motivation, isolation, academic success, and feelings of being supported. Successful communication and the effective use of communication apps in the online classroom can impact the learner experience and the amount of support received. Students should no longer feel as if they are learning in isolation or have inferior experiences because a course is online. Instead, communication apps can help students feel supported, connected, and academically engaged. Higher education institutions should consider current practices in the online classroom and ways in which to improve communication for students.

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Appendix A: The Project

Purpose: The purpose of this project is to train faculty at RHC on the effective use of communication apps in online learning.

Goal: The goal of this project is to develop faculty understanding on the effective use of communication apps in online learning.

Learning Outcomes: The learners will understand the importance of communication and social presence theory in online learning. The learners will understand online learning pedagogy and how it differs from in person learning. The learners will understand how to effectively utilize communication apps in online learning.

Target Audience: The target audience is online faculty at RHC.

Professional Development Training Agenda: Days 1-3

Day 1: Agenda

- 8:30-9:00 Introduction: Icebreakers, introductions, purpose, and overview of the training
- 9:00-9:30 Pre-assessment on communication in online learning and communication apps
- 9:30-10:00 Reflection journal overview and description, complete first reflection question regarding communication in online learning
- 10:00-11:30 Discuss: How is online learning different from face-to-face instruction? Assign mixed groups (faculty who have used and have not used communication apps) that will remain groups for training and community of practice, faculty read and annotate articles about online learning vs. face-to face-

learning (Day 1 Resources) and then discuss in groups, groups share out ideas that affirmed their own ideas, surprised them, or they are unsure about

- 11:30-11:45 Faculty completes next question in reflection journal regarding perceptions around communication in online learning
- 11:45-12:45 Lunch (provided)
- 12:45- 1:00 Discuss morning learning and make list of important factors noted for online learning that are different than face-to-face teaching
- 1:00-2:00 Discuss current practices regarding communication apps in small groups, have those who have used apps share out experiences and have those not using communication apps share out why they have not utilized communication apps at this point, make a cohesive list of current practices as a group
- 2:00-2:45 Discuss: Why should you use a communication app? Faculty read and annotate articles and review resources about using communication apps
- 2:45-3:00 Break
- 3:00-3:30 Discussion about articles and resources in groups, groups share out to whole group on usage of communication apps in online learning
- 3:30-4:15 Review some examples of the purpose and use of communication apps in online learning and discuss how it can be used effectively
- 4:15-4:30 Journal reflection on next question regarding the use of a communication app's purpose
- 4:30-4:45 Formative assessment on difference in online learning overview and communication app's purpose in online learning

Day 2: Agenda

- 8:30-9:00 Review of learning from day 1 and overview of agenda for day's learning (social presence theory and communication in online learning)
- 9:00-10:00 Overview of social presence theory, faculty read overview and theory and answer question in reflection journal about the theory and how it connects
- 10:00-10:45 Discuss in groups, share thinking from reflection, and outline how social presence theory connect or is involved in online learning, self-assess if current practices meet these connections or expectations
- 10:45-11:30 Discuss social presence theory as whole group and summarize connection to online learning and the classroom
- 11:30-12:30 Lunch
- 12:3-1:00 Overview of the group assignment for the afternoon and WhatsApp
- 1:00-2:00 Overview of WhatsApp and community space in the app that can be used for classroom use, introduce community space for the faculty for this course and community of practice meetings for the future
- 2:00-3:15 Groups work on creating best practices list for communicating in online classrooms at RHC using resources
- 3:15-4:00 Group discussion and sharing out of best practices, make finalized list of best practices document as a whole group
- 4:15-4:30 Journal reflection on next question regarding best practices in communication in online learning at RHC
- 4:30-4:45 Formative assessment on best practices in online communication

Day 3: Agenda

- 8:30-9:00 Review of previous day learning and best practices, overview of day's agenda
- 9:00-9:30 Resource shared on how to use WhatsApp communities (in Day 2 resources and slide deck), group discussions on how they will use WhatsApp in their own classes and what needs to be included, brief share out
- 9:30-11:30 Begin work of setting up WhatsApp communities for an online class, begin with one course and work as a group step by step to set up the group, invite students, put students in learning groups, attach syllabi, attach other important documents or video resources for students, write an introduction for students about the use of the app for the course
- 11:30-12:00 Share how first class is set up to whole group
- 12:00-1:00 Lunch (provided)
- 1:00-3:00 Complete setup for any additional courses and share as a group
- 3:00-4:00 Summative assessment
- 4:00-4:30 Final Reflection on learning from all sessions and use of WhatsApp
- 4:30-4:45 Faculty complete survey about professional development experience

Monthly Community of Practice Check-In Meetings:

- Regular monthly meetings will take place every 3rd Thursday of the month from 11:00-1:00 and lunch will be provided

- Small groups will meet to discuss obstacles and positives they are noticing with the use of WhatsApp
- Small groups will share out to the whole group regarding their experiences and the whole group will discuss, problem solve, and learn from each other
- The online learning coordinator will host all meetings throughout the year but will allow expert members of the group provide further trainings or discussions, especially as new faculty may be included

Journal Questions:

Day 1: Journal Prompts

Prompts for Writing Reflection 1:

- What does communication look like in your online classes?
- What communication methods do you use most often?
- What issues do you have with teaching online?
- How is online teaching different for you?

Prompts for Writing Reflection 2:

- What perceptions do you have about communication in online learning?
- How might your perceptions align or be different from your students?
- What surprised, reinforced, or contradicted your thinking in the readings?

Prompts for Writing Reflection 3:

- What is the purpose of using a communication app in your online classes?
- What are your thoughts on the use of communication apps in online classes?

Day 2: Journal Prompts

Prompts for Writing Reflection 4:

- What is social presence theory?
- How does this connect to teaching online?
- What is the social presence within your online classes?

Prompts for Writing Reflection 5:

- What did you learn about using communities in WhatsApp?
- What best practices do you find most important for using WhatsApp? Why are those the most important to you?

Day 3: Journal Prompts

Prompts for Writing Reflection 6:

- What have you learned about communication in your online classes? (summarize)
- Describe how you will use WhatsApp in your courses.
- What potential benefits or concerns do you have about using WhatsApp?

Assessments:

Pre-Assessment Questions: Communication in Online Learning: Pre-Assessment

1. How do you prefer to communicate with students in your online classes?
2. How quickly do you respond to students if they contact you?
3. How do your students prefer to communicate with you in your online classes?
4. How do your students communicate with each other in online courses?
5. How important is communication in your online courses?

6. Are there communication issues or concerns in your online courses?
7. What concerns or issues do you have regarding communication in your online courses?
8. How quickly do students receive feedback in online courses?

Formative Assessment Questions: Communication in Online Learning: Day 1 Assessment

1. How important is communication in your online courses?
2. What are the major differences between online learning and face to face learning?
3. How is communication different in online classes versus face to face learning?
4. What is the purpose in using communication apps in online classes?

Formative Assessment Questions: Communication in Online Learning: Day 2 Assessment

1. How important is communication in your online courses?
2. How can WhatsApp be used in online classes?
3. What best practices must be in place for the use of WhatsApp to be effective and safe?

Summative Questions: Communication in Online Learning: Summative Assessment

1. How important is communication in your online courses?
2. How important is it to communicate quickly and effectively with students?
3. What will be your primary communication tool in your online classes?
4. What is social presence theory and how does it apply to your online classes?
5. How often do you plan to use WhatsApp in your courses?
6. Describe the advantages of WhatsApp communities.
7. Describe the advantages of WhatsApp communities.

Resources:

Day 1 Website Resources

Online Learning vs. face to face learning:

- https://www.usnews.com/news/education-news/articles/2022-02-15/how-online-learning-is-reshaping-higher-education
- https://epale.ec.europa.eu/en/blog/5-key-differences-between-online-and-face-face-learning
- https://miamioh.edu/regionals/eccoe/news/2019/01/differences-between-f2f-and-online.html
- Face-to-Face and Online Learning in Higher Education https://journals.sagepub.com/doi/full/10.1177/21582440231218114
- Staying connected while physically apart: Digital communication when face-to-face interactions are limited https://journals.sagepub.com/doi/full/10.1177/1461444820985442
- Advantages and Disadvantages of Online and Face-to-Face Peer Learning in Higher Education: A Review https://www.mdpi.com/2227-7102/13/4/326

Why should you use Communication Apps?

- Article: Using WhatsApp for active learning
- Article: WhatsApp and Its Potential to Develop Communication Skills among University Students
- Article: Examining The Effectiveness Of WhatsApp in Facilitating Online Learning

- Article: Whatsapp's Potential To Broaden Online Teaching And Learning: Perceptions Of Undergraduate Students From One South African University

Day 2 Website Resources

Social Presence Theory:

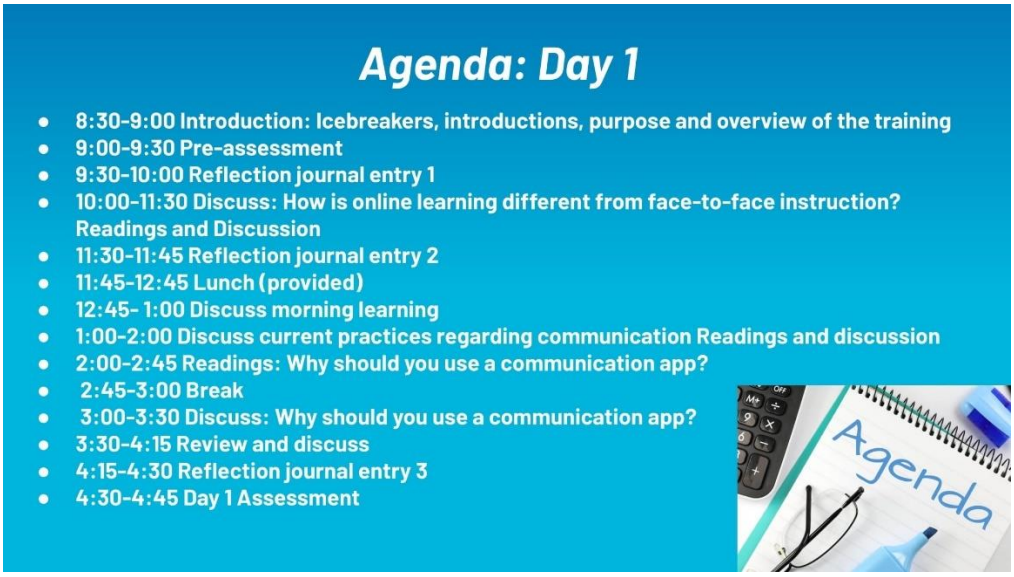
- https://mlpp.pressbooks.pub/mavlearn/chapter/social-presence-theory/
- https://www.cambridge.org/elt/blog/2023/10/08/how-social-presence-theory-can-strengthen-online-teaching/
- https://www.frontiersin.org/journals/robotics-and ai/articles/10.3389/frobt.2018.00114/full

WhatsApp and Best Practices

- https://www.whatsapp.com/communities/learning/education
- https://teachonline.asu.edu/2023/05/understanding-whatsapp-as-a-resource-for-online-learning/
- https://nas.io/blog/the-ultimate-guide-to-managing-a-whatsapp-community
- https://www.whatsapp.com/communities/learning/settingupyourcommunity
- https://www.whatsapp.com/communities/learning/buildingasafecommunity
- https://timelines.ai/whatsapp-communities/
- https://respond.io/blog/whatsapp-communities
- https://www.makeuseof.com/how-to-manage-whatsapp-community-effectively/
- https://zixflow.com/blog/whatsapp-communities
- https://wato.ai/blogs/creating-a-vibrant-community-on-whatsapp-best-practices

Slide Decks:

Day 1 Slide Deck:



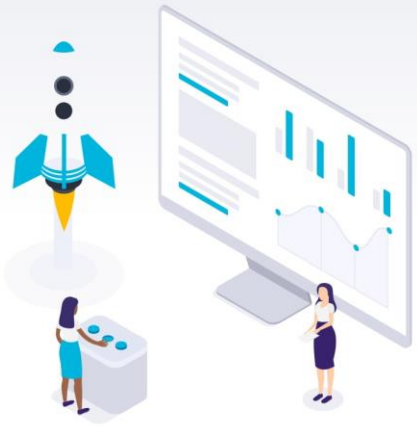
Welcome!

1

1. Introductions:
Please introduce yourself and what you teach (online)

2. Icebreaker:

Two Truths & a Lie (at your table)



I'm a great believer that any tool that enhances communication has profound effects in terms of how people can learn from each other, and how they can achieve the kind of freedoms that they're interested in.

-Bill Gates

5

Pre-Assessment

Please complete the pre-assessment as honestly as you can so we have information to address your needs!

6

Reflection 1

Share at your table and then journal on your own!

- What does communication look like in your online classes?
- What communication methods do you use most often?
- What issues do you have with teaching online?
- How is online teaching different for you?

Journal writing...reflect on your discussion!

7

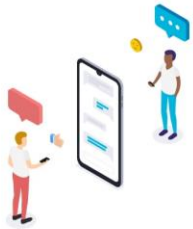
Discussion

How is online learning different from face-to-face instruction?

1. Read the articles and sources in the Resources for Day 1.
2. As a group, discuss the differences when communicating.
3. Be prepared to share out your differences to the group

Online Learning

Face to Face Learning



8

Reflection 2

Share at your table and then journal on your own!

- What perceptions do you have about communication in online learning?
- How might your perceptions align or be different from your students?
- What surprised, reinforced, or contradicted your thinking in the readings?

Journal writing...reflect on your discussion!

9

Discussion

What key points have we developed about communication in online learning vs. face to face learning?

11

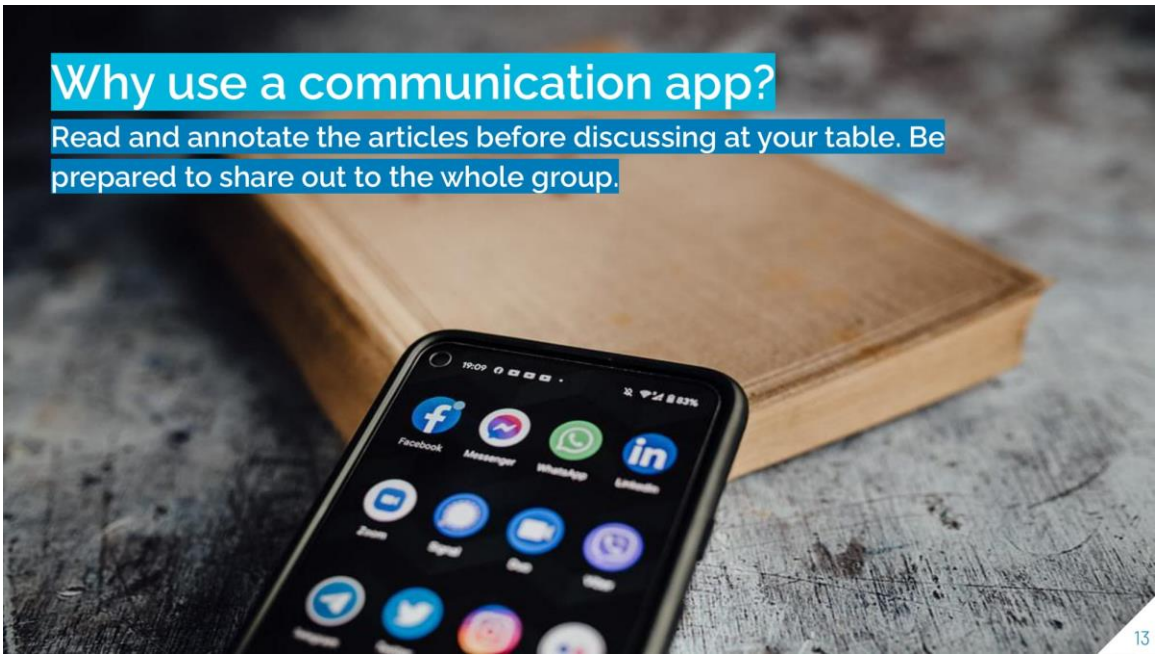
Current Practices

Discuss: What are your current communication practices in online learning?

1. Share Out: Professors who have used communication apps...
2. Share Out: Professors who have not used communication apps...

Current Practices List

12



Reflection 3

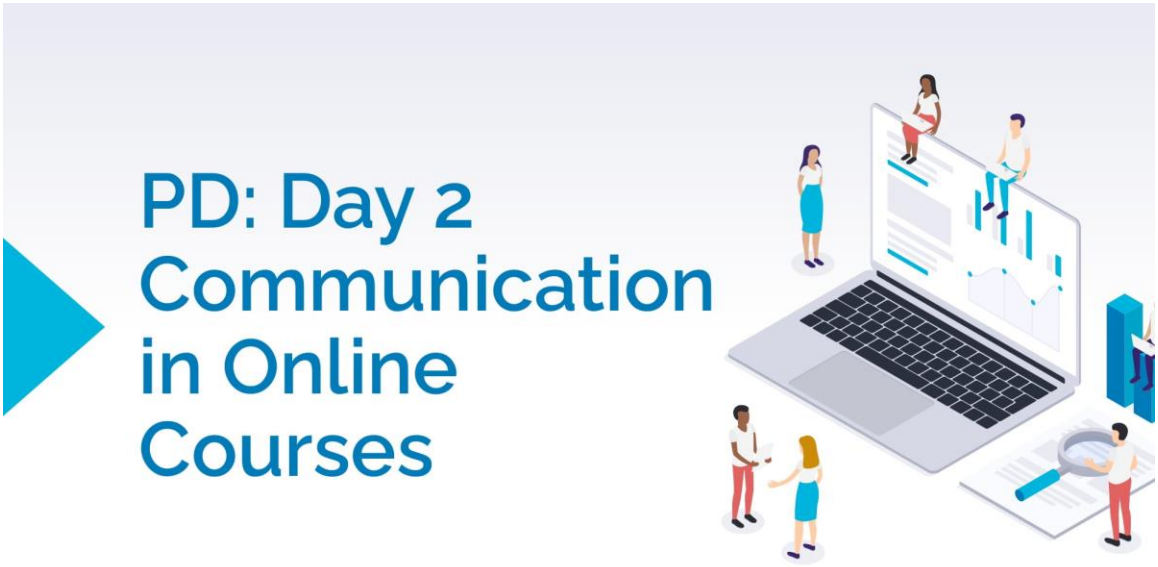
Share at your table and then journal on your own!

- What is the purpose of using a communication app in your online classes?
- What are your thoughts on the use of communication apps in online classes?

Journal writing...reflect on your discussion!

14

Day 2 Slide Deck:



Agenda: Day 2

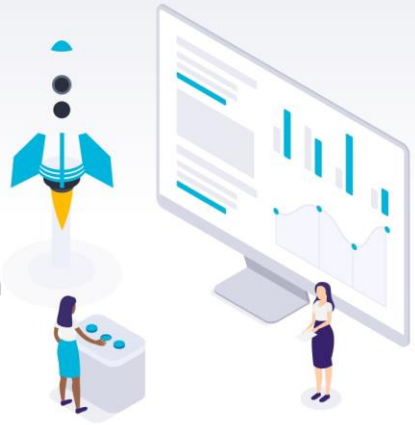
- 8:30-9:00 Review of learning from day 1 and overview of agenda for day's learning
- 9:00-10:00 Overview of social presence theory, reflective journal entry 4
- 10:00-10:45 Discuss: Social presence theory in online learning (small groups)
- 10:45-11:30 Discuss social presence theory as whole group
- 11:30-12:30 Lunch (provided)
- 12:30-1:00 Overview of the group assignment for the afternoon and WhatsApp
- 1:00-2:00 Overview of WhatsApp and community space in the app
- 2:00-3:15 Groups work on creating best practices list
- 3:15-4:00 Group discussion and sharing out of best practices
- 4:15-4:30 Journal reflection entry 5
- 4:30-4:45 Day 2 Assessment

Review Day 1

1

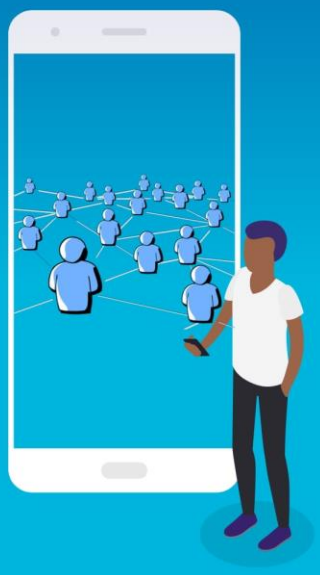
Review online learning and how is it different than face to face learning.

Review purpose in using communication apps in online learning.



Social Presence Theory

Overview, discussion, and connection to online learning practices



4

Reflection 4

Share at your table and then journal on your own!

- What is social presence theory?
- How does this connect to teaching online?
- What is the social presence within your online classes?

Journal writing...reflect on your discussion!

5

Discussion

How does social presence theory connect to or is involved in online learning?

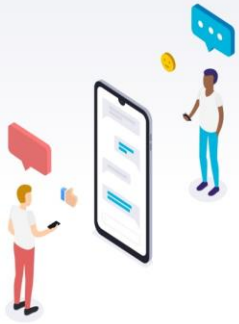
Online Learning Social Presence

Self-assessment: Do your current practices meet these connections or expectations?

6

Best Practices Assignment

What best practices need to be put in place for WhatsApp to be successfully used as a communication app at the college?



- *WhatsApp Communities*
- *Community for faculty group*

8

Share Out Discussion

Best practices for using WhatsApp to communicate in online classes...

10

Reflection 5

Share at your table and then journal on your own!

- What did you learn about using communities in WhatsApp?
- What best practices do you find most important for using WhatsApp? Why are those the most important to you?

Journal writing...reflect on your discussion!

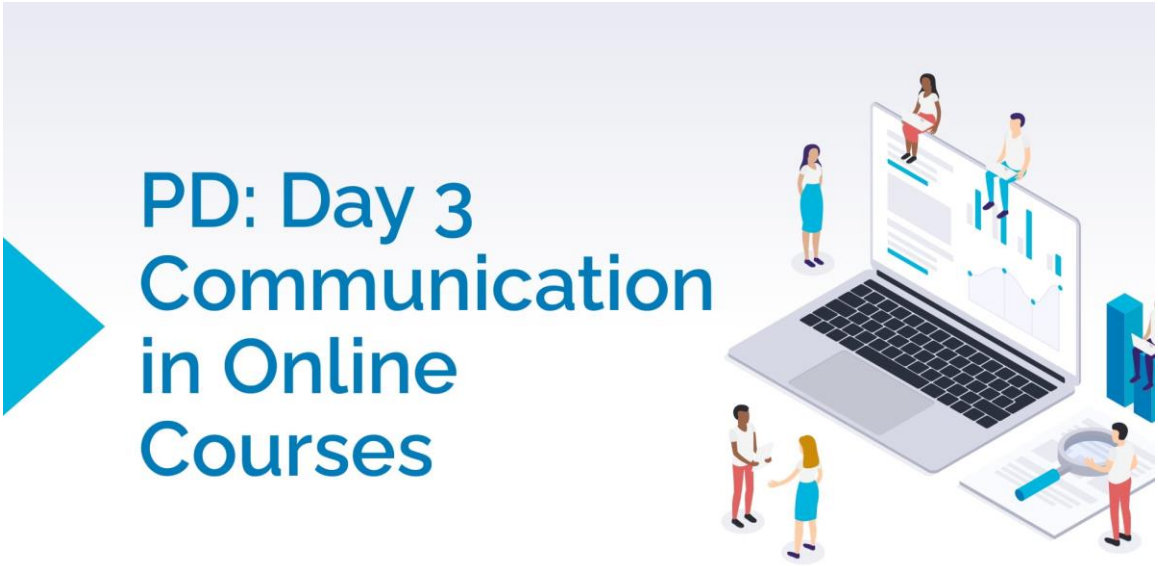
11

Day 2 Assessment

Please complete the Day 2 formative assessment as honestly as you can so we have information to address your needs!

12

Day 3 Slide Deck:



Agenda: Day 3

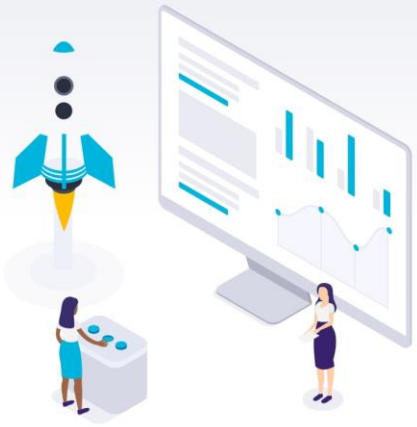
- 8:30-9:00 Review of previous day learning and best practices, overview of day's agenda
- 9:00-9:30 WhatsApp Communities: How will you use this in your classes?
- 9:30-11:30 Begin work of setting up WhatsApp communities for an online class
- 11:30-12:00 Share how first class is set up to whole group
- 12:00-1:00 Lunch (provided)
- 1:00-3:00 Complete setup for any additional courses and share as a group
- 3:00-4:00 Summative assessment
- 4:00-4:30 Final Reflection on learning from all sessions and use of WhatsApp
- 4:30-4:45 Faculty complete survey about professional development experience

2

Review Day 2

1

Review best practices in using WhatsApp as a communication tool.



WhatsApp Communities

Rsource:

WhatsApp's guide for creating communities

Setup of WhatsApp Communities:

- *Add resources, syllabi, videos*
- *Create introduction video*
- *Create groups*
- *Craft emails for inviting students*
- *Add links or documents*
- *Add assignment info*

Share out setup tips or decisions to whole group!

5

Setup of WhatsApp Communities:

- *Add resources, syllabi, videos*
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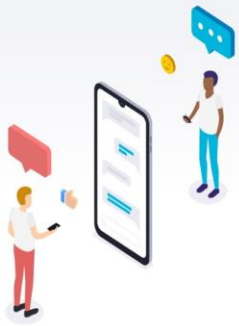
Share out setup tips or decisions to whole group!



7

Final Assessment

Please complete the final summative assessment as honestly as you can so we have information to address your needs in community of practice meetings!

8

Reflection 6

Share at your table and then journal on your own!

- What have you learned about communication in your online classes? (summarize)
- Describe how you will use WhatsApp in your courses.
- What potential benefits or concerns do you have about using WhatsApp?

Journal writing...reflect on your discussion!

9

THANKS!

Any questions?

Next Steps:

1. Complete the PD survey feedback in your email.
2. Add the monthly meeting dates to your calendar!

Appendix B: Interview Questions

1. What was your experience with communication with instructors during online classes at RHC?
2. What was your experience with communication with peers during online classes at RHC?
3. How were communication apps used in your online courses?
4. What was your experience with communication apps during online courses?
5. How did the use of communication apps in your online courses impact your learning experience?
6. How did the use of communication apps impact the frequency of communication in online courses?
7. How did the use of communication apps in online courses impact your academic efforts?
8. How did you feel about your connection with your instructor in your online course experiences?
9. How did you feel about your connections with your peers in your online course experiences?
10. How did the use of communication apps make the learning experience easier or harder?
11. How did the use of communication apps affect your overall satisfaction with courses at RHC?

Appendix C: Online Survey Questions

1. What was your experience with communication with instructors during online classes at RHC?
2. What was your experience with communication with peers during online classes at RHC?
3. How were communication apps used in your online courses?
4. What was your experience with communication apps during online courses?
5. How did the use of communication apps in your online courses impact your learning experience?
6. How did the use of communication apps impact the frequency of communication in online courses?
7. How did the use of communication apps in online courses impact your academic efforts?
8. How did you feel about your connection with your instructor in your online course experiences?
9. How did you feel about your connections with your peers in your online course experiences?
10. How did the use of communication apps make the learning experience easier or harder?
11. How did the use of communication apps affect your overall satisfaction with courses at RHC?