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SOCIALIZATION TECHNIQUES, COMMUNITY, & STUDENT RETENTION

SOCIALIZATION TECHNIQUES IN ONLINE HIGHER LEARNING: CREATING A SENSE OF COMMUNITY, AND THE IMPACT ON STUDENT RETENTION

A Scholarly Research Project

Submitted in Partial Fulfillment of the Requirements for the Degree

Doctor of Education

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ABSTRACT

In the past few years online learning has grown to a point where it was estimated that by 2020, even before the COVID-19 pandemic, five million people would have completed their education online. Going to school outside of a traditional classroom could be more convenient for many learners but may present a barrier to concepts of socialization and collaboration that have long been the hallmarks of higher learning. The purpose of this research is to understand how the use of synchronous techniques can help improve socialization and collaboration in online graduatelevel programs. The study also seeks to discover if an increased sense of community could potentially have an impact on student retention in these programs. The study uses qualitative techniques to survey and interview online learners, educators, and higher education professionals to address the issue of student engagement and community which could then help improve student persistence or retention. The research findings show that the sense of community in an online classroom can help create accountability among learners and there is a clear indication from participants of all backgrounds that there is a need for learner interaction and engagement in the online classroom, and that this plays a key role in student retention. The research findings can be shared with programs and institutions that are turning to the online format in an attempt to reach more learners, especially during and after the COVID-19 pandemic. This will help create a robust online learning environment that can come into effect during other unexpected situations, or just aim at catering to the needs of the modern higher education learner.

DEDICATION

To:

Baba, for always encouraging curiosity, endless debates, and a love for reading,

Ma, for unconditional support, never saying 'No' to books, and for wanting this doctorate even

more than I do!

Mamma, for being an example of strength and family,

My fur baby, Mrs. Robinson, for being the only distraction I could ever need,

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CHAPTER 1

INTRODUCTION

According to the National Center for Education Statistics (n.d.), in Fall 2018 there were 6,932,074 students enrolled in any distance education courses at degree-granting post-secondary institutions in the United States. In the four years since these reported numbers, the world of education has changed more than anyone could have expected. The past two years have dealt with an unforeseen global pandemic which has further increased the importance of virtual education. The higher education learner has moved from wanting to study online, for many reasons that we will address through this chapter, to needing to do so because it became impossible to create and maintain a physical classroom or group environment.

Statement of the Research Problem

In the past few years online learning has grown to a point where it was estimated that by 2020, five million people would have completed their degrees online. With these statistics comes the realization that while learning online is convenient for a lot of people, it also has its potential drawbacks. Going to school outside of a traditional classroom could be convenient for modern learners but may present a barrier to concepts of socialization and collaboration that have long been the hallmarks of higher learning. Research on this topic shows that a sense of community can create an "increased ability to manage stress and greater overall emotional well-being" (Berry, 2019, p. 165). The lack of community, therefore, has been a crucial factor in online learning not being as widely accepted as it should be, even in a world where the professional setup, especially in the corporate world, does trend towards the virtual. Research in 2010 suggested that online attrition could be up to 20% higher than in in-person programs (Berry, 2019) and this can be attributed to a lack of membership and closeness among students.

However, as online learning has progressed in the past few years, much has been done to mitigate this concern and create an online classroom environment where students can collaborate and socialize and prepare for their careers that mirror these virtual scenarios. Many virtual learning techniques can now be used to create a sense of community, using technology within social media, video-based webinars and recordings, real-time forums and blogs that improve every day and are available to everyone.

In a world where technology is now accessible to a growing population, it may be easy to assume that online learning is also easily available to all. It is important in terms of social justice that all learners should have equal access, equal opportunity, and equal learning outcomes regardless of their background or demographics. Living in a country like the United States, with seemingly easy access to technology, resources on the Internet, and virtual libraries, there is a feeling that everyone would be able to choose the format in which they would like to learn. These choices are grounded in personal and professional needs and decisions are made based on what may be convenient. However, with all the available resources, one must keep in mind that this is not necessarily true for everyone. Research shows that online students are not always traditional learners and may be of varying ages, may be caring for family members, and are usually working or professionally engaged (Lu, 2020; Muir et al., 2020; Muljana & Luo, 2019; Peacock et al., 2020). Online learners also include students from rural, remote locations and from low socioeconomic backgrounds without regular access to the kind of technology towards which online education may now be heading. Virtual learning may have given some of these learners easier access to educational opportunities but fewer than 40% of online learners were found to have completed their degrees (Muir et al., 2020). Withdrawal from online courses is 2.5 times more likely with reasons for incompletion being family and work commitments as well as poorly

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designed study material (Muir et al., 2020). These learners need to focus on their personal and professional concerns since that is the environment in which they exist, and they feel a sense of disconnect from their educational environment. It is important from a human point of view to feel connected and to be able to relate to others. This sense of belonging has psychological and social dimensions for learners where they need to feel accepted and valued, and at the same time, feel like they fit in with a group or class (Peacock et al., 2020). It is important then, to ensure that all learners also have access to the same resources and benefits so they can come together in a feeling of trust that can provide them with academic and social support, and lead to a sense of community that makes them less likely to drop out of an academic program (Berry, 2019).

The researcher works in a corporate higher learning environment, an Online Program Management (OPM) organization, that partners with traditional universities and helps them run their traditional programs in an online format. The researcher's role is to help set up online programs for these academic partners. This includes advising them on the virtual methods and techniques that can help them keep their students connected and involved and receiving the best that their programs have to offer. Some universities are more open to these techniques while others are not. Some may see online learning as an option chosen by students that prefer an asynchronous format while others appreciate the connections that students can form using synchronous methodology. The goal is to be able to help these academic partners find methods that might be most effective for their programs and their institutions. It is understood that creating too much synchronicity might turn away students that opt into the online format due to a lack of time or availability. However, there is a balance between using synchronous methods to help students connect, while still respecting the necessity of asynchronous learning. Finding this balance could help keep students involved, while still keeping them in their programs and preventing attrition. Student retention is a large part of the OPM industry and being able to find specific ways in which this could be positively impacted would be a significant advantage to the researcher's organization, colleagues, and clients.

The OPM organization allows its employees access to multiple programs and their methods of teaching, and this study was aimed at participants that included online learners and higher education professionals. These professionals regularly observe and analyze teaching methods, faculty involvement, student satisfaction, and retention data across programs. Information gathered from these sources helped create a comprehensive research project that used qualitative methodology to help determine the research proposal and answer the proposed questions. This research also aimed at exploring efficient teaching methods that could help create a sense of community among graduate online learners. These methods also need to be accessible to all learners and faculty without any disparities in learning outcomes based on socio-economic backgrounds.

Purpose Statement

According to Lockman and Schirmer (2020), "online teaching often led to feelings of isolation from colleagues and though online teaching did not take more time, it commonly took more effort" (p. 137). The purpose of this research study was to understand how the use of synchronous techniques could help overcome this feeling of isolation and improve socialization and collaboration in online graduate-level programs. The study also attempted to discover if this increased sense of community could potentially have an impact on student retention in these programs. The research does not imply that synchronous methods are required in online learning or if they specifically help decrease attrition among graduate online learners. It focused on speaking with learners and professionals across multiple programs, institutions, and knowledge

areas, and examining their responses in the context of the available literature and prior research studies. This was done in an attempt to identify strategies that could help improve socialization between students and faculty, and then conclude if this could have any potential impact on student learning outcomes and retention rates.

Brief Review of the Literature

Student engagement and retention are considered some of the major challenges of virtual learning with attrition rates in 2016 being higher than traditional courses by 10-20% (Foster et al., 2018). Creating a sense of community and improving interaction is, therefore, an important aspect of creating effective online learning programs. The three main types of interaction in any classroom are learner-to-learner, learner-to-instructor, and learner-to-content (Martin & Bolliger, 2018). Socialization techniques for learner-to-learner interaction can include social media platforms like Facebook or Twitter, online forums or blogs, audio and video technology including live synchronous sessions, group assignments, and discussion forums. These methods help keep students connected using platforms that they recognize from their personal or professional lives and create engagement through social interaction. Live synchronous web sessions, using technologies like Adobe Connect, Zoom, or Google Meet, also help create learner-to-instructor interaction and can help online students feel as close to a physical classroom setting as possible (Lowenthal et al., 2017). Instructor presence is an essential aspect of the success of online courses since it motivates students and helps achieve better learning outcomes (Muir et al., 2020). Being able to see their instructor in live sessions while they also engage with other learners can help students feel more involved and avoid the online learner's sense of isolation and disconnect. Drawbacks to this method could be that some online learners are unable to be present at a specific time due to personal or professional commitments or time zone

differences, or they may have technical or bandwidth concerns (Lowenthal et al., 2017). However, finding a way to navigate through these issues could create a potentially viable way of connecting learners with each other and with their instructor, and could also help with the element of learner-to-content interaction. The latter uses methods like multimedia, instructional videos, and modern technology that helps with virtual case studies, and interactive blogs and texts that connect students directly with the course material.

Another aspect of learning that could be mentioned here as it could fit into all three levels of interaction would be the concept of blended learning, a hybrid of classroom and online learning where the convenience of online courses can be combined with some manner of inperson contact like campus visits or in-person residencies (Rovai & Jordan, 2004). This format, however, has moved further into a purely online setting as the years progressed, due to various factors, including personal and professional commitments, that attract students to a fully online learning environment.

Using some or all of these techniques to help create a sense of community is important in the educational sphere. Having a sense of community helps students retain knowledge, develop meaningful social relationships, and cooperate with each other to create connectedness and belonging. This leads to student satisfaction and could help increase retention rates (Lu, 2020). Lu (2020) also goes on to explore the idea that students with better social presence in the classroom are more satisfied with their instructors and the learning they receive. Inversely, the role of an effective instructor lies in increasing teaching presence which can then motivate students and their engagement and social presence within the learning environment.

Muljana and Luo (2019) identified multiple factors impacting student retention, including institutional support, curriculum difficulty, facilitation of student engagement and learning, and

course design. Their findings result in an overarching concept that is viewed by faculty as well as students: that a lack of student engagement can lead to student attrition (Muljana & Luo, 2019). Much of the research in their study, while indicating a definite connection between student engagement and retention rates, does not entirely confirm this hypothesis. The goal of this research, therefore, was to examine the available literature as well as the feedback from students and professionals who have the required experience in this format and setting, to explore the ways in which student engagement can be improved by using multiple interaction techniques. This information could then be used to find a specific connection between the students' sense of community and their retention in a program.

Addressing the Deficiencies in Existing Studies

As mentioned earlier, much of the literature reviewed on this topic highlights the importance of increasing student engagement and creating a sense of community in an online learning environment, and the impact this can have on student satisfaction. It does not, however, indicate any connection with student retention (Bissonette, 2017; Lockman & Schirmer, 2020; Lu, 2020; Muljana & Luo, 2019), which should be a key factor in higher education research. The available literature also looks at individual programs, largely studying participants within the same courses, or between different courses and programs at the same institution (Berry, 2019; Cornell et al., 2019; Gray & DiLoreto, 2016). In this study, the researcher collected data from a wider range of participants across multiple programs, universities, and knowledge fields, some of whom were experienced in using specific techniques to increase student engagement and others that were not.

Another aspect of the reviewed literature is the increased focus on the importance of student engagement and fewer details on the actual techniques utilized by programs to help

increase student involvement. There are references to video and audio tools, online forums, and a few references to social media and office hours or live sessions (Lowenthal et al., 2017; Martin & Bolliger, 2018; Swartzwelder et al., 2019). The participants included in this research study were experienced in using and managing more specific and detailed techniques, including, but not limited to, online orientation programs, virtual meet-and-greet sessions between students and faculty, and live classroom sessions. Other socialization techniques that were addressed in the study include in-person residencies at the beginning or end of a program, student involvement in campus events or commencement ceremonies, social media groups and communities, and online Learning Management Systems (LMS) with their own community forums.

Another limitation noticed in the literature has been the omission of demographics as a potential determining factor in this research. Online learning is definitely more accessible in the current world. However, student and instructor demographics can play a large role in how they engage with each other, how they use technology and online tools, as well as students' reasons for staying in or withdrawing from a program. Students' age, professional and personal backgrounds, their reasons for online learning, or their current life circumstances, are all factors that could impact these actions. For example, a student may find it difficult to use technologically advanced learning techniques if they do not have enough training in these tools or easy access to them, and this could create a level of anxiety that can play a role in a student's decision to stay in a program (Swartzwelder et al., 2019). With access to student and program data, the study also aimed at overcoming these limitations and surveying a more comprehensive and diverse group of participants to ensure that the findings were more inclusive and could factor in these differences and diversities.

In the current state of the world impacted by the global pandemic, there is another significant deficiency in all the available research. Almost all the literature references programs where online students have chosen their format of learning. None of these have included the fact that due to the pandemic, a significant majority of students and faculty across the United States and the world are now required to learn in an online format (Christian et al., 2020; Corcoran, 2022). These students and instructors did not choose to learn in this format and are, therefore, struggling a lot more than their counterparts for whom this was a conscious decision. In this study, the researcher included participants that may not have been prepared to teach or learn online and may have been in a more difficult position as they tried to incorporate student engagement into their online learning environment. It must be acknowledged that with the onset of the pandemic, there was no time to plan and therefore, no way in which to train faculty or students or create content that would improve the student experience.

Rationale for Methodology

Creswell & Creswell (2017) describe the qualitative research method as one that asks open-ended questions, uses data from observations or interviews, interprets themes and patterns, and explores emerging methods. At the beginning of this research study, all the planned methods seemed to fit into these criteria. Added to these was another significant factor that Mertler (2020) mentions: the researcher's skill set and aptitude towards a more qualitative approach when compared with the aspects of a quantitative methodology.

Based again on Creswell & Creswell (2017), this study leaned towards a qualitative approach with a combination of a constructivist worldview, ethnographic design, and observation of behavior, as well as some elements of a narrative design and open-ended interviewing. The goal was to examine the concept of student engagement in an online higher learning environment and learn how the use of specific socialization techniques could increase student collaboration and potentially create an impact on retention rates in those programs. To examine this, the study gathered information from online learners and professionals representing multiple programs and knowledge areas and attempted to present them using a narrative approach.

This information gathering was largely based on surveys and interviews with individuals who work with, or teach in, online programs as well as with online students in traditional or corporate institutions. The study tried to gather their thoughts on the topic in general, and the research questions in particular. These participants were largely colleagues and professional acquaintances of the researcher, and their participation in this research was augmented by the fact that the findings could potentially help them in their own professional environment as much as they could to the researcher's study.

Research Questions

The main research question that needed to be answered using the qualitative approach was:

• How can virtual socialization techniques be used to create a sense of community within online adult learners, and what impact could this have on student retention?

The following sub-questions helped break down and answer the main question:

- How important is it to create a sense of community in online higher education learners?
- What techniques can be used to increase socialization and create a sense of community in online graduate learners?
- How can this sense of community impact retention in online graduate learners?

Much of the literature that has been reviewed trends towards using the qualitative approach. Some of the most useful articles in the review are those that analyze multiple other readings and concepts of student engagement to help consider the use of technology and improve the student experience and, in turn, help define strategies and best practices that could impact retention and learning outcomes (Bissonette, 2017). Some articles do move into the mixedmethods aspect (Cornell et al., 2019) which combines the qualitative and quantitative methodologies. This option was considered, but the researcher's own manner of thinking and approaching the research kept them within the qualitative methodology.

Significance of the Study

While researching the topic, there was a great deal of existing literature available. This was an advantage, because it provided the validation needed for this research and some guidance on how similar topics have been approached. At the same time, the abundance of literature was a disadvantage because it pointed towards similar work done and this could create confusion and possible comparisons. However, as mentioned in an earlier section, there are significant aspects that are addressed in this research that have not been detailed or addressed in much of the existing material, including virtual learning techniques, diverse student and faculty participation, and more definitive information on the actual impact of student engagement on retention rates (Lockman & Schirmer, 2020; Lu, 2020; Muljana & Luo, 2019). This research study will add to the existing literature on this issue largely because there is, due to the researcher's experience, the ability to consider these concepts from the viewpoints of participants experienced in a variety of programs and knowledge areas, and this could help provide further context to educators. The study also adds to the research on the global pandemic and its impact on global education trends, specifically in line with online higher education.

The most significant factor in the research is, of course, its potential value in the researcher's place of work. As mentioned earlier, the researcher works in an OPM organization that works directly with traditional educational institutions to help them create and run their degree programs in an online format. Through their work experience, there have been multiple programs and institutions that try to reconcile their traditional teaching methods with those of the modern technologically savvy world. A lot of work goes into researching methods that can then be suggested to the clients to help them create the most effective courses to suit their own goals and also fit into the required online format. It is a constant challenge to work with faculty and staff as they attempt to align their many years of teaching with the requirements of the modern learner.

The results of this research identified specific findings that could help the researcher's organization and its academic partners in these daily challenges. These findings can later be compiled into a more comprehensive list of techniques that can be recommended to various programs to create a stronger understanding of how student engagement can help students feel more integrated and involved. The specific evidence of its impact on retention rates and learning outcomes will be well received by institutions looking at improving their online programs. This should help create material that can be used by departments like Student Services or Course Development in their everyday work with their academic partners.

Conclusion

With educational institutions continuing to incorporate online learning into their teaching structures, there is a growing need to create programs and content that will overcome traditional biases against this format. Increased student engagement and a sense of community could help learners and educators overcome their inherent opinions of this modality and come together to teach and learn efficiently regardless of the methodology. This study aimed at exploring and identifying techniques that can be used to create this sense of community with the larger purpose of keeping learners involved and committed to graduation. The next few chapters examine the existing literature in more detail and then delve into the methodology and results of the study.

CHAPTER 2

REVIEW OF THE LITERATURE

"The landscape of distance education is changing" (Eom et al., 2006, p. 215). In the past few years, as more universities have begun offering online courses to keep up with the changing education environment, there has also been a lot of research work done on the topic of online learning. Since early 2020 this has increased exponentially with the COVID-19 pandemic and its impact on higher learning.

The COVID-19 pandemic made a resounding impact worldwide, forcing brick-andmortar higher education institutions to move online. During this transition, students had to adjust while attempting to construct meaning amidst a myriad of pandemic related challenges. At the same time, educators had to transition from in-person to online course delivery, while navigating their own uncertain circumstances. All the while, learning continued. (Christian et al., 2020, para.1)

Purpose and Research Questions

Before the pandemic, the available literature on the topic of virtual education did not always analyze its impact on student retention (Lockman & Schirmer, 2020; Lu, 2020; Muljana & Luo, 2019), since the option of the online medium was a conscious choice made by the student which usually meant that they stayed in school. Since the pandemic, however, with this no longer being optional, the focus of the available literature (Christian et al., 2020; Corcoran, 2022) seems to have shifted to exploring techniques that could help educators teach more effectively, and therefore, help students feel more connected with the material and with each other. The topic of this research study aims at bringing many of these aspects together, even as it helps the researcher and their Online Program Management (OPM) organization within the online higher education world in general and the student support function in particular. The study explores the various socialization techniques that can be used to create a sense of community in online higher learning and to understand what impact this could have on student engagement and retention. This review brings together some of the available literature, before and during the pandemic, to help analyze and comprehend the existing material on these topics and to highlight any existing gaps so they can be filled in with the results of the research study as it attempts to answer the main research question and its corresponding sub-questions:

Research question:

• How can virtual socialization techniques be used to create a sense of community within online adult learners, and what impact could this have on student retention?

Sub-questions:

- How important is it to create a sense of community in online higher education learners?
- What techniques can be used to increase socialization and create a sense of community in online graduate learners?
- How can this sense of community impact retention in online graduate learners?

Student Engagement and Retention

"Online courses have become notorious for their high dropout rates in comparison with contact teaching" (Laato et al., 2019, p. 587). The same study also shows that student engagement and retention in online courses are significantly lower than in face-to-face teaching. Laato et al. (2019) also look at student engagement in online courses, and use a mixed methods approach to obtain a holistic understanding of student engagement. They then examine methods that could lead to minimizing the number of dropouts, which, they determine, occur largely at the beginning of a course. Adding accountability in the form of tests, before and after the course, improved retention rates significantly, as did the modification of course content to allow adult learners to be able to utilize their professional experience in their studies and apply their learning to their work.

This approach of creating course content to fit into a professional environment can work well in courses and program that are career oriented. While looking at more academic content, Bissonette (2017) explores some of the major challenges faced by faculty, students, administrators, and support staff in retaining online students, and doing so while earning high marks for the quality of each course. Bissonette (2017) also identifies a number of strategies, including effective mixes of technology, structure, and content in the classroom environment. These strategies emphasize social presence and careful consideration of how students use this technology to access the class Learning Management System (LMS). They also help offer a variety of options to build a successful classroom space that fosters a sense of community and collaboration which, in turn, could lead to a decrease in student attrition. Martin & Bolliger (2018) also conducted a survey-based research study to examine student perception of various engagement strategies used in online courses. They analyzed how age, gender, and years of online learning experience could impact students' perception of engagement strategies. These strategies could increase student satisfaction, enhance student motivation to learn, reduce the sense of isolation, and improve student performance in online courses. Martin & Bolliger (2018) don't necessarily identify the lack of community and socialization as the main cause for attrition, but one of their findings was the facilitation of student engagement and the promotion of a sense of belonging, which helps retention as a larger goal.

The Role of the Instructor

Some studies, like Gray & DiLoreto (2016), continue to follow the trend that student interaction is not the only factor with a statistically significant impact on student satisfaction. They identify instructor presence, course structure, and learner interaction to have a statistically significant impact on perceived student learning. The authors identify four factors related to student satisfaction in online courses, including student and faculty interaction and communication, amount of time on task, active and engaged learning, and cooperation among classmates. The results of this study were intended to inform practice related to increasing retention and improving the quality of online teaching and learning. Continuing this trend of faculty involvement, Seery et al. (2021) examined online retention research in higher education over a 5-year span, January 2015 - March 2019, and also suggested that the most common retention issues or strategies involved student factors and motivation as well as interactions between faculty and students. Their reviewed data concluded that common retention strategies most often included enhancing faculty training and development and adding student services support. These additional support systems could amplify the importance of retention and clarify issues or challenges that the students may encounter, challenges which could have led to lower retention rates. Strong faculty and adviser support, therefore, could help in improving student retention since high dropout rates are a constant challenge to higher education institutions and their management teams who continue to search for ways to improve student retention and graduation rates (Lu, 2020). Engaging students and creating a sense of community among them and between students and faculty remains a key factor in keeping students connected with the program and with their learning progress.

The Sense of Community

McMillan and Chavis (1986) write that a sense of community is "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (p. 9). Berry (2019) says that in a learning community, participants have a shared goal, provide academic and social support to members, and work together to create learning artifacts or products and feel a sense of belonging. The sense of community benefits learners in all settings, but it becomes a more crucial aspect in online learning since there isn't an obvious group setting that can help students collaborate, manage stress, and improve their emotional well-being, all factors that could, in turn, make them less likely to drop out of an academic program (Berry, 2019).

Building a Sense of Community in the Online Classroom

Peacock et al. (2020) conducted a small-scale exploratory study using qualitative data collection and analysis methods to investigate "the importance, or not, of a sense of belonging for postgraduates' online education by exploring the origins and nature of their lived experience of online learning and their sense of belonging" (p. 18). They found that for online learners, nurturing a sense of belonging may present a way of improving their experiences and attainment, as well as reducing attrition rates. Their subjects recognized engagement as being pivotal to learning, and they were all impacted by the student community with which they engaged. This was true even among online learners where online discussions, group work, and paired activities were all considered important, to the extent that learners admitted to being adversely affected by what others would say about their work on public discussion forums (Peacock et al., 2020).

Berry (2019) also examined interviews with 13 instructors to explore strategies that could help build a sense of community that is usually lacking in virtual classrooms. Based on the results of the study, she then identified four specific methods that could help educators create a sense of community in their classrooms. These methods included reaching out to students often, limiting lecture time, using video and chat to engage students, and allowing class time to be used for personal and professional updates.

Variations in the Sense of Community

Some of the reviewed literature (Beeson et al., 2019; Cornell et al., 2019; Trespalacios & Uribe-Florez, 2020) also highlighted the variations in the understanding of the concept of community in online education. Beeson et al. (2019) suggest that while interaction is a basic component of cultivating a sense of community, however, mere interaction does not encompass the entirety of this concept. The results of their study show that perceived outside interaction with students, the understanding of student diversities including race, culture, sexual orientation, the importance of the sense of community, and outside interaction with faculty also accounted for a significant proportion of the variation in participants' total sense of community scores (Beeson et al., 2019). Their study also suggests that a community that develops through the pursuit of learning seems to be more prevalent than a general social community. Cornell et al. (2019) also considered this idea of creating a community through learning in their study where students were provided with multiple opportunities for authentic, spontaneous, supportive discussion using video chat sessions on Zoom, and this emerged as central to fostering a sense of community through the sharing of similar experiences and challenges. Trespalacios & Uribe-Florez (2020) also used synchronous, as well as asynchronous, activities in their research study to explore the perceptions of graduate students on the sense of community and learning after using different collaborative activities with diverse forms of interaction (text, audio, and video). Their findings indicate that "multimodal and scaffolding interactive activities help to support

connectedness and learning, and therefore foster online graduate students' sense of community" (Trespalacios & Uribe-Florez, 2020, p. 57).

Socialization Techniques in Online Learning

Engaging students socially in an online course is demanding as today's learners are often very effective multitaskers who may tune out the course content. Utilizing engaging technology that promotes social learning is imperative. As online learners interact with course content and collaborate with their classmates, learning outcomes are optimized. Teaching strategies must continue to evolve in order to encourage student participation and creative problem solving. (Swartzwelder et al., 2019, para. 2)

As online educators strive to optimize learning outcomes for students, it is imperative that social learning through engagement and interactivity is considered when implementing new teaching methods into the virtual learning environment.

Specific Socialization Techniques

Swartzwelder et al. (2019) conducted a study where online graduate students enrolled in a nursing ethics course were exposed to text and video discussion formats during their academic term and were subsequently surveyed on their perceptions of each modality in terms of engagement and interactivity. Students felt that the text-based discussions were more engaging and interactive than the video-based discussions, although the results could have been skewed based simply on a student's preference for the familiar format as well as anxiety about recording a video or challenges with technology. Despite students preferring the text-based format, it may be important to continue to use video-based learning in this context, especially in program areas like nursing to help students become more comfortable with social interaction, an aspect they will need to incorporate into their professional lives. While this particular study does show a

preference for known teaching formats, new technology should always be an option despite requiring additional training to improve effective usage and understanding.

Nearly all other reviewed studies (Mosteanu, 2021; Swartzwelder et al., 2019) have shown an increase in student engagement when diverse teaching methods are used. Antonaci et al. (2019) went many steps further and identified gamification as a successful strategy to engage online learners. They presented a review clarifying the effects gamification generates on users' behavior in online learning. While not always successful in higher education or professional courses, this is an effective method in programmatic learning, especially among younger students where it can help increase motivation and learner engagement.

Muir et al. (2020) used more traditional virtual techniques, including discussion boards, instructor presence, and videos, and identified twelve different facilitation strategies to enhance instructor presence and instructor connection while enhancing learning and engagement. They inferred that instructor communication played a large role in maintaining student engagement by conducting design-based research to evaluate the impact of facilitation strategies on instructor presence, instructor connection, engagement, and learning in math education and human biology subjects. Their findings indicate that focusing on social, managerial, and technical facilitation strategies resulted in an increased instructor presence and active involvement, which in turn were influential in motivating students to engage with learning online.

Martin & Bollinger (2018) also identified multiple techniques to help increase student engagement in the online learning environment with three specific forms of interaction being highlighted: learner-to-learner, learner-to-instructor, and learner-to-content. In their study, icebreakers or introduction discussions and online communication tools used to work collaboratively were rated the most beneficial engagement strategies in the learner-to-learner category. Sending regular announcements or email reminders and providing grading rubrics for all assignments were rated most beneficial in the learner-to-instructor category. In the learnercontent category, students mentioned working on real-world projects and having discussions with structured or guiding questions were the most beneficial (Martin & Bolliger, 2018). Foster et al. (2018) also highlighted similar categories of engagement: student to content, student to student, and student to instructor. These categories helped with the necessary interaction that could result in mastery of the course content and for deep learning to occur. Lockman & Schirmer (2020) analyzed the patterns and trends in 104 research studies to identify five themes: course design factors, student support, faculty pedagogy, student engagement, and student success factors. Unique to the online environment are user-friendly technology tools, orientation to online instruction, opportunities for synchronous class sessions, and incorporation of social media (Lockman & Schirmer, 2020).

Making a Case for Asynchronous Learning

As a slight variation on the studies detailed above, Lowenthal et al. (2017) found that most online courses rely solely on asynchronous text-based online communication. Online educators often avoid using synchronous forms of communication in their courses, because of their own constraints and because technology doesn't always work. When it doesn't work, technology can cause more damage than not (Lowenthal et al., 2017). The authors described how they integrated live synchronous web meetings into asynchronous online courses, collected student feedback, and made iterative changes and refinements based on student feedback over time. They also found that scheduling live office hours or synchronous sessions doesn't always work because many students are unable to attend at a specific time, which was the reason for them choosing online learning in the first place. To overcome the challenges that synchronous learning could cause, the authors suggested multiple factors to keep in mind while incorporating synchronous methods. These include scheduling live sessions based on the time zones of students or sending out recordings that can be viewed at students' convenience.

According to Petronzi & Petronzi (2020), the core challenge lies with the inherent choice made by students that face-to-face learning was their preference. Now "institutions must address this by utilizing a range of digital solutions, that crucially, must also be embraced by those that no longer have the luxury to be risk-averse or believe that digital solutions align with their existing pedagogical approaches" (Petronzi & Petronzi, 2020, p. 498). The authors tried to explore pertinent literature surrounding blended approaches with regard to key pedagogical and learning theories, with an overall aim of suggesting the hybrid Online and Campus model as a potential blueprint that incorporates campus, synchronous, and asynchronous learning experiences.

COVID-19 and its Impact

With the changes in online learning during the global COVID-19 pandemic since March 2020, more research and information has surfaced now than at any other time since the advent of virtual and blended education. Since the pandemic, "we have no longer debated whether online teaching and learning was the future of education. The answer is here" (Tesar, 2020, para. 5). While online learning has become the norm in the current scenario, it has also given rise to a new concern. The sense of community that was always identified as missing in the virtual world is now seen in a different light. With the onset of COVID-19, socializing was deemed to be not only less useful, but possibly detrimental to physical survival, and thus severely limited through social distancing (Christian et al., 2020). "We have in this COVID-19 world perhaps become even greater strangers to ourselves in the educational world, as our otherness is enhanced

through the physical distancing and social isolation policies" (Tesar, 2020, para. 9). As learners, along with everyone else, look to creating virtual communities in their limited spheres, online learning continues to develop the techniques that were already in progress, and that will continue to develop in this setting.

Conclusion

Even after the completion of this research, there will continue to be more published material and extensive literature on the topic of online learning, especially in the aftermath of the pandemic. As more creative techniques are employed by educators and as students look for new ways to stay connected, even in this new world there will continue to be improvements in virtual teaching methods. In the present day, creating a sense of community is more important than ever, and this is seen in the online learning environment every day. Much of the literature reviewed has helped answer the research questions listed earlier and has confirmed the need to study this very relevant topic. The literature reviewed on this topic has also justified the qualitative methodology that will be discussed in the next chapter. This study and its findings will help add to the existing research and literature on this topic. This literature has helped create a stronger and more relevant study that will help not only the researcher's organization and the OPM industry, but also the world of higher education as a larger setup.

CHAPTER 3

METHODOLOGY

Action Research

According to Herr & Anderson (2014), "the definition (of action research) that a researcher chooses should be made clear in a dissertation. This definition will then determine the kinds of epistemological, ethical, and political decisions a researcher will have to make throughout the dissertation study" (p. 5). Of the many definitions of action research that are available, the one that fits this study best comes from Manfra (2019), who states that "action research shifts the paradigm of contemporary educational reform by emphasizing inquiry and placing teachers at the center of research-into-practice" (para. 1). She continues to say that action research allows teachers and other higher education professionals to "explore issues of everyday practice and work to bring about change" (para. 1). This statement highlights the focus of this study, that the problem is the lack of student connection and engagement in a learning environment that has slowly moved further towards an online format. The purpose of the study is to find ways to overcome this concern and use specific socialization techniques to create a sense of community and bring about the change that is helping students become more successful in an online learning format.

Initially coined by Kurt Lewin in 1944 as a way to describe a process of investigation and inquiry that occurs as action is taken to solve a problem, action research now describes a "practice of reflective inquiry undertaken with the goal of improving understanding and practice" (Kolk, 2021, para. 5). Kolk also details the steps needed for action research as identification of the problem, developing a plan of action, collecting data, analyzing the data and forming conclusions, modifying the theory, and repeating the cycle, and then reporting the results. These

steps were followed in this research study and were addressed using the qualitative methodology approach.

Methodology

All three approaches to research were considered for this study. Creswell & Creswell (2017) define the quantitative approach as one that can be used to test "objective theories by examining the relationship between variables" (p. 4). Using this approach would involve using numbered data that represented the retention rates that are (or are not) impacted by student engagement and the sense of community in the online learning environment. These rates would then be analyzed using statistical procedures to determine the level of impact. Similarly, using a mixed-methods approach would mean collecting both qualitative and quantitative data, integrating both forms to represent the numbers from the quantitative approach as well as the themes and patterns generated from the qualitative, and then analyzing both to arrive at a more holistic result.

Methodology Used in This Study

This research initially did trend towards some use of the quantitative methodology to find a direct correlation between student engagement and retention. This would have used the descriptive observational research method (Mertler, 2019) which would turn the methodology into a triangulation mixed-methods design. However, Mertler (2019) also declares that the researcher's preference and skill can determine the research approach that is chosen. Solely based on these criteria, the qualitative method would have been the preferred option for this research study since the researcher's mindset and aptitude tend towards this approach.

To add to this reasoning, much of the reviewed literature on the topic uses the qualitative approach, which is further justified by exploring the basic characteristics of qualitative methods

conveyed in introductory texts by Creswell (2016), Hatch (2002), and Marshall and Rossman (2016), as cited by Creswell & Creswell (2017). Some of these basic factors that fit into this research plan include collecting data in a natural setting by directly interviewing participants who work or study in an online learning environment; gathering and interpreting the data without using instruments developed by other researchers; using multiple forms of data, including interviews and surveys; and working inductively and deductively by organizing the gathered data to find emerging themes, trends, and patterns between student engagement techniques. These engagement techniques can lead to a sense of community among online learners and could create a potential impact on student retention. This method needs to be cyclical so more information can be gathered as needed to further add to the emerging themes.

Another feature of qualitative research followed in this study was a focus on learning the participants' opinions and views on the issue and exploring their meaning in the right context without attempting to inject the researcher's opinion into the study. At the same time, understanding that situations can change at any time and for various reasons is an inherent part of qualitative research. With the relevance of the topic in the current environment, there was always a strong possibility that practices and behaviors may change even during the course of the study. These changes and adaptations needed to be incorporated and brought together to deliver a holistic account with multiple perspectives and to help create a larger picture that addressed the inherent issue and its possible impact.

Based on Creswell & Creswell (2017), this study trended towards a qualitative approach with a combination of ethnographic design and observation of behavior, as well as some elements of a narrative design, and open-ended interviewing. An ethnographic design explores the everyday experiences of people and attempts to capture a holistic picture based on how these experiences are described, and this is what was obtained from the participants in the study. Open-ended interviewing methods were used to allow participants to share their opinions, experiences, and ideas, and these have been narrated using the themes that emerged from these conversations.

Limitations

During the initial research proposal, there was some consideration of using elements of the quantitative methodology to find a direct correlation between student engagement and retention. This would have used the descriptive observational research method (Mertler, 2019), which would turn the methodology into a triangulation mixed-methods design. However, during the Institutional Review Board (IRB) approval process, the legal team at the researcher's organization prohibited the use of any existing student and program data which could have helped compare retention rates across multiple programs that may or may not use socialization techniques to build a sense of community. This limitation meant that the variables required to use the quantitative approach were no longer available.

This pushback in the IRB approval process brought the methodology back entirely into the qualitative sphere and allowed the study to focus on the narrative and ethnographic approach. This was done through conversations with higher learning professionals as well as adult learners with experience in multiple learning formats. This method aligns well with some of the most useful articles in the reviewed literature (Berry, 2019; Peacock et al., 2020). Many of these references analyze other readings and concepts of student engagement to help consider the use of technology and improve the student experience and, in turn, help define strategies and best practices that could impact retention and learning outcomes (Bissonette, 2017). As seen in the previous chapter, these resources provide strong reference points for this research study as well.

Research Questions

This study aimed to answer the central question that addresses the main research topic:

• How can virtual socialization techniques be used to create a sense of community within online adult learners, and what impact could this have on student retention?

The associated sub-questions below helped break down and answer the central question:

- How important is it to create a sense of community in online higher education learners?
- What techniques can be used to increase socialization and create a sense of community in online graduate learners?
- How can this sense of community impact retention in online graduate learners?

Data Collection

Sampling

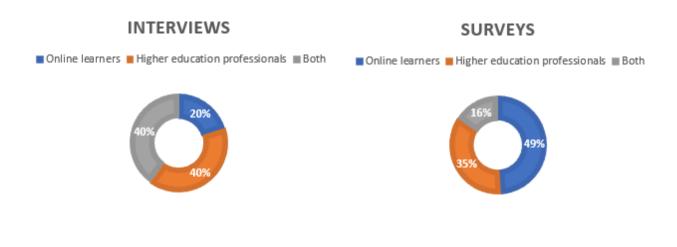
The prevalent data collection method followed in this study was *survey research*, which is a form of the descriptive research design and involves "acquiring information from individuals representing one or more groups—perhaps about their opinions, attitudes, or characteristics—by specifically asking them questions and then tabulating their responses" (Mertler, 2019, p. 98). This qualitative study acquired information using interviews and surveys conducted with participants that were either adult students or educators with some experience in online learning, or professionals in the online higher education environment. The researcher also considered diversity among participants in areas like general background, public or private learning and professional experience, and the possible impact of the pandemic, to bring a more robust and inclusive perspective to this topic.

With the researcher's experience in the online higher education environment, there was reasonable access to other team members who also work in the same environment and would have useful insight into how socialization techniques are used in online programs and how students and educators respond to them. Many of the participants had some experience in student support which allowed for interesting conversations on their view of the sense of community in online higher learning, what could be done to improve this concept, and whether or not they had seen any noticeable impact on student retention. At the same time, speaking with students provided some relatable views on their own experiences in the online format, their level of collaboration and cohesion with faculty and other students in their program, and the impact they thought it had on their engagement and learning.

Responses were expected from most participants based on previous professional or personal associations with the researcher. The study aimed to interview or survey 50-75 participants, with a possible 1:1 ratio of students and professionals, to get enough ideas and opinions to find strong patterns and themes in their responses. Over 100 surveys were sent to a group of participants that included nearly equal numbers of students and working professionals. Figure 1 displays the representation of the 51 survey responses that were received, of which 49% (25) were students, 35% (18) were higher education professionals, and 16% (8) had been both and could respond from both perspectives. 10% of these participants also set up face-to-face follow-up interviews which provided more detail and information. These also included a mix of students (20%), professionals (40%), and some with both (40%) perspectives.

Figure 1

Representation of Participants in the Data Collection Process

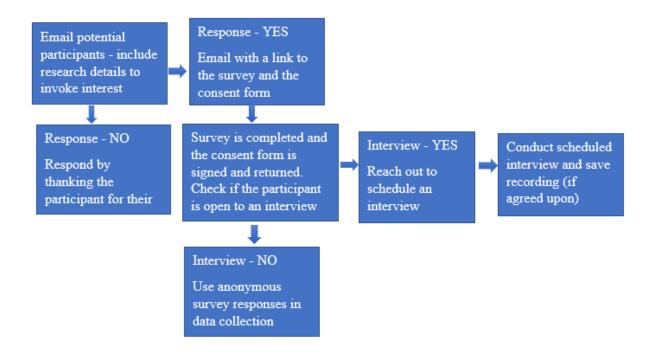


Data Collection Process

Qualitative surveys and interviews are essential in the quest to gain perspectives from students and professionals. To reach the expected sample size, each identified participant, student or professional, was contacted directly using a scripted email (see Appendix A) with specifics about the research plan in an attempt to invoke interest in the topic, especially in light of the current pandemic and its impact on online learning. The email included a link to an anonymous survey (see Appendix B) that participants were encouraged to complete, as well as a consent form (see Appendix C) that they needed to sign and send back if they wanted to participate in a follow-up interview. The data collection process is outlined in Figure 2.

Figure 2

Data Collection Process



The survey was designed using open-ended questions which are used to "get a wide variety of responses. It is then the responsibility of the researcher to 'analyze' the resulting data by grouping similar items together and tallying the number of responses in each category" (Mertler, 2019, p. 145). For the follow-up interviews (see Appendix D), the *semi-structured* interview method was used where "the researcher asks several 'base' questions but also has the option of following up a given response with alternative, optional questions, depending on the situation" (Mertler, 2019, p. 133). The consent form included a section on permission to record the interview so it could be analyzed further at a later time while the focus during the conversation was on the participant. This analysis helps get a closer look at details that may be missed during the conversation, and it becomes possible to address tonalities and inflections in the speakers' narrative. However, since none of the participants checked this option, the

interviews were not recorded and the process consisted of detailed notetaking to ensure that the content, as well as their perspective, was understood and documented for further analysis.

All survey responses, consent forms, and interview notes were saved on a passwordprotected computer that was used solely for the purpose of this research, and no information or specific views were shared with other participants at any time.

Data Management and Analysis

Qualitative data analysis primarily entails classifying things, persons, and events and the properties which characterize them. Typically, throughout the data analysis process ethnographers index or code their data using as many categories as possible. They seek to identify and describe patterns and themes from the perspective of the participant(s), then attempt to understand and explain these patterns and themes. During data analysis, the data will be organized categorically and chronologically, reviewed repeatedly, and continually coded. (Creswell & Creswell, 2017, p. 207)

This research study followed the qualitative data analysis process defined above. There was an expectation of potentially conflicting responses and opinions from the participants, and those were analyzed in great detail for themes and patterns that continued to emerge. With the researcher being a part of the professional online learning environment, there was a potential for personal existing opinions on the topic. However, the researcher made a conscious and determined effort to avoid any biases and to focus on the perspectives of the participants. Also, as mentioned by Creswell & Creswell (2017), the qualitative approach is cyclical, which meant that as trends emerged, there was a need to go back to the notes and surveys for a more in-depth review and analysis to add to the narrative. No existing codes were used since the qualitative nature of the methodology created its own codes from the emerging data and the analysis built on

that data. Themes were added to these emerging codes from the detailed notes that were made while analyzing survey responses and interviews.

Managing Collected Data

To manage open-ended responses from 51 survey participants, a *data accounting log* was used to help document information and view it at-a-glance (Miles et al., 2014). This also helped determine if there was sufficient data to answer all the research questions. To add to this need for data management, a *contact summary form* was used during each interview to help capture "thoughtful impressions and reflections and make(s) them available for further reflection and analysis" (Miles et al., 2014, p. 124).

Analyzing the Data

Once the data was collected, *in vivo* codes were used during the first cycle of coding to help identify and use specific words and phrases from the participants' experiences. *Process* codes, which are gerunds used to extract "participant action/interaction and consequences" (Miles et al., 2014, p. 75), were also used to label observed action in the data. *Emotion* codes were used to help understand the participants' experiences and recollections since this is appropriate for studies that "explore intrapersonal and interpersonal participant experiences and actions" (Miles et al., 2014, p. 75).

While further analyzing the data, there seemed to be a need to help organize the cases or situations that were detailed by the participants in varying levels of interest (Miles et al., 2014). A *descriptive meta matrix* helped organize positive and negative responses to the survey questions and find connections between specific variables like synchronous techniques, student engagement, the sense of community, and even the possible final outcome of student retention. Since multiple cases and experiences were expected from the participants, this method helped

bring them together into "one thematic display" (Miles et al., 2014, p. 237) using an inductive approach since the hypotheses continued to progress and refine through the fieldwork. There was a conscious effort to minimize any expectations and bias which can come about with a deductive approach.

Due to the involvement of the researcher in the subject, and with the prevalent postpandemic environment creating some level of bias, there was a need to confirm all findings to avoid any incorrect generalizing. This was aided by sampling a random group of participants and a purposeful aim at finding contrasting cases to gain different perspectives. To avoid these pitfalls, the triangulation method was used to confirm the findings. Gathering data from multiple sources, roles, backgrounds, and methods, helped double-check and verify the findings as they were collected "by seeing or hearing multiple instances of it from different sources by using different methods and by squaring the findings with others it needs to be squared with" (Miles et al., 2014, p. 300).

Due to the qualitative nature of the study, all research questions were largely open-ended and led to much conversation and discussion, especially during the interview process. During the data collection and analysis process, patterns and themes were noted to help "pull together separate pieces of data" (Miles et al., 2014, p. 277) and *clustering* was used to help understand the "phenomenon better by grouping and then conceptualizing objects that have similar patterns or characteristics" (Miles et al., 2014, p. 279).

Ethical Considerations

After explicit denial of permission from the researcher's organization's legal team during the IRB process, there was a conscious effort to avoid using any contractual or programmatic data. However, the researcher's upper management team was open to the idea of employees participating in this research via surveys and interviews, with the hope that the results of the research could be used to improve certain methodologies and student support material in the organization. As a result, the interview and survey participants included professionals and students within the system, but there was a clear understanding that the entire research process had no connection with the organization and that participants must not divulge any details that may be sensitive and protected by the Family Educational Rights and Privacy Act (FERPA).

Despite having a professional relationship with many of the participants, the researcher made an effort to avoid any conflict of interest. There was no compulsion on anyone to participate in the study. All participants, whether they were students, or colleagues of the researcher, were adults, and they were given the opportunity to participate in or ignore the survey contained within the initial email communication. To participate in an interview, they were required to sign a consent form acknowledging their understanding of the topic and methods and ensuring that they were comfortable with the process at all times. Based on their indicated preference, none of the interviews were recorded. All data were stored securely and analyzed ethically to report all findings, whether or not they support the proposed theory. After the research is completed, copies of the study will be shared with any interested participants.

Timeline and Barriers

All communication with the organization's legal teams and upper management was shared as a part of the research proposal application to Bradley's Committee on the Use of Human Subjects in Research (CUHSR) and was approved in July 2021. In Fall 2021, the CUHSR-approved communication was to be sent out to all intended participants. However, this timeline fell right when most students and educators were trying to return to normal after the COVID-19 pandemic and getting back to the in-person learning format from a forced online option. "More and more academics were protesting and calling for a return to face-to-face offerings. They argued that there was minimal meaningful investment in online teaching and learning" (Tesar, 2020, para. 3). The concern with collecting data at this time was the possibility of an inherent bias on the part of the participants due to post-pandemic emotion. This led to a decision to delay data collection until after the Fall term. The hope was that the delay would help collect more factual, and relatively unbiased, feedback from the participants without the pandemic being the most significant variable in the equation, even while acknowledging that it would continue to play some role in the results. The goal was for participants to respond based on a steady state of learning and not their personal response to the post-pandemic environment. The surveys were eventually shared and collected through December 2021, interviews were scheduled in January 2022, and the data were analyzed through Spring 2022. Considering the cyclical nature of the process, additional time was factored in to allow for follow-up conversations with some agreeable participants during the data analysis stage.

Author Positionality

"The positionality that researchers bring to their work, and the personal experiences through which positionality is shaped, may influence what researchers may bring to research encounters, their choice of processes, and their interpretation of outcomes" (Foote & Bartell, 2011, p. 46). As someone who works in an Online Program Management (OPM) setting, with many years spent advising online students, the researcher had specific personal opinions regarding the topic and how student engagement and the sense of community could impact the student experience and their decision to stay in their program. Similarly, the researcher had some experience in designing courses and curricula that used multiple socialization techniques that could affect students' level of engagement in the program. Working closely with online learners and virtual higher education professionals does provide an understanding of the topic, its requirement in the current post-pandemic environment, as well as its potential limitations. Being able to view the topic from different positions, that of an online learner, a higher education professional, and an online educator, has provided the researcher with a unique opportunity to understand and research this topic, and observing its relevance in the pre-and post-pandemic world has also provided a new, and much needed, perspective to its importance in education today.

Conclusion

This study attempted to address how online higher education could use virtual socialization techniques to create a sense of community within the classroom, and then explored what impact this could have on student retention. In light of the recent pandemic, when online learning had shifted from a format of choice to one of necessity, there is much that can be done to improve student engagement and acceptance of the virtual learning format, and this study will add to that understanding. With the changes made in the higher learning environment in the past two years, there is reason to believe that there may not be a complete return to what was practiced in the past, and with the further growth of online learning being a real possibility, it becomes even more important to identify and examine methods in which students and educators can transcend the perceived disadvantages of the online format and attempt to create a more inclusive and cohesive classroom space.

The ethnographic design and narrative nature of this study explored these conditions and situations from the points of view of students, educators, and higher education professionals. The goal of the research is to use the acquired data to help educators create more efficiencies in the online format. This data has been analyzed and detailed in the next chapter, and it can be shared

with institutions of online learning to create programs that will allow their students the opportunity to feel connected regardless of the teaching modality that may be employed, either due to circumstance or choice. These institutions of learning can also be aided by Online Program Management (OPM) organizations that can help provide these options through their curriculum and instructional design professionals. The industry is in a tumultuous phase of growth and change, and this research study can add to the work being done to streamline and hone these methods of improvement.

CHAPTER 4

DATA ANALYSIS

The purpose of this research was to examine graduate-level virtual learning using the qualitative methodology detailed in the previous chapter to help understand what socialization techniques can be used in online classrooms to increase student engagement and build a sense of community. The research was also used to help determine if this sense of community could have any impact on student retention. With the changes in learning methods during the COVID-10 pandemic, it has become crucial for higher learning institutions to overcome the potential bias against the virtual learning format and create a more communal classroom space.

Education will always be a primordial need of the entire society...We need to continue to find new techniques to maintain a high level of education, in order to be able to face the rapid changes that are occurring as a result of digitization and online remote learning and working. (Mosteanu, 2021, Conclusion section)

This research aims to understand the needs of the online classroom and help institutions incorporate these techniques to build this student community and add to the work being done to improve the virtual teaching format. This qualitative study was conducted using interviews and surveys with 51 participants that were either adult students or educators with some experience in online learning or working professionals in the traditional or online higher education environment.

Research Questions

This chapter details the data management, analysis, and results of the conducted research to help answer the following research question: • How can virtual socialization techniques be used to create a sense of community within online adult learners, and what impact could this have on student retention?

The associated sub-questions below helped break down and answer the central research question:

- How important is it to create a sense of community in online higher education learners?
- What techniques can be used to increase socialization and create a sense of community in online graduate learners?
- How can this sense of community impact retention in online graduate learners?

Data Collection and Management

Over 100 surveys were sent out to participants who were either online students, educators, or higher learning professionals. Survey responses were received from 51 participants of which 49% (25) were students, 35% (18) were higher education professionals, and 16% (8) had been both. 10% of these participants also set up face-to-face follow-up interviews

The surveys were shared and collected through December 2021 after giving students and educators time to return to a post-pandemic "normal" school system. Interviews were conducted and the data was analyzed through Spring 2022. All survey and interview responses were saved securely in a data accounting log and contact summary forms and analyzed using an inductive approach. The triangulation method was used to confirm findings after gathering data from participants representing multiple sources, roles, backgrounds, and methods. Since all survey and interview questions had been open-ended to encourage discussion, the data collection and analysis process largely consisted of identifying patterns and themes to group information with similar patterns, and the use of in vivo, process, and emotion codes to understand and label these patterns.

Data Analysis

Findings/Results

Socialization Techniques in the Online Classroom

"Synchronous activities provide additional elements to the interactions such as instant communication and feedback that help establish others as being 'real' and 'there'" (Trespalacios and Uribe-Florez, 2019, p. 59). The research findings corroborated this idea and confirmed that socialization techniques within the online classroom are necessary because, as stated by an interview participant, "humans are social creatures". Another survey participant emphasized that many learners need synchronous learning options to feel "connected and engaged with their peers and program...there is an increased sense in belonging and confidence." Other opinions that were repeated through the responses highlighted the importance of classroom discussions with the caveat that they "need to be handled well or they don't help." This also reflects much of the research on this topic which includes similar opinions from authors like Muir et al (2020), who pointed out that "the use of interactive discussion boards in online learning suggests they can be important tools to foster student engagement, but students and facilitators have been critical regarding the structure of forums and the quality of interaction and content" (p. 4).

Another noteworthy aspect that must be considered since it was repeated among the participants was the need to use the right technology to help improve socialization and engagement in the classroom. Added to this was the importance of instructors facilitating socialization activities to encourage thought and discussion among learners. Mosteanu (2021) highlights the idea that technology currently shapes all industries, including education. At this point, "educators are looking for solutions to optimize teaching, learning, and assessment techniques" (Mosteanu, 2021, Conclusion section). This is a task for both instructors and learners, and "the challenge is to master an entirely new set of technologies and to effectively

deliver instruction, knowledge, and ultimately competency" (Mosteanu, 2021, Conclusion section). An interview participant stated that "instructors need to learn the technology they are using. They struggled through it with us." This observation also points to the need for trained instructional designers to design online courses using the most effective technology, while educators need to undergo regular professional development and training to be able to deliver good instruction. This concept of design v. delivery was mentioned repeatedly during the study and will be discussed in a later section.

Popular Socialization Techniques

In their study on the practices in online instruction, Lockman and Schirmer (2020) stated that they found course design elements "to be effective in improving achievement and satisfaction including incorporation of multiple pedagogies and learning resources, feedback from the instructor and peers, user-friendly online tools, high instructor presence, and promotion of socialization, and group trust." (p. 133). These elements were repeated across the research findings, with the following techniques being highlighted more often than others.

The data shows that students and educators identify live sessions as one of the most effective socialization techniques in an online learning environment. These may be formal classes facilitated by faculty or casual conversations between learners, but even when they are not fully attended, live sessions do help create a connection between learners, and they can be recorded and shared so learners can relate to their peers and not feel isolated. Watching a recording may dilute the effectiveness of live human connection, but it can still help students notice other learners in the classroom which makes them "more likely to generate new ideas and contribute to the classroom" (survey participant "John"). Instructors can use these sessions to connect with students and facilitate discussion and interactive learning and create an environment very close to that of an actual classroom.

Chats and discussion forums were mentioned by most participants as effective methods of increasing classroom engagement. As discussed previously, it is important for discussions to be facilitated well to increase efficiency. One of the survey participants specified that "when faculty and instructors are engaged in facilitating discussions and responding actively to students, it has led to a more engaged atmosphere." The discussion and chat method can be further explored by using online tools like Zoom, Slack, WhatsApp, Facebook groups, or Google Meet. These help students bring their personal methods of communication into the classroom space and interact with others using familiar technology. They can also be used to execute small group assignments or projects, which have been mentioned by many research participants as a way to increase student engagement and interaction. Small groups and breakout sessions also help students who are not as comfortable in larger group settings and may not be very interactive during live sessions. It is important, however, for the instructor to facilitate group work in some manner, to avoid negativity and conflict among learners.

In-person or virtual residencies and orientations were also recommended by students as methods that encourage interaction and create a sense of accountability. Furthering a cohort system helps students build connections with specific groups and share experiences and degree progression.

Student Engagement

According to the research findings, specific socialization techniques can have a direct impact on student engagement. For example, cameras used during live sessions, even if opted out by introverts, can create accountability and connections between learners. Some students may work better in an asynchronous environment because there is less pressure and responsibility. However, students seem to prefer synchronous environments that help them feel like they are not alone and can ask for help. It can make them feel more accountable and can increase a sense of confidence for some, but it also has the potential to go the other way for some learners who feel like they are being put on the spot. A participant who is an instructor and an online student mentioned that some students, "are not going to do it if there's no grade attached to it, but if interaction and synchronous aspects are made mandatory, then they will stop being authentic and can become transactional." This is a definite concern and puts a larger responsibility on the instructor and course designers to understand students and their goals and plan courses and activities accordingly.

There is also a need to keep the type of program and curriculum in mind. For example, it may be more difficult to create student engagement in science, technology, engineering, and mathematics (STEM) courses, but these students usually need the support that comes with student engagement.

The results of the study showed that both students and faculty felt the need for socialization and engagement in the classroom. Instructors can feel disconnected outside of live sessions so synchronous techniques like discussions, chats, or webinars can help bridge the online and in-person gap. Students, on the other hand, while agreeing with the necessity of these methods, would like the faculty to take on more responsibility to facilitate and manage classroom interaction. An interview participant who is an online learner referred to instructors as the "north star" because they need to guide without micromanagement, and not let students try to "figure it out for themselves". Instructors, however, are concerned that some students may not want to engage, and they cannot enforce synchronous options on everyone, especially in an online environment.

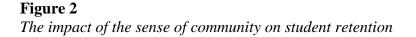
Sense of Community

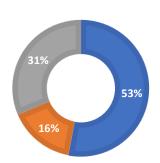
According to one of the survey and interview participants, the concept of a student community "may not matter to introverts, but it will to the other 80%." This will also help students learn how to function in the workplace where interaction may be virtual but still required. The research also showed that learners feel the need for what an interview participant referred to as a "safe space to help students feel connected with students and faculty". This feeling of connection, accountability, motivation, and support could lead to a better overall learning experience and help encourage conversation in a classroom, even opening up the possibility to obtain differing perspectives that could aid in learning. The sense of community can prompt students to band together, sometimes even against instructors and the institution, to create a unified student body since "it gives them a support system and resources beyond the instructor." (interview participant "Joe"). Students that interact with each other during residencies and live sessions can connect and create lifelong relationships. In a virtual environment, using the right technology and activities to improve these connections will also play a role in students' personal and professional lives.

An important aspect that surfaced through the interviews was that the faculty members believed that instructional designers should create course content so instructors can focus on facilitating understanding and creating the right environment for students. Multiple participants mentioned the concept of design v. delivery with the explanation that roles should be clearly defined in content creation and facilitation. This helps instructors who are untrained in course design since they will not be expected to create effective content for online classrooms. Instructional designers need to create courses based on learner needs and outcomes, while instructors should focus on their teaching methodology. This is especially relevant because learners and educators both believe that educators play a large role in connecting students by giving regular feedback, facilitating coursework and activities, and being available when needed.

The Impact on Student Retention

One of the interview participants declared, "If I didn't have people to lean on or hold me accountable, I would have dropped." This is not an isolated opinion as 53% of the participants (see Figure 3) confirmed that student engagement and the sense of community can have an impact on student retention while another 31% said that it could be a factor for some learners but may also depend on individual situations or circumstances.





■Yes ■No ■Depends

Only 8% of the participants said there is no specific connection between student engagement and retention, but these participants' responses still detailed the importance of the community and the sense of belonging for students. They mentioned that the sense of community does help increase motivation and creates a positive learning environment. This idea of the students' sense of community may not have a direct impact on retention, but it creates a stronger support system and helps increase student success and confidence in the classroom. This opinion was shared by a majority of participants in both groups, students and higher education professionals, who agreed with the potential impact of student engagement on retention. 64% of students confirmed this opinion, as did 56% of the higher education professionals (see Figure 4). Even those that did not fully agree did include at least 20% in each participant group who mentioned that this would depend on individual circumstances.

Figure 3

The difference in opinion between students and educators on the impact of community on student retention



The impact of using socialization techniques on students' sense of community and any potential impact on retention can be summed up in Figure 5 using specific verbiage mentioned by the research participants.

Figure 5

General research findings on each of the sub-questions

Socialization Techniques:

- Live sessions
- Social Media
- Facilitated discussions
- Small group projects
- Residencies
- Using the right technology
- Good instructional
 design

Impact on Students' Sense of Community:

- Motivation
- Accountability
- Creating a safe
- space'Better learning
 - experience
- Design v. Delivery

Impact on Retention:

- Positive learning environment
- Support system
- Increased student success and confidence
- Individual circumstances and goals make a difference

Discussion

Conflicting Opinions

The data (see Figure 3) confirms that students and higher education professionals believe that well-executed socialization techniques can help increase a sense of community in a virtual classroom and that this is needed to help students feel connected and motivated. All 51 surveyed participants believe that creating a sense of community helps learners in the online learning environment. However, 16% still believe that this will not have an impact on a student leaving or staying in a program.

Other differences in opinion relate to discussion forums which may not promote actual dialogue, and there are multiple mentions of synchronous v. asynchronous methods that can help or hinder learning depending on the type of learner and their goals and outcomes. According to some participants, synchronous options can increase pressure on learners who may prefer online learning for its potential anonymity. This aspect needs to be considered by program managers as they build courses that can suit the needs of different learner types.

Impact of the COVID-19 Pandemic

In the post-pandemic world of higher learning, learners seem to want increased socialization and want to come together. The enforced isolation during the pandemic has created a need for community. At the same time, it has also demonstrated to learners and institutions that the virtual format can work if managed effectively. The survey and interviews included participants that did not choose to learn in the online format but were forced to do so due to the pandemic. These learners were critical of the online format, largely because their programs were not created to be taught in this manner. One of the interview participants, a higher learning professional in a traditional university system, complained about how instructors who were unused to teaching online handled the pandemic. The lack of preparation and training was obvious, and this led to disruption in their teaching methodology all semester. Tesar (2020) says that the forced move to the online format highlighted the problems prevalent in the academic community. The move showed some level of creativity, but it also showcased the gap in democratic practices, the "unfairness of the online system" (Tesar, 2020, para. 4), and the lack of "meaningful research into digital pedagogies and teaching and learning." (Tesar, 2020, para. 4). The research participants agreed that in the post-pandemic world, there is a need for courses and programs to be designed effectively with instructors who are trained to teach and facilitate in this specific format so they can keep modern learners engaged and involved in the classroom.

Conclusion

The results of the conducted study have made it overwhelmingly clear that the participants, representing different groups in the online learning environment, agree upon the role that engagement and community can play in the virtual classroom. The majority also agree that this sense of community plays a role in student retention, and they identified multiple

synchronous learning techniques that can increase socialization and engagement in the classroom. As this research study shows, it is important for programs and institutions to adopt these techniques and methods to help increase student interaction in their online programs with the goal of improving retention rates and student satisfaction. The following chapter attempts to contextualize this study and provide opportunities for practice, while also recognizing its limitations and options for further research.

CHAPTER 5

CONCLUSION

According to Bissonette (2017), "turning engagement into community is a constantly renewing process. When it does work, studies strongly indicate it significantly increases student satisfaction and retention" (p. 17). This study examined how socialization techniques can be used in online higher learning classrooms to increase student engagement and help build a sense of community among students and between students and instructors. The research findings also attempted to determine if this sense of community could have an impact on student satisfaction and retention.

Research Purpose and Questions

The study used qualitative techniques to survey and interview online learners, educators, and higher education professionals and help address the issue of student engagement and community in the online learning format. "Students are more likely to persist with their studies if they are able to integrate socially and academically with the university community" (Muir et al, 2020, p. 1). The study aimed at understanding how the research participants felt about the use of specific synchronous teaching methods that could promote this feeling of community, which could then have the potential to improve student persistence or retention. To do this, the researcher needed to obtain a response to the main research question:

• How can virtual socialization techniques be used to create a sense of community within online adult learners, and what impact could this have on student retention?

The associated sub-questions below helped break down and answer the central question:

• How important is it to create a sense of community in online higher education learners?

- What techniques can be used to increase socialization and create a sense of community in online graduate learners?
- How can this sense of community impact retention in online graduate learners?

Summary of Research Findings and Results

The research findings included detailed methodology and activities that could help increase student participation and engagement in the classroom. These included synchronous techniques like audio-visual aids, live sessions, well-facilitated classroom discussions, or group assignments that could be included in courses designed specifically for the online format by professional instructional designers and facilitated by instructors that are trained to teach in this format. The research showed that the sense of community in an online classroom can help create accountability among learners and there was a clear indication from participants of all backgrounds that there is a need for learner interaction and engagement in the online classroom, and that this plays a role in student retention. 53% of the participants specifically stated that the community aspect had a direct impact on student retention, while another 31% agreed that it does play a role even while allowing for a dependence on the situation or individual circumstances.

Another crucial aspect of student engagement that emerged in the study was the role of the instructor in the online classroom. According to Muir et al. (2020), "instructors' ongoing, regular, and frequent communication with students was important for establishing and maintaining student engagement in the units taught" (p. 16). This is a popular opinion in the literature reviewed for this study and the research findings further corroborated this by detailing the role of the instructor as a facilitator who needs to use the right technology and tools to manage an online classroom while allowing trained course designers to create the actual course

content (Bissonette, 2017: Cornell et al., 2019; Gray & DiLoreto, 2016; Lockman & Schirmer, 2020).

Implications for Online Learning Classrooms

Based on the research findings, there is a great deal of information that can be shared with programs and institutions that are turning to the online format in an attempt to reach more learners, especially during and after the COVID-19 pandemic. Higher learning institutions need to work on increasing synchronous options in virtual classrooms while allowing for learners that may prefer asynchronous methods. They also need to create opportunities for professional development for faculty so they can facilitate and manage the classroom effectively to meet the needs of the modern learner.

The research specified that programs must allow instructional designers to design courses with the right technology and activities to help promote socialization and student engagement. Faculty must be allowed to focus on facilitation and teaching methodology used in the classroom. Lockman and Schirmer (2020) identify "components of effective online instruction such as the use of feedback, culturally responsive teaching, problem-based learning, metacognitive support, and instructor presence" (p. 134), and the study participants agree with these concepts. Online programs should include well-designed synchronous activities that utilize the correct tools and modern technology to help instructors facilitate live sessions, organize small groups for discussions and projects, and create scenarios that encourage students to come together in a safe environment to help further their individual and community goals. "Covid-19 has diminished the premise that online is just for some students and not for others" (Tesar, 2020, para. 8). Institutions must use the pandemic as a learning experience and focus on creating programs and courses that incorporate synchronous learning methods and can be taught in the

online format even outside the pandemic situation. The goal is to create a robust online learning environment that can come into effect during other unexpected emergency situations or just aim at catering to the needs of the modern higher education learner.

Suggestions for Future Research

According to Trespalacios & Uribe-Florez (2020), "we are still at the beginning of understanding how to satisfy the educational needs of the more diverse population enrolled in our online education programs" (p. 65). Higher education learners come into their online programs with diverse personal and professional goals and experiences, and these play a role in learner outcomes. While the research is conclusive in its findings with only 16% believing that the sense of community plays no role in student retention, there are still 31% that allow for individual circumstances that can factor into this situation. This points to a gap in understanding learner needs that could impact the research problem. To overcome this gap, institutions should add to the information collected during the enrollment stage so there can be a better understanding of what different learners may need depending on their goals, career plans, and professional and educational backgrounds. Course and program content can then be built and facilitated accordingly to meet expected learner outcomes.

The current higher learning scenario also includes non-degree courses and certificates. These are usually shorter and work outside the idea of full degree programs that are focused on one discipline. "Given the increasing challenges facing educators in the 21st century, the process of how knowledge is produced today is global and diverse. There is an urgent demand for interdisciplinarity, a term commonly used to refer to the integration of knowledge from multiple disciplines" (Zhang et al, 2022, p. 3). Future research must look at identifying goals and outcomes for the growing group of learners that subscribe to this mindset, and then build courses for them utilizing the right technology and tools to help achieve the same level of student success that is expected in traditional degree programs.

Limitations

There is an existing bias that "on-line learning does not replicate the learning that takes place in the classroom." (Corcoran, 2022, p. 2). This mindset plays a role in any study that relates to the online learning modality, with educators and students continuing to undermine the validity of the format. This bias continues to apply even outside of the COVID-19 pandemic, but the timeline of this particular study, situated during and after the pandemic, played a role in the results. This time factor was a potential perceived limitation since it demonstrated a strong bias against the online learning modality augmented by the isolation and disruption caused by the pandemic. The original data collection timeline was changed to allow for the participants to acclimate after their 'return' to the post-pandemic education environment. However, there is definite conjecture that the participants, especially students, may have responded differently to the research questions before the pandemic when they were not forced into the online learning environment. Many educators also struggled with unprepared online teaching during the pandemic, and this has led to an increased bias against the format as well. During the interview process, there were multiple allusions to the pandemic and how online learning was handled before, during, and after this phase. Future research on this topic may see different results that are not impeded by their immediate proximity to an unforeseen global situation with its specific impact on all learning methodologies.

Another limitation of the study, while expected and identified at an early stage, was the role of the researcher's organization in the study approval process. The original research plan included an attempt to compare programs across disciplines and methodologies, an aspect

possible due to the researcher being in an Online Program Management (OPM) organization that had access to multiple programs and institutions. This comparison of teaching techniques, student and educator feedback, and retention statistics, could have provided a holistic view of how socialization and student engagement play a role in online program retention. However, due to legal restrictions based on contractual limitations, this proposed plan had to be altered to only use data collected anonymously through surveys and interviews, with no direct connection to the OPM or its academic partners.

While the study does confirm the hypothesis, that socialization techniques in an online classroom can help build a sense of community which can impact student retention, the research does not provide any insight into how we can provide for students that choose not to participate in the community aspect of online learning and prefer to remain separate from others. Their reasons for learning online reflect a need for asynchronous learning and the anonymity that it can bring, and it will need some creative thinking for instructors and instructional designers to be able to create course content that can appeal to these differences in learning requirements. Identifying student goals and potential outcomes during the admission stage and creating course content accordingly could help minimize this limitation during future research.

Conclusion

As online learning continues to move into new and technologically advanced domains, institutions and programs must attempt to keep up with the needs of the modern learner. Higher learning needs to help students in their professional and personal growth. To succeed in this endeavor, there needs to be an effective use of the right methodology to create the right programs. Learners, educators, and higher education professionals who participated in the research study agreed that learners need to stay engaged and connected in their learning environment, and the sense of community that this creates could help keep them on the path to graduation. This study helps add to the existing research on what is needed at this time to create positive, social, and engaged learning environments that can help further improve the online learning modality and help institutions in their quest for learner success in all teaching and learning formats.

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APPENDIX A

EMAIL SCRIPT

Email script for invitation to participate in research

Good morning/afternoon <name of participant>,

I am working on my doctoral research at Bradley University and am hoping you could be a part of my research. The purpose of my study is to understand how the use of synchronous techniques can help improve socialization and collaboration in online graduate-level programs. The study also seeks to discover if this increased sense of community could potentially have an impact on student retention in these programs. With your experience in online higher learning as <a professional or a student> I am hoping you could provide some valuable insight on this topic to help me explore trends and patterns that could help us bridge some gaps and create a stronger version of online learning, especially in this current world scenario where online learning plays such a large role in our lives.

This study consists of answering questions on a survey and following that up with a short interview if you are interested in discussing your thoughts further. To participate in the survey, please click on the link below. This will take you to a Google form that you can fill out anonymously and submit. The form is a combination of multiple choice and text responses and should only take you around 10 minutes and you are not required to include your name or identify yourself in any manner. However, if you do choose to discuss your opinions further, you can select the interview option on the attached consent form, and I will reach out to you to set up a short interview (15 minutes duration). Even if you participate in the interview, your responses will be used as a part of collective data, and you will not be identified in the research or any published material.

Survey link: https://forms.gle/k1S7XkHWU4YTvxei7

Taking part in this study is entirely voluntary. I have also attached a consent form that you will need to sign and submit to me along with your survey responses (also attached). If you have any further questions, feel free to reach out to me at <u>simran@mail.bradley.edu</u> or to my advisor Dr. Daniel McCloud at <u>dmccloud@fsmail.bradley.edu</u>.

Thank you so much for your participation. I look forward to your thoughts and opinions.

Thank you,

Seema Imran

APPENDIX B

SURVEY QUESTIONS

Socialization techniques in online learning

Using socialization techniques to create a sense of community within online adult learners, and what impact could this have on student retention?

- 1. Have you worked or studied in an online higher learning environment?
- 2. If you were a student, on a scale of 1 to 5 (with 5 being very strongly connected), how connected did you feel with others in your program?
- 3. How important is it, on a scale of 1 to 5 (with 5 being very important), to create a sense of community in online higher education learners?
- 4. What techniques have you seen that can help increase socialization and student engagement in online graduate learners?
- 5. How do online learners like to interact with each other, and with faculty?
- 6. How can educators promote the sense of community within their online classroom?
- 7. How can students stay involved with the classroom and campus while they are learning in the online format?
- 8. What impact can it have on a student when they feel connected and engaged with other students and the program?
- 9. In your opinion, do students make a decision to stay or leave a program based on their connections or engagement with other students?

APPENDIX C

CONSENT FORM

Consent to participate in research

How can virtual socialization techniques be used to create a sense of community within online adult learners, and what impact could this have on student retention?

You are invited to participate in a research study. The purpose of this study is to understand how the use of synchronous techniques can help improve socialization and collaboration in online graduate-level programs. The study also seeks to discover if this increased sense of community could potentially have an impact on student retention in these programs. This study consists of answering questions on a survey and following that up with a short interview if you are interested in discussing your thoughts further. Your participation in this study will take approximately 10 minutes for the survey. This is an anonymous survey, and you are not required to include your name or identify yourself in any manner. However, if you do choose to discuss your opinions further, you can reach out to me to set up a short interview (15 minutes duration). Even if you participate in the interview, your responses will be used as a part of collective data, and you will not be identified in the research or any published material. You can choose below if you would like to participate in the interview, and if you would like for it to be recorded. Taking part in this study is voluntary. You may choose not to take part, and not to answer any specific questions on the survey, and you may leave the study at any time.

Questions about this study may be directed to the researcher in charge of this study: Seema Imran at simran@mail.bradley.edu. If you have general questions about being a research participant, you may contact the Committee on the Use of Human Subjects office at (309) 677-3877. The faculty advisor for the researcher is Dr Jana Hunzicker <u>jhunzicker@bradley.edu</u> and

the Co-investigator and Online Program Director is Dr. Daniel McCloud

dmccloud@bradley.edu.

You are voluntarily making a decision to participate in this study. Your submission of this form and the survey means that you have read and understand the information presented and have decided to participate. Your submission of the attached survey also means that all of your questions have been answered to your satisfaction. If you think of any additional questions, you should contact the researcher(s).

 \Box I Agree to participate in the survey with the understanding that my name and details will not be shared in the published material

 \Box I Agree to participate in an interview with the understanding that my name and details will not be shared in the published material. Please include your email address so I can reach out to set up the interview ______

 \Box I Agree to participate in a recorded interview with the understanding that my name and details will not be shared in the published material. Please include your email address so I can reach out to set up the interview _____

____(Name)

_____(Date)

APPENDIX D

INTERVIEW QUESTIONS

Follow up interview questions

What would you like to add to your survey responses?

How difficult is it to keep students engaged in a virtual classroom?

Please describe any specific socialization techniques you have seen as a student or a higher education professional that may have helped increase student engagement.

How do you think creating a sense of community in a classroom can impact student behavior and possible retention?

What do you believe is the responsibility of the teacher or instructional designer in creating this sense of community?