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FACULTY'S PERSPECTIVE ON STUDENT ENGAGEMENT FOR SYNCHRONIZED ONLINE GRADUATE LEVEL COURSES

Ambeeka Jewnandan

FACULTY'S PERSPECTIVE ON STUDENT ENGAGEMENT FOR

SYNCHRONIZED ONLINE GRADUATE LEVEL COURSES

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Ambeeka Jewnandan

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Ambeeka Jewnandan   Dr. Barbara Cozza

ABSTRACT

FACULTY'S PERSPECTIVE ON STUDENT ENGAGEMENT FOR
SYNCHRONIZED ONLINE GRADUATE LEVEL COURSES

Ambeeka Jewnandan

Many colleges and universities are moving towards online learning as it increases access to education and aid in managing the growing enrollment. Students' engagement in schools has been a growing concern for academic institutes especially in today's time where online learning is prominent. This study explores instructor's perspective on the different methods and techniques used in synchronized online courses to increase student engagement at a graduate level. The theoretical lens of Connectivism Theory (Downes, 2006; Siemens, 2004) and Engagement Theory (Kearsley & Schneiderman, 1999) will be explored to understand the relationship found between the methods used in teaching and student engagement while employing the conceptual framework of the theory of self-regulated learning (Harris & Graham, 1999; Schraw, Crippen, & Hartley, 2006; Shunk, 1996). The sample consists of seven faculty members teaching graduate level online courses at a private independent university located in suburban New York City. The findings suggest that instructional methods, course modification, faculty's role, and technology increase student's engagement in a synchronized online class. Student engagement increases enrollment, retention, and graduation rate – all important aspects of a successful learning institute, therefore it is important to understand what aspects of teaching increase student engagement to create a successful learning environment.

DEDICATION

I dedicate this dissertation to my children; Aarya and Aaron, I love you both so very much. I hope that my dissertation is a model and motivation for your accomplishment and dreams. To my husband Rajesh for all your support and guidance, and to my parents Mr. and Mrs. Seoparsan for their unconditional love and blessings.

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CHAPTER 1

Introduction

Over time many universities have raised concerns about student engagement and academic success. Student engagement has now become a main factor for academic institutions to be successful. Student engagement is receiving considerable attention by higher education institutes where The National Survey of Student Engagement (NSSE) was implemented to measure levels of student engagement in higher education. Previous research and studies confirm that an engaged student is more likely to continue with their academic career and do well academically (Kümmel & Kimmerle. 2020; Leiber, 2020; CCSSE, 2008; Kuh, 2009; Kuh, Kinzie, Whitt & Shuh, 2005). Carini, Kuh, and Klein (2006) using data from NSSE found that student engagement in classes there was a positive outcome in grades and critical thinking. A critical component to quality online learning is student engagement, the need for effective engagement techniques is important to learning success (Rajabalee, et al., 2020). Pascarella and Terenzini (1991) also found an increase in positive impact on learning where there is interaction between students and faculty. Miller et al. (2020) found online students become disengaged quickly if challenges do not exist, when the curriculum is not challenging, or when there are technology challenges. Other studies have shown with student engagement there is an increased in student retention and graduation rate (Tinto, 2012).

The lack of engagement specifically for adult learners can create problems with academic success, retention, and graduation. Whether online or in a face-to-face learning environment, 67% of college instructors believe videos, blogs, podcasts, and other online media are necessary teaching tools (Quitadamo & Brown, 2001). Engagement in online

learning at a graduate level is important due to the lack of face-to-face contact and, of which teaching, and learning are mediated through technology (Quitadamo & Brown, 2001). There is very little literature about the faculty perspective on engagement in online learning. While the experiences of campus-based students have been thoroughly explored, instructor's perspective needs some focus and attention. It is important to understand what is needed to increase students' engagement and approaches to students' engagement in an online environment especially at a graduate level. This study will explore instructor's perspective on the different methods/techniques used to increase engagement when teaching synchronized online graduate level courses.

Engagement is directly linked to the quality and quantity of time students invest in their educational activities during class or outside of class time. Online learning enables instructors and students to use a variety of strategies for communication, submission of work and access to additional resources. According to the National Institute of Education Involvement in Learning report (2019), student learning and development are more effective and successful when students are more involved and participate in academic learning. As per the National Center for Education Statistics for the 2018 academic year, there were 6,932,074 students enrolled in online learning courses at degree granting postsecondary institutions (U.S. Department of Education, National Center for Education Statistics, 2019). Prior to 2020, many colleges and universities were already moving towards online learning as it increases access to education and aids in managing with growing of enrollment (Baun, 2008). Van Der Werf and Sabatier (2009) noted that the U. S. Department of Education has predicted that nontraditional students will be attracted to higher education via online learning as it

provides flexibility and accessibility to students. Online learning is not a new concept, online learning derives from blended learning and distance learning which started in the United States in the 1980s via correspondence and broadcasting from television (Willis, 1994).

Advancement in technology and the internet is taking over the online learning world. Anyone anywhere in the world can earn a college degree online with all these available resources. The classroom is no longer limited to a physical room on a college campus, but it has now become a virtual global classroom. The flexibility, convenience and access of online learning fits the needs of many students today that are juggling family, work, and other responsibilities. Due to the Covid-19 pandemic, in June 2020 97% of college students are attending classes via online modalities (Bustamante, 2021). Given the current pandemic, online learning is the only safe option educational institutions were left with, therefore, to maintain enrollment to sustain educational institutes, creating an engaging student learning experience is vital for institutes to survive. With advances in technology is this enough to help our students to stay in college and finish their degree requirements to obtain their diplomas? From previous findings we learned that one of the main and significant factors of student academic success and completion is student engagement, therefore this study aims to learn about the different techniques and methods faculty members are using to increase engagement via online classes.

Purpose of the Study

The objective of this qualitative case study is to learn from graduate level faculty members the different techniques and methods used in teaching online graduate level

synchronized courses that can aid in the increase of student engagement. Graduate

students specifically are centrally motivated to learn to further their studies and careers.

Graduate learning is highly specialized, individualized, and advanced than undergraduate.

Students pursue a graduate degree to become expert in their chosen field.; therefore, it is

important to create a meaningful and engaging environment that goes beyond core

teaching. Research shows that students are more likely to remain engaged in an activity if

they find it enjoyable and/or valuable. In 2018, Graduate level online programs have

grown 26% (U.S. Department of Education, 2018). Today the main goal of educational

institutions is to increase enrollment, increase student retention and graduation rate, as

these factors make the institute more appealing. Distance learning as stated by the U.S.

Congress Office of Technology Assessment (2007) is connecting a teacher and a student

in several geographic locations via technology that allows interaction. Learning is an

education that takes place via different mediums and not just the physical proximity of

the instructor in the physical classroom (Van den Brandle, 1993). With the great resource

of the internet today online learning is now part of a student's routine lesson plan. Earlier

studies describe learning engagement as incorporating behaviors, emotions, and cognitive

engagement (Hew, 2016). Success of student engagement have traditionally been noted

via instructors and their curriculum (Newmann, Wehlage & Lamborn, 1992).

Theoretical/Conceptual Framework

The theoretical lenses of Connectivism Theory (Downes, 2006; Siemens, 2004)

and the Engagement Theory (Kearsley & Schneiderman, 1999) will be explored to

explain the relationship found between engagement and teaching methods that includes

technology-based teaching and learning methods. Connectivism Learning is based on

different educational techniques and methods used by educators incorporating technology to engage students. Connectivism theory aids in assisting students to make choices about their learning that is changing constantly and will help understand from faculty perspective what changes are incorporated in online teaching to increase engagement. In addition to Siemens' Eight Principles of the Connectivism Learning Theory, the three components of the Engagement theory will be incorporated when reviewing the instructor's methods in teaching virtually. The conceptual framework for this model is related to the theory of self-regulated learning. Self-regulated learning refers to an individual's ability to control and understand the learning environment. Self-regulation capabilities include self-monitoring, goal setting, self-directive, and self-boosting (Harris & Graham, 1999; Schraw, Crippen, & Hartley, 2006; Shunk, 1996). Figure 1 below demonstrate the application of these theories in this research.

Figure 1

Teaching Methods/Techniques and Theories
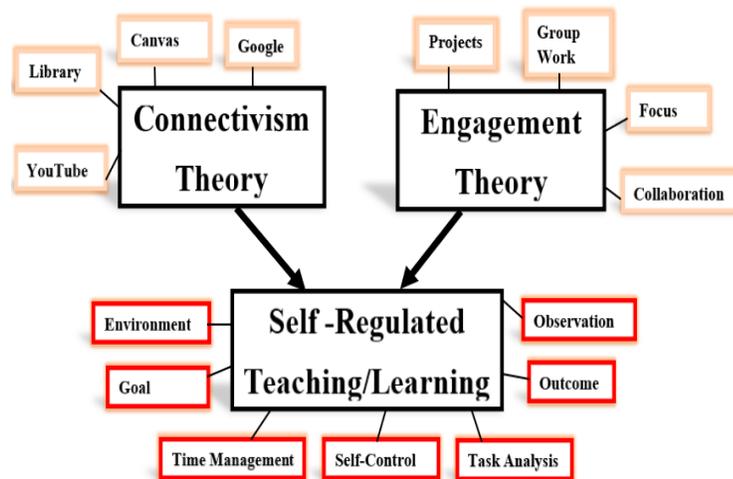
Significance/Importance of the Study

This study will help educational institutes scrutinize the different instructional methods used in teaching online courses to increase students' engagement. In recent findings, 86.5% of higher education institutions in the United States offered online courses and 62.4% of those institutions are now delivering entire programs online (Allen & Seaman, 2013). Online education is growing at a college level, and educators need to make sure the institute is prepared to accommodate this trend which can also increase enrollment. Overall, students are satisfied with the online learning environment (Hart, 2012) and choose online courses for reasons including the convenience and flexibility that face-to-face instruction is not able to provide (Braun, 2008). Student engagement encompasses of emotional, behavioral, physical, and cognitive engagement. Student engagement consists of active and collaborative learning. It includes activities such as group work, discussions, and other activities that stimulate engagement. In an online environment using online discussions, breakout virtual groups, blogs, chats, and email exchange are all tools used in today's online learning. Instructors are facilitators; therefore, it is essential to understand what instructors are doing to create an engaging online class.

Connection With Social Justice

Online learning gives students with disabilities or students with transportation limitations the ability to enroll in online courses, certifications, and degree programs without worrying about special accessibility needs. With the current Covid-19 pandemic remote/online work and academic learning is the only way an institute or corporation was able to sustain. Working and learning from home has become the "new norm". In 2019,

more than 30% of individuals with disability were employed remotely (U.S. Bureau of Labor Statistics, 2020); therefore, universities should also be prepared to educate these students. Remote learning also eliminates the physical structural requirements required by an institute to accommodate students with disabilities. Per Business Weekly (2020), many companies are saving on rent, utilities, and cleaning services since more work and school is virtual. Remote learning and working also increases retention, productivity, reduces absence, and reduces costs for commuting (Business Weekly, 2020). Online learning eliminates the geographical constraints and can create a global learning environment for the institute; therefore, it is important to increase engagement in online learning.

Research Question

1. What teaching methods and techniques used in synchronized online graduate level courses increase student engagement?

2. How do faculty respond to the differences in engagement levels of students?

3. How does technology impact/help to promote student engagement in class?

4. What activities promote or increase engagement during classes?

Design and Methods

Research Design and Data Analysis

This study is a qualitative, case study analysis (Creswell, 2003) of graduate level faculty perceptions on student engagement in an online synchronized class. A case study was chosen as the researcher used a variety of methods to gather the data of a specific group. The study was conducted during the 2021 academic school year. The qualitative

data was collected via interviews, class observations and a content analysis of the documents related to the course. The qualitative data are stored in a secure area and coding was used to analyze the data. The coding method used in this research followed the thematic analysis and six steps described by Braun and Clarke (2006). The qualitative data collected were used to develop a deeper understanding and conceptualization of the research topic to answer the questions.

Sample

This research study was conducted at a private independent university located in suburban New York City. The sample consisted of seven faculty members from the university who volunteered via an email request and willingness to participate in the study. The type of sampling method that was employed in this study was a non-random purposive criterion sampling method, as only instructors teaching graduate level online synchronized classes were invited to participate in the study. This type of sampling was used after the researcher reviewed the course offerings to determine which college within the university offered the majority of synchronized graduate level classes during the academic semester. This allowed the data collected to be specific to the environment but not limited to a small sample size. This purposive technique made it possible to prove the validity of the information as no one was left out from the sampling process. Additionally, each participant had notable characteristics needed for this research.   The sample included graduate level faculty members from the College of Applied Studies. Faculty members participating in this study are both full time tenured faculty and adjunct faculty members. The sample also includes first time faculty as well as faculty that has been teaching for over 10 years**.**

Instruments

The current research study employed triangulation of data. The data was collected via multiple sources which includes in-depth interviews, class observation, and examination of course documents. In addition, the researcher kept a reflexive journal throughout the study as a strategy to increase credibility and authenticity. The data was analyzed using manual coding. The researcher also uses member checking to further validate the accuracy of the findings. Member checking is the process in which the researcher asks one or more participants in the study to check the accuracy of the transcripts from the interviews (Creswell, 2015).

Procedures

The researcher requested permission to interview faculty members from the department dean. The participants met individually with the researcher via WebEx and Microsoft Teams, a web-based video conferencing platform. There were no in-person interviews due to the research restrictions posed with the COVID-19 global pandemic. In addition to one-on-one interviews, the researcher observed a session of each instructor's online classes that were synchronized. The observation helped in understanding the different methods used to note students' participation in the class. The instructors collected course syllabus and any additional documents related to the course that were shared with the students in the class. The syllabus described the lesson and topic, of which the instructor explained the methodology used in teaching these topics online. The researcher also kept a reflective journal of all interaction and observations. The data collected from the interviews, observation, and course documents helped in the researcher understanding the techniques used in teaching.

To answer the research questions, the researcher used open coding and selective coding analysis. The researcher referred to guidelines developed during the coding process to categorize the findings based on theories and code words to identify themes.

Online education is a growing trend. As colleges and universities struggle with enrollment, the need to keep up with enrollment can decrease with the increase of online course offerings. There are many reasons why student success, retention and graduation rate are on a decrease - one being student engagement. Therefore, analyzing student engagement methods and techniques is important to student success in higher education. Based on the findings of this current study, it is important for educational institutes to understand the different techniques needed to be implemented to create an engaging virtual class to keep students enrolled and graduated. This study will be a small view of student engagement methods used in online courses, which can be used as a motivation tool to encourage more online courses and research.

Definition of Terms

Enrollment

Enrollment is defined as a student attending classes for one full semester term within the academic year being reviewed (Baun, 2008).

Online Program

Online Program is defined as a course or group of courses that is completely delivered and administered over the internet (Kurt, 2018).

Online Course

A course that is completely delivered and administered over the internet. The course can occur at the same time or at different times. With these types of classes, the

student has no in-person interaction or meeting with the instructors or students. All contents, assignments and presentation are administered and completed online (Kurt, 2018).

Synchronized course

   Synchronized course is similar to traditional on-campus courses that meets at a specific day and time but meets virtually (Bustamante, 2021)

Student Engagement

   The amount of effort and time an instructor puts into their students based on how educational institutes direct its resources and instruct its curriculum(s) to promote students to partake in activities directly related to learning (NSEE, 2018).

Connectivism Theory

   Connectivist theory focuses on how individuals learn and work within an online environment, or more specifically, the lack of control over what is being learned because of changing information requires the individual to adapt to new learning techniques (Anderson, 2008).

Engagement Theory

   Engagement theory is a model of learning based on teaching and learning via a technological environment. This type of learning includes activities with collaboration, project-based and goes beyond the classroom (Kearsley & Schneiderman, 1999).

Self-regulated learning/teaching

   Self-regulated learning/teaching is an individual's ability to understand and control the learning environment presented. This type of learning includes self-checks,

self-direction, and self-sufficient. (Harris & Graham, 1999; Schraw, Crippen, & Hartley, 2006; Shunk, 1996).

CHAPTER 2

Introduction

This chapter starts with discussion of the theoretical framework specific to this study, followed by findings from existing research. The research findings are from previous research that includes national reports, national and state educational policies, educational theories, peer-reviewed journals, books, and websites. These findings from previous research are divided into four sections: 1) comparison of instruction methods (online, face-to-face (F2F)); 2) online course structure; 3) student engagement in online courses and 4) faculty's perspective on student's engagement. This chapter concludes with a discussion on the gap in research that prompted this study.

Theoretical/Conceptual Framework

The theoretical lens of Connectivism Theory (Downes, 2006; Siemens, 2004) and Engagement Theory (Kearsley & Schneiderman, 1999) will be explored to understand the relationship found between the methods used in teaching and student engagement. Keeping the theoretical lenses in focus, this researcher will also employ the conceptual framework of the theory of self-regulated learning (Harris & Graham, 1999; Schraw, Crippen, & Hartley, 2006; Shunk, 1996). Connectivism theory along with the Engagement Theory in combination with self-directed, meaningful, relevant, and challenging materials will be analyzed as part of the conceptual framework on student engagement (O'Brien & Toms 2008).

Connectivism Theory

Connectivism theory is for the technology era. Connectivism theory focuses on how individuals learn and work within an online environment. Connectivism theory also

looks at the lack of control over what we learn as the result of changing information - information is updated constantly on the internet. Due to the change of information connectivism theory requires the individual to adapt to new learning techniques. The techniques used for creating material for online learning is constructed from the connectivism theory (Anderson, 2008). Connectivism theory also allows learners to connect with each other globally via virtual social networking, as many today believe relying on a network of individuals is the motivation needed for success (Siemens, 2006). The eight classifications by Siemens' shown in figure 2 demonstrates the concept of how individuals learn differently.

Figure 2

Siemens' Eight Principles of the Connectivism Learning Theory:

- Learning and knowledge rests in diversity of opinions.

- Learning is a process of connecting specialized nodes or information sources.

- Learning may reside in non-human appliances.

- Capacity to know more is more critical than what is currently known.

- Nurturing and maintaining connections is needed to facilitate continual learning.

- Ability to see connections between fields, ideas, and concepts is a core skill.

- Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.

- Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision

Engagement Theory

Engagement Theory is a technology-based teaching and learning concept. The main idea of this theory is that students must be engaged via meaningful learning activities and interactions to stimulate engagement. The theory emphasizes and is focused on the use of technology to facilitate ways to engage students via learning. The three components of Engagement theory are collaborative group work, project oriented and have an outside focus, (Kearsley & Schneiderman, 1999). O'Brien & Toms (2008) categorized their findings based on four categories of the engagement theory: at the point of which the student is engaged, the amount of time the student is able to stay engaged, the disengagement period, and the process to reengage the student. The focus is on meaningful engagement in learning activities via interaction with others using technology to make the facilitation easier.

Self-regulated learning

The conceptual framework for this model is related to the theory of self-regulated learning. Self-regulated learning refers to an individual's ability to control and understand the learning environment. Self-regulation capabilities include self-monitoring, goal setting, self-directive, and self-boosting (Harris & Graham, 1999; Schraw, Crippen, & Hartley, 2006; Shunk, 1996). Learning has been reported as having control over its content. Learning also promotes self-learning via customized learning sequence and pace, and other elements that allow the students to modify their techniques to learn and make do with materials provided (Olojo, Adewumi, & Ajisola, 2012). Johnson (2011) states that it is important for researchers to understand the different characteristics of students

taking part in online learning and how these attributes can impact achievements, however the general outcome is the same as traditional learning.

Today educational institutes that understand the changes of how students learn, where they learn, and what they learn, have incorporated methods and techniques into their teachings. Connectivism theory provides a sense into student's learning abilities and what is required for students to be successful in this digital era (Siemens, 2005). The connectivist approach to learning and teaching requires students and teachers to be open to learn and gain new knowledge in today's virtual world. The connection of learning is not just by knowing something but knowing the different ways to learn something new in the moment of changing information and how to apply what is learned and connect it to the changing environment. Instructors can now use different teaching techniques and methods using technology to expand on information that already exists, connect via multiple data sources, applying information in different settings, and exchange information virtually with collaboration globally that is not limited to face-to-face connections.

A study done by Rajabalee, Santally, and Rennie (2020) based on Connectivism theory focused on students' engagement in an online course at a higher education level. The researchers' goal was to understand the relationship between online learning activities, overall performances, and students' engagement. The researchers identified three criteria that were relevant to online engagement: the number of activities that were completed by the students, the relevant level of completing the activities, and the requirements of presence. The findings suggest students with higher levels of engagement mean performance scores were significantly better than those of lower engagement

levels. Marshall (2007) conducted a case study based on the Engagement theory using the online learning system (WebCT) in a writing course. The study used techniques from the Engagement Theory to design the internet site for the writing course. The findings showed the methods used to design the course increase and enhance the teaching and learning experience of the students and instructor. The design of the course increased student interaction, collaboration, and participation in activity (Marshall, 2007). A critical component for a successful online course is student engagement.

This current study aims to understand what methods and techniques instructors are using in relation to Connectivism theory and the Engagement theory to increase student engagement. All methods and techniques used via Connectivism theory and the Engagement theory depends on self-regulated learning, as engagement and learning can only happen when an individual is able to control and understand the learning environment.

Review of Related Literature

Online vs Face-to-face

Prior to 2018 over six million students enrolled in distance learning/online learning courses; over one million of these students were graduate level students. Due to the Covid-19 pandemic, more that 95% of college students are enrolled in online education of which 63% indicated the education experience received was worse online compared to F2F classes (Bustamante, 2021). There were many studies done on the comparison between traditional classes and online classes. Researchers such as Imel, 1998; NEA, 2000; O'Malley, 1999; Paskey, 2001, Smith, Ferguson, & Caris, 2001, etc. found regardless of the difference in courses or students' enrollment characteristics both

methods of instruction resulted in the same or more effective based on the variables used in the research. For example, Cooper (2001) using surveys asked her students in online classes and traditional F2F computer systems/business information classes about their learning experiences. Thirty one percent of students stated they learned more in traditional F2F classes where 12.5 percent said they learned more via online classes. However, Cooper also compared grades for the online classes and traditions F2F classes and did not find any difference, therefore, concluding students in online classes learned the same as students in traditional F2F classes which relates to the concept of self-regulated learning as individual's ability to control and understand the learning based on the environment.

Driscoll et al. (2012) focuses on the difference in students' academic achievements and contentment when comparing online and F2F courses. Driscoll's interest was to find if there were any significant differences between online and F2F courses based on exams, assignments, and student satisfaction. Both F2F and online courses were administered using the same technology, same instructor, and followed the same syllabus and timeline. The experiment compared student satisfaction, exam grade and a data analysis assignment on the F2F courses and online course. Using quantitative analysis, the results indicated there were no significant differences in exam scores, and student satisfactions, once again relating to the self-regulated theory.

Additional research by Logan et al., 2002; Russell, 1999; Summers et al, 2005; and York, 2008 compared online learning and F2F learning assessment resulted in similar outcomes for online and F2F courses. Researchers such as McFarland and Hamilton, 2005; Parkhurst et al., 2008; Russell, 1999; Summers, Waigandt, and Whittaker, 2005;

and Tucker, 2001 findings support the hypothesis that online courses provide the same learning experiences as F2F courses.

These finding sets the basis of this research as the results not only confirms there is no significant difference in academic performance between instructional methods, but it also shows predictions that confirm the same. This study helps to validate theories regarding instructional modalities and serves as an inspiration to pursue and focus on research regarding online instruction. As shown in the previous research review there are no significance difference with quality of learning in online versus F2F; therefore, engagement and learning should also not be any different eliminating the barrier of creating a different approach to teaching online in comparison to traditional in person.

Online Course Design

Designing a course is a process that incorporates methods and techniques to create an environment that includes quality of learning. The most important consideration when designing a course is to promote optimal learning given the environment and resources available. When building a course outline for the online environment it is important to focus on the technological requirements, availability and what works best in the classroom environment (Watson & Pecchioni, 2011). Carr (2014), explored the primary areas to consider when designing an online course that can be used to increase engagement. Carr's qualitative study analyzed an instructor's outlook on ways to improve students' engagement in an online graduate level course using a survey specific to a graduate level educational leadership course offered over a three-year period. The researcher focused on three areas when looking at online course design: the course design, instructor's role, and students' role. The findings revealed the most effective

method to increase online student engagement is interactive live video sessions – or synchronized classes. The findings also showed weekly interactive video instructions and lessons with voice recordings promote success in learning. Another finding also indicates smaller classes with enrollment less than or equal to 20 creates more opportunity for interaction between student and instructor. Results from this study confirms that for an online course to be successful it requires careful planning for the course, as well as instructor and student involvement (Carr, 2014).

Kearns (2012) conducted a qualitative case study to explore the different types of assessment methods used in online courses to identify how they were used, and to identify any restrictions encountered. Kearns reviewed course syllabi, interviews and focus groups with course instructors. The findings indicated five categories of assessment which includes: 1) assignments, 2) discussions, 3) fieldwork, 4) exams, tests, and quizzes 5) class participation. Results from this study provided information regarding concerns faculty members have with online teaching and with collaboration, what methods have shown to be helpful that can be incorporated into online course design (Kearns, 2012).

The study by Carr focuses on the instructor's perspective regarding online learning and engagement. This study will provide a background as the research provides three important aspects of online course design - the course design, instructors' role, and students' role (Carr, 2014). The triangulation of data used by Kearns (2012) and coding will be a guide to this study. The method used in this study for collecting data includes interviews and course documents. This study will build upon the researchers' findings on instructors' concerns regarding assessment in online courses (Kearns, 2012). Both Carr and Kearns fold into connectivism theory as

information changes individuals are changing their ways of learning and adapting to new techniques.

Student Engagement

In the study done by Valerie Dews-Farrar, the author using qualitative research focuses on why students choose to study online for graduate degree programs. Another aspect of the research looked at the factors that help students in their journey. The researcher used a sample of 26 students who earned a graduate degree online. The methods used were telephone interviews. The researcher used Braun and Clarke's six-step process of inductive thematic analysis and Keller's ARCS model of motivational design. The study also looked at "student retention and attrition, faculty responsiveness, and institutional commitment and support" (Dews-Farrar, 2018). The results of the research produced ten factors that made the program a success. Other findings included "family support, support from other students, and institutional support in the form of student services, and efficacious instructors were essential elements for persistence in online graduate degree programs" (Dews-Farrar, 2018).

A qualitative case study conducted by Farrell and Brunton (2020), explored the many components relating to student engagement. The purpose of the study was to identify the key components of online student engagement from the student's perspective in Irish higher education. Farrell and Brunton interviewed 24 undergraduate online adult students from a university connected to Dublin City University to identify their perception of their online engagement experience over one academic year. The findings indicated five components of students' engagement that includes: 1) peer community – collaboration with other students, 2) module support – tutoring played a role in learning

and socializing, 3) studying while balancing other responsibilities were the most challenging, 4) confidence – many students were not sure about their academic potential, and 5) students' approach to learning. The researchers found the main barrier of being a successful online student was balancing academic workload with external responsibilities such as work and family. Results from this study confirms other studies by Brown et al., 2015; Kahu et al., 2014; and others indicating professional, personal, and social responsibilities have a huge impact on a student's online learning experience.

A qualitative case study conducted by Blackmon and Major (2012), explored student perspective on online learning. The purpose of the study was to gather student experience on online learning, analyze the findings, and incorporate these findings into educational practices. The researchers conducted their studies by using online educational databases examining research previously done on student's perspective of online learning. Online databases such as Academic Search Elite, Google Scholar and Education Resources Information Center were used to collect data. The research that was used was collected after 1998 and, specific to higher education – universities and colleges. The findings indicated many different themes regarding student perspectives of online learning, however the five that the researchers highlighted include: 1) balancing academic and personal responsibilities, 2) effective time management, 3) undertaking responsibilities, 4) availability and connection to instructors, and 5) collaboration and relationship with colleagues. The researchers found students miss the physical aspect of learning, however, students welcome the flexibility that comes with online learning. The researchers also found for online learning to be successful it takes the student and the instructor to collaborate. The responsibility should not solely be on the students to

balance academic workload with external responsibilities, but it is also the instructors'

responsibility to create an educationally stimulating learning environment to challenge

students.

Blackmon and Major (2012) centered on students' perspectives on online learning

and while this research is on the instructor's perspective, it is very important to learn

about the students' views in order to create a better analysis and comparison.

Understanding student's expectations provides input and suggestions for online teaching

methods and techniques. Understanding student's needs help academic departments plan

better course outlines and curriculum. An instructor's role is to understand the student's

perspective to provide a successful academic experience. An academic institute's goal is

to increase engagement to promote learning and academic success. Understanding a

student's perspective in online engagement is important in this study to understand the

needs of the students and use this as a basis for instructor techniques. The research on

students' engagement all tied into connectivism theory, engagement theory and self-

regulated theory; as the student adapts to new information being updated constantly

online, adapting to new teaching methods, techniques, style, faculty members,

technological changes all while applying self-regulating techniques to modify their

thinking, actions, and behaviors to learn.

Instructor's perspective on Engagement

Hiltz et al. (2000) analyzed instructors' perspectives on how students learn best in

virtual classrooms. Their findings suggest if students are actively involved and engaged

in online classes these students learn as much as students in traditional in person

classrooms. Chickering and Gamson's (1987) work on the principles of good teaching

influences the creation of BlackBoard and WebCt. Teaching done virtually should include good teaching practices, therefore having a solid curriculum, and lesson plan is important. Chickering and Gamson's (1987) presented the following good teaching practices: 1) motivate communication between students and faculty, 2) stimulate collaboration among students, 3) encourage active learning, 4) provide quick feedback, 5) stress time on tasks, 6) make clear of high expectations, and 7) respect different ways of learning and diversity.

Wang & BrckaLorenza (2018), focuses on the different teaching practices for international students and analyzing the engagement of international students. The purpose of the study is to investigate international student engagement in collaborative learning, learning strategies, and interaction between student and faculty. The data for this study was not collected by the author but it was from the 2016 administrations of the National Survey of Student Engagement (NSSE) and Faculty Survey of Student Engagement (FSSE). The findings for the engagement level of domestic and international students where instructors are more often engaging international students indicated students benefit from higher levels of learning and participation (Wang & BrckaLorenza, 2018).

The Bolliger, Shepherd, and Bryant (2019) case study looked at online faculty members and their role in creating a community for students. From the instructor's perspective, their part in building this "community" was only successful during class sessions. Faculty members used several techniques such as discussions, sharing of personal and professional updates as well as curriculum discussions. Faculty members took time outside of class sessions via office hours to interact with students, but the

response was not well received. The researchers found faculty members were faced with many barriers including personal demands and lack of time when being part of this study. The study stressed the importance of engagement as a huge factor for retention and for there to be more programs and/or research to understand what is required to increase engagement in the classroom and outside. Kuh, Kinzie, Schuh, and Whitt (2005) found from their study of 20 four-year colleges using NSSE to measure nursing students' engagement indicated high levels of graduation rates when engagement techniques were used in teaching. Results from these students prompted changes in teaching strategies to boost engagement to increase student outcomes.

Sorbie (2015) conducted a qualitative case study to explore teachers' perceptions on blended learning and engagement and its effect on students' learning. Sorbie's (2015) research, similar to the current study, was based on connectivism and social constructivism theories on student engagement in a high school. The researcher purposely selected twelve teachers for three different classroom observations and interviews. The findings disclosed blended learning and technology promotes collaboration, student centered learning and engagement. The Hsieh (2021) qualitative study interviewed eight faculty members on methods used in student engagement and the impact on student's reading and writing. The study was conducted on a literacy freshman class at a community college using the theoretical framework of andragogy and cultural literacy. The findings that promoted student engagement were dialogue, a variety of material that is specific to different cultures and student-centered learning. The main findings suggest new technology-based methods founded by faculty members aid in increase in engagement which increase student's performance.

The purpose of the study by Wang & BrckaLorenza (2018) is to investigate the faculty's practices on international students' engagement. Findings from this study will aid in analyzing the techniques used for international students that can be compared to the domestic student from an instructor's view. Bolliger, Shepherd, and Bryant (2019) findings suggest there needs to be more done to increase student engagement via communities. Sorbie (2015) and Hsieh's (2021) studies will aid in theoretical, conceptual, and framework guidance. Using self-regulated theory and incorporating connectivism through the use of technology can be appropriated to analyze the findings from these previous researcher's findings.

Conclusion

Faculty members are the primary point of contact for online graduate students, therefore, learning about their methods/techniques used in their online classes to increase engagement is critical in supporting online students' academic success. Barkley and Major (2020) suggests, to increase student engagement instructors should design assignments that are challenging, help each student feel part of a team and learning community, and teach students by integrating multiple means. This study extended previous research on instructor's perspective on online learning and student engagement. Driscoll et al. (2012) sets the basis of this research as the experiment not only confirms there is no significant difference in academic performance between instructional methods, but it also shows predictions that confirm the same. This study will help to validate some theories regarding instructional modalities and serves as an inspiration to pursue and focus on research regarding online instruction. The study by Wang & BrckaLorenza (2018) is to investigate the faculty's practices on international students'

engagement. The current study expanded on the limited research and findings done on this subsection on instructor's approach to student engagement. Incorporating the theory of connectivism, engagement and self-regulation theory, the findings from this study will aid in analyzing the techniques used to increase engagement for online student from an instructor's view. The study by Farrell and Brunton (2020) will provide structure as well as a basis in which to expand on research related to online instruction in higher education. The method used in gathering and analyzing the data from this study used in this current research study. The author used surveys in this research, while in this study the central method that will be used to collect data will be interviews. This research incorporated these findings as a tool to conduct the research and data analysis needed to satisfy the research questions. This study explored faculty perceptions of what methods/techniques are more effective in increasing engagement for graduate level students.

CHAPTER 3

Introduction

The purpose of this chapter is to provide information about the methods and procedures for data collection and analysis for this study. This study is a qualitative case study analyzing the instructor's perspective on methods/techniques used to engage graduate level students taking online synchronized classes at a private university in New York City. A qualitative research was chosen as it was used to uncover trends from the data collected to gain an understanding of the methods used in teaching online courses (Creswell, 2003). Additionally, the research was conducted in a natural setting of a university where the researcher attempts to understand and make sense of the strategies used that are relevant to the research questions of this study (Fraenkel, Wallen, & Hyun, 2019). A case study was chosen by the researcher as per Creswell (2003), case studies are a strategy of inquiry where the researcher explores programs, events, activity, and processes of one or more individuals. A case study is tied by time or activity and the data collection is done via different ways as the data in this study will be collected via interviews, observations, and review of course materials (Creswell, 2011). The detailed steps of this qualitative research study including data collection and analysis are described in this chapter.

Research Questions

1. What teaching methods and techniques used in synchronized online graduate level courses increase student engagement?

2. How do faculty respond to the differences in engagement levels of students?

3. How does technology impact/help to promote student engagement in class?

4. What activities promote or increase engagement during classes?

Methods and Procedures

Setting

This study included a deliberately selected setting to conduct a case study analysis of graduate level students. The site was chosen based on location within suburban New York state. The setting that was selected by the researcher was a private university in New York City. The university has over 17,000 students currently enrolled and 1,195 full and part-time faculty members. Ninety percent and more of the faculty members possess a doctorate or other terminal degree in their field, and the student-to-faculty ratio is 17:1. The university's acceptance rate is 72% and graduation rate is 58%. The total graduate student population is approximately 4,636 students as displayed in Table 1. The university is organized into six graduate schools and five undergraduate schools offering more than 100-degree programs including bachelor, master, doctoral degree, and professional certificates. The university offers two graduate programs that can be completed fully online. The university also has 25 blended (mostly online classes) graduate level degree granting academic programs (NYSED Data Site, 2020). This research will be conducted within the College of Applied Studies within the university. The College of Applied Studies offers 25 undergraduate degree programs (Associates and Bachelor's), nine graduate level programs (Master's Degree), one doctorate degree program, several double major, and minor options. There are over 100 faculty members teaching in the College of Applied Studies. Faculty members teaching in the College of Applied Studies includes adjunct, full time tenure, and full-time non-tenure instructors.

Table 1

Fall 2019 Enrollment Data University of New York

Level	Number of Students	Percentage
Undergraduate	17,088	68%
Graduate	4,633	18%
Freshmen	3,135	12%
Undergraduate Transfers	268	1%

Participants

The sample consisted of seven graduate faculty members from the College of Applied Studies. The faculty members participating in this study are full time tenured faculty, full time non-tenured faculty, and adjunct faculty members. The initial invitation was sent to all faculty members teaching online synchronized classes in the spring 2021 academic semester. The invitation was sent to both first-time faculty members and faculty who have been teaching for over ten years. There was no filter to the participants in regard to years of teaching or tenure/non-tenure/adjunct status. Of the seven participants three earned PhD, three earned EdD, and one earned an MSEd and is working on teaching certifications. All instructors attended and earned the online-teaching certification offered by the university. The volunteers for this study represent four academic disciplines: sports management, software programming and data management, homeland security, and healthcare system as noted in Table 2. All of the participants teach online synchronized graduate classes, a delimitation of the study (Fraenkel et al., 2019).

Table 2

Participant's Demographic

Participant	Type	Years of Teaching	Subject
A	Tenure	7	Sports Management, Financial
B	Adjunct	3	Homeland Security
C	Adjunct	13	Software/Data
D	Adjunct	6	Sports Management, Technology
E	Adjunct	11	Sports Management, Seminar
F	Tenure	16	Legal Aspect of Health Care
G	Tenure	6	Software/Data

Data Collection and Procedures

After receiving approval from the University Institutional Review Board (IRB) the researcher requested permission to interview faculty members from the department dean. The researcher reached out to the dean/associate dean of the College of Applied Studies to request the instructors teaching graduate level synchronized courses to volunteer to participate in this study. The researcher received a list of faculty members informed of the research by the dean and associate dean. In addition, the researcher followed up and reached out to faculty members to participate in the study. Out of 15 faculty members that were contacted, seven agreed to be part of this research. Once contact and consent were established the first method of data collection was a virtual interview. The one-to-one interview is a data collection process in which the researcher asks questions and records answers from one participant at a time (Creswell, 2015). The

researcher selected interviews as a method for data collection because it is a powerful way to gain insight into educational and other important social issues through understanding the experience of the individuals whose lives reflect those issues (Seidman, 2019).

Interviews

The seven participants met individually with the researcher via WebEx, the web-based video conferencing platform, for a series of three interviews each. Seidman (2019) state that implementing the three-interview series allows both the interviewer and participant to explore the participant's experience, place it in context, and reflect on the meaning. There will be no in-person interviews due to the research restrictions posed by the COVID-19 global pandemic. The first interview took approximately 20 minutes, and the second and third interviews will take about 30 minutes each. In some cases, the first and second interviews were held at the same time. The interviews were conducted during May and June of 2021. The specific interview questions are in appendix A.

The first part of the interview in the series was focused on the instructors' academic history and their experiences in teaching graduate level courses. Following Seidman's (2009) guidelines, the first part of the interview targeted the participants' history as it relates to the subject of this study. The second part of the interview included the details of the instructors' experience of teaching online courses via synchronized methods. The second portion of the interview mainly addressed the central research question and was specific to students' engagement in an online class. The second part of the interview addressed the participant's experience into the atmosphere focusing on the research question in the present (Seidman, 2019). The final part of the interview was

more of a reflection interview where the participants were given the opportunity to reflect on their experiences in relation to the research question (Seidman, 2019). This gave the participants the opportunity to reflect on the meaning of their experiences as it relates to their online teaching methods and students' engagement. The participants were asked to review all that was collected for confirmation and validation, a form of member checking. At this time, the researcher had an opportunity to clarify and gather additional information vital to this research.

Documents

After the consent was received, the researcher asked for copies of course documents for review. The participants shared documentation such as course syllabus and assignment details list. The syllabus described the lessons and topics, and the instructor then went over the syllabus after the interview questions and explained the methodology used in teaching these topics online. The initial review of the syllabus was used to determine what assignments including collaboration, group work and technology that promotes engagement are included in the course work that can connect to Connectivism, Engagement and Self-regulated theories. Document review served a variety of purposes for this research. The syllabus provided data on the context and background information of the course that helped in the observation process. Information for the syllabus also triggers questions for the interview phase of the research. The syllabus provided supplementary data for this research that were used in answering the sub research questions in this research (Bowen, 2009). This also helped the researcher follow along when observing the course. For the data analysis process of this research, the document is saved on a secure area (Microsoft One Drive) and any identifiable information is erased.

Observation

After receiving approval from the instructor and acknowledgement from the students, the researcher observed a session of the synchronized online course. The observation was scheduled based on availability and class objective of the day. The researcher reviewed the course calendar outline with the instructor to observe a session of the course applicable to the research question. The observation was conducted by the researcher, a non-participant observer and took place after the interview. The observation supported the researcher in understanding the different methods used to note students' participation and engagement in the class. Observation is important as it allows the observer to use all senses to examine the participants in the given setting familiar to them (Barkley, 2020). The class observation served a dual purpose as the researcher were able to observe the activities of the instructors and the response and activity of the students. While observing the class the researcher looked for methods and techniques used by the instructor to engage the class to answer the research question. The researcher referred to Connectivism, Engagement and Self-Regulated theories to make a connection to any interactions and behaviors observed during the session.

Reflective Journal

The researcher kept a reflective journal and field notes as an additional source of data for reference. The reflective journal allowed the researcher to describe her feelings about the events and the observations specific and relevant to this study. The field notes are a condensed account in the researcher's own language for future reference. The use of a reflective journal adds severity to qualitative research as the researcher can record his/her reactions, observations, expectations, assumptions, and biases about the research

(Morrow and Smith 2000). The field notes provided additional data for the analysis and can be referred to for clarification/questions.

Trustworthiness of the Design

To strengthen the trustworthiness of the design, the current research study employed triangulation, as the data sources include in-depth interviews, class observations, and an examination of course documents. None of the participants had any direct relationship with the researcher. The researcher closely followed a line of inquiry via structured open-ended interview questions while taking notes and practiced active listening. In addition, the researcher kept a reflexive journaling throughout the study as a strategy to increase credibility and authenticity. The researcher also uses member checking to further validate the accuracy of the findings. Member checking is the process in which the researcher asks one or more participants in the study to check the accuracy of the transcripts from the interviews (Creswell, 2015, p. 259).

Research Ethics

All participants will be treated in accordance with the ethical guidelines indicated in the American Psychological Association (APA) and the University Review Board (IRB). The researcher will request permission to interview a minimum of five instructors from the department dean. Each participant will receive an emailed consent form (appendix D) detailing the nature of the study. It will include potential benefits, such as identifying and improving current practices and instructors' pedagogical beliefs of online learning and how it may influence their instructional practices. By agreeing to participate in the study, the participants will give their consent to be interviewed via the web-based video conferencing platform, WebEx. Additionally, the invitation will include a

statement explaining that all data collected will be kept confidential and used only for research purposes. Finally, the invitation will state that participation in the study is voluntary and that the participant's name and participation information will be kept confidential. The email invitation will be sent two weeks in advance of the interviews to each teacher. The interview instrument meets the guidelines for protecting human subjects. All data collections will be kept secure, and the interviewees' names and the settings will be coded to protect confidentiality.

Data Analysis Approach

The data collected from the interviews, observation and course documents were noted in a format that can be found via appendix B, which will aid in the researcher understanding the techniques used in teaching to increase engagement. In addition, before analyzing the data, the researcher transcribed all interviews, observations notes, documents, and field notes to a secure electronic source. As indicated by Reissman (1993), transcribing data pushes the researcher to re-review the data. The researcher created Microsoft Excel spreadsheets and Microsoft Word documents for the interviews, observations, documents, and notes. All files are password protected. All files are saved on a Google drive cloud storage only accessible by the researcher.

The researcher organized the data and separated it by instructor to identify themes which were later cross referenced. Thus, the interview answers, observation, course syllabus and field notes were organized and analyzed for each instructor. After the individual analysis, the researcher performed a cross-case analysis to identify themes. The analysis provided the researcher additional information for understanding the data and interpreting the information that can be used for this research.

The analysis of the data followed a thematic analysis method outlined by Braun and Clarke (2006) as identifying, analyzing, and reporting patterns. The following six steps by Braun and Clarke (2006) were used in this research: the researcher became familiar with the data; the researcher generated initial codes; the researcher identified themes after all data were initially coded; the researcher reviewed all themes; the researcher defined and name the themes; and the researcher produce a written report. In addition to these steps, the researcher merged the findings to create a cohesive report to answer the research questions.

To answer the research questions, the researcher used open coding and selective coding. The researcher referred to guidelines developed during the coding process to categorize the findings based on theories. The researcher used an inductive approach to identify teams that are linked to the data collected in relation to the theoretical framework and main research questions. In addition, the interview responses were deductively coded using a rubric created with the researcher. Member checking was used in collaboration with the participants to check the validity of the data collected.

Researcher Role

The researcher is currently employed at the university in a data management position. The researcher does not work with faculty members with the College of Applied Studies, therefore the bias between researcher and participant in this study will be limited. The researcher will not have any direct contact with the instructors initially eliminating any prior acquaintances. The researcher's professional and academic role, which has an influence on the present study, to analyze what methods/techniques are important to increase student engagement. Student's perspective on on-line courses

engagement is important, however is it essential to understand what instructors are doing to increase engagement. It is important to understand what resources are available and what may be missing, or what techniques/methods should be used or discard. Student engagement increases enrollment which increases retention and graduation rates – the main goal of the university of which the researcher is employed.

Conclusion

Online education is a growing trend. Colleges and universities need to make sure they are keeping up with the trend by increasing online course offerings. Based on the findings of this current study it is important for educational institutes to understand from the faculty's perspective what technique/methods are used in online synchronized learning and what promotes students' engagement. This study is a small view of the outcomes of student engagement via a synchronized instructional method, which can be used as a motivation tool to encourage more online courses and research.

CHAPTER 4

Introduction

This qualitative study sought to understand what methods or techniques faculty use in online synchronized graduate courses to increase student engagement. As outlined in chapter three, this study utilized class observations, seven individual interviews and a review of course documents. This chapter provides an analysis of the accumulated data according to themes that emerged to answer the research questions. The researcher did that by identifying codes, analyzing codes, turning the codes into themes, and presenting those themes describing the characteristics relevant to the study. The researcher used the teachers' words and tone throughout the findings to highlight their experience and knowledge. Participants were selected among those who volunteered and were available; the researcher purposefully selected participants based on the course modality.

Results/Findings

The following four themes were identified from this study:

1. Course content modification, defined as any modifications to course materials and assignments to accommodate for synchronized teaching.

2. Faculty roles, defined as the role of the faculty member to create an engaging synchronized class.

3. Faculty emotions are defined as the faculty's mixed perspective of using the technology available for their students.

4. Instructional methods, defined as the instructional techniques used by instructors during synchronized classes.

The first major theme to emerge was course content modification. The first theme resulted into three sub-themes: assignments, group projects and lecture style. The second theme stemmed from the different roles' faculty took which includes: continuous learning, availability or communication, and persona. The third theme emerged from faculty's emotions on technology which resulted in mixed response: effective and positive, and ineffective and negative. The final theme discovered was the different instructional methods used by faculty members to teach online synchronized courses. Within this theme, there were three sub-themes: discussion - verbally and via chat, presentation - live and pre-recorded, and questions that were open-ended and related to current events. The themes, sub-themes and data sources are presented in Table 3. This chapter concludes with a discussion of the findings according to the research questions of the study.

Table 3

Themes, Sub-themes, and Codes

Theme	Sub-themes	Data Source
Course Modification	Assignments	Interview
	Group Projects	Syllabus
	Lecture Style	
Faculty's Role	Continuous Learning	Interview
	Availability	Observation
	Personality	

Technology	Positive	Interview
	Negative	
Instructional Techniques	Discussion	Observation
	Presentation	Syllabus
	Questions	Interview

Research Question 1 Findings

The first research question for this study was what teaching methods and techniques used in synchronized online graduate level courses increase student engagement? The analysis of the interviews is categorized into the first theme – course modification that includes three sub-themes.

Theme 1: Course Modifications Specifically for Synchronized Teaching

Teaching a synchronized course not just because of a pandemic requires modification to contents and materials. The methods, techniques, assignment, and style used in a face-to-face course needs to be tweaked for an online synchronized course to be successful. Each instructor who participated in this study shared that they made some changes to their syllabus and curriculum to accommodate for synchronized teaching. From the course syllabus, interview, and observation, changes to accommodate for synchronized teaching were made to assignments, deadlines, project types - more virtual groups projects were introduced, and lecture style were changed. For example, instead of assigning weekly assignments, the instructor combines all weekly assignments into one final project. In another instant, instead of having one large final project the instructor broke up the final project into bi-weekly group assignments that included student's

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presentations. Weekly and bi-weekly assignments were assigned by groups instead of individually.

Sub-theme: Assignments/Deadlines

A theme that was constant in the findings were changes to assignment and deadlines with synchronized online courses. For instance, instructor C who would normally assign a weekly assignment did not require a weekly assignment but one final assignment that was composed of mini assignments that were to be completed weekly. Instructors also allowed pre-recorded video presentations which would have normally been done in person in a face-to-face class instead of live presentations. Instructor C stated,

> I had to come up with more challenging questions for the assignment, as the students were not in front of me therefore, they could look information up, the assignments were posted ahead of time, so students had time to research and be prepared for class therefore giving more challenging questions were necessary.

Instructor C made changes to accommodate and adopt to the teaching environment that was presented. Additionally, instructor B prepared step by step problem set guides for students to work on. An updated syllabus was shared to be reviewed and compared to the same course that was taught face-to-face. Upon comparison to the synchronized online modality the deadline for the online class was more rigid than of the face-to-face modality course. Most of the instructors stated they had to be more flexible in some cases with deadlines for instance for assignments, however for posts on the discussion boards they had to be more rigid as this was the only way to track and make sure the students are doing the necessary work to learn the materials. Instructor A who is

a tenure instructor that is involved in curriculum planning explained for courses to be successful online changes need to be made. Instructor A stated the following,

> Re-developing all courses to be most effective and compatible for remote learning is necessary. These include creating new assignments, reorganizing lecture materials, incorporating technologies (e.g., video-recorded lecture).

Sub-Theme: Group Project

The next theme that emerged was collaboration/group projects. As mentioned by a participant, to increase engagement outside of the classroom incorporating group projects into the classroom is important. In the legal studies class students collaborated on presentations based on the topic of the day. For instance, in the previous class the instructor assigned students to groups and each group was given a court case to research and present on. The presentation included a set format that included the issue, evidence, outcome, and alternate outcome. Students worked together to create visual presentations and presented it at the beginning of the class which resulted in discussions. Students were able to meet virtually outside of the classroom, share ideas and work collaboratively to understand the materials and presented their findings during class. Instructor D said the following,

> As educators we encourage and employ active learning where students can learn from each other and share information rather than just receiving the information from the instructor. Group work builds connections and stimulates thinking beyond the box and in my specific coding class this is what is needed; therefore, group work/collaboration was necessary, and a great tool used in this class.

Given the pandemic and classes being online, group work can be challenging but with the resources available today and with faculty's modification of curriculum, students were able to work together virtually to complete their required group projects and presentations.

Sub-Theme: Lecture Style - PPP and Current Events

The interviews included questions specific to changes faculty members implemented in their teachings to increase engagement in a synchronized class. Six of the seven faculty members that participated in this study moved away from the traditional presentation/lecture style and conducted these courses via more student discussions and presentations. Instructors broke their class up into live lectures as well as pre-recorded lectures where students can view the lectures before class and be ready to discuss. As stated by instructor E,

> It was difficult in an online environment to present your slides and just lecture, students will not pay attention, therefore it was important to change how we presented our lesson. I started off with an open-ended question based on current events or a hot topic related to the topic or subject I wanted to cover which goes into a conversation and discussion, then I will present my lesson but in between made sure to ask open ended questions so students can think, participate, and feel engaged and be part of the discussion/class.

Instructors in some instances started off with a student's presentation or student responded to answers submitted on the discussion board. The students would then participate and discuss how this related to the topic of the day. The instructor will then take over and present his/her lesson of the day but stop after every few points to ask

questions and engage students. This increased participation and engagement were at the highest when it was more of a conversation rather than a lecture to listen and notate. This method of teaching created an engaging learning environment and revealed to be successful in increasing participation at a graduate level. At an undergraduate levels students are younger and may not have professional experiences or connections, undergraduate students focus on learning information and understanding concepts, where graduate student are interested in applying concepts. At a graduate level student are professionals and focused on learning via networking, discussions, conversations, and collaborative class experience. Graduate students learn from the experiences of their peers, working together and sharing ideas – they already know these concepts, they want to learn how to apply these concepts into the real world. This can be accomplished by creating an active learning environment to share experiences and ideas. In the sports management course observed, a professional coach was invited and joined the class as the guest speaker for the night sharing his experiences and challenges. The students attending the course were working towards their degree to become a coach, therefore all students had numerous questions for the guest and hearing from a professional in the field was helpful in clarifying any doubts students may have about their career paths. This class went over the designated time and not one student were ready to sign off. Of the seven classes observed participation/engagement was at its highest when discussions and conversations were happening.

Research Question 2 Findings

The second research question is how do faculty respond to the differences in engagement levels of students? The data collected reported faculty members plays a huge

role in stimulating participation in class. From the observations, instructors tried to build a community with the students by promoting the exchange of ideas and information between students - sharing ideas and providing feedback with each other in small groups.

Theme 2: Instructor's role

For students in an online program (in this case due to the pandemic) the virtual classroom is the most important site of community. It is the only space they must interact and have an active role; therefore, the faculty member's role is important in creating such an environment for the students. Instructors take it upon themselves to research new technology and resources to keep up with their students in today's technological world. Faculty members felt it was important to help students to feel comfortable in their online classes and be able to connect to their fellow students to build a community. Instructors are under pressure to deliver their material in a way that demonstrates knowledge, their passion for the subject and involvement in the community. Participant G discussed the following,

> It was important for me to know my students, their backgrounds, their focus and understand their career goals. With this knowledge I invited guest speakers that already went through my student's journey so they can ask questions and know what the future holds from someone that went through the journey and what the end result is.

Faculty members not only teach but build a relationship with their students to create a sense of community and support system for students beyond the semester. Another instructor felt the classroom given the virtual setting needed to be more accessible and students needed to make connections where they can interact with each

other outside of the classroom therefore discussions and group work were necessary. Participant F expressed his experience in students that were not comfortable with discussions and stated,

> There were students that were not comfortable with verbal discussions, they could have been shy, they don't like speaking or could have had a language barrier, therefore using the chat was a great feature to connect to this student and have them feel like they are part of the class because as faculty members we not just hear to teach, we need to understand our students and their needs, restriction and limitation in order for us to make our classroom a learning place for all students.

From hearing about all the experiences and interactions with students, instructors' role is a key factor in student's learning. The pressure is not only on students to learn but on the faculty member to come up with different techniques and a variety of strategies to promote learning and increase engagement. Creating an active virtual learning environment has it challenges, especially when technology is involved and there is a lack of resources. It is essential for instructors to be active and play many different roles in their classroom for the students to be comfortable to learn and engage in their classes. From the reflective journal notes on one of the technical courses observed, most of the students had their cameras off, the instructor could not see the student and the students could not see each other. How can engagement take place in this setting? It is essential as observed from the other classes for instructors to emphasize the important of engagement in the virtual environment, stressing the importance of having a presence with cameras on and participating during class.

Sub-theme: Continuous learning - technology

The most common factor that emerged from the data collected was the agreement of faculty members to always continue to learn about online teaching. Faculty members expressed their interest in professional development to better support their students. All seven faculty members received the mandated training to teach virtually provided by the university, however five of the seven took additional outside training to learn about other programs and technology available to teach classes virtually. A couple of faculty members joined a professional organization for ongoing training of new technology for online teaching. For educators to be successful keeping up with the times and technology especially in a virtual teaching environment is vital. Participant G shared the following,

> Teaching and being an instructor are not just about going to class and presenting your materials, as an instructor you must be knowledgeable of the tool available in teaching - from a technical aspect, you must be able to know what is happening in the background to answer questions your students may have not related to the course content. Knowing about connecting, troubleshooting the internet, and streaming tools, knowing how to access online textbooks, and interactive tools are essentials.

As instructor G stated,

> As in instructor learning does not end once you completed your degree, learning is continuous, we are students in our own class as we learn so much every day from our students - be it in technology, new tools, or social media; for us to be successful in teaching online courses we must always continue to learn about new technology and resources available to teach our students.

Considering the shifting landscape within our learning environments, it has become clear that educational leaders are aware of this shift to continuously learn to stay current with instructional technology. Findings from this research found all participants received the mandated training but the majority took it upon themselves to go beyond what was offered to advance their technological knowledge to remain current in the field to support their students.

Sub-Theme: Availability - Virtual communication

Another theme that emerged from the data collected was the instructor's availability and open communication with students. In a virtual learning environment, it can be difficult for students to communicate with faculty members. On each course syllabus instructors listed virtual office hours, additional contact information such as email and in some cases cellular phone number. A few of the instructors were comfortable with sharing their mobile number with students as they indicated graduate level students do not call them constantly as an undergraduate student may. Graduate students gather their information and would only call if they have exhausted all other means of communication without a response, which in this case is rare as instructor make it a point to respond to students' email within a timely manner. At the end of each that was observed, faculty members announced they would stay on for those students that have additional questions, in many cases students would stay on to speak to faculty members about their assignments, projects, etc. As stated by instructor D,

> It is important to be available to your students, given the virtual teaching world
> we are in currently students should know you are available to them, be it after
> class, before class, during office hours or in the middle of them working on their

project they should feel they can reach out to me so that I can help them with the course materials.

The following is what was indicated on the course syllabus regarding faculty's virtual availability:

Detailed instructions on how to schedule the office hours is available under the "Course Logistics Module" in your course page. Once you reserve your time slot, the instructor will email you a WebEx Meeting link you can use to attend the meeting. The following times will be made available every week, unless the university is closed: Tuesdays: 7:00-8:00 and Thursdays 17:00-19:00

Virtual Office hours: Monday: 3:30 to 4:30 p.m. Wednesday: 10:30 a.m. to 12:30 p.m. Or by appointment.

Office hours: Mon – Thur 10am – 12pm (flexible throughout other times if needed)

Office Hours: Virtual Appointments via Email

In addition to virtual office hours, emails and phone calls became virtual meetings and chats in the synchronized teaching environment, which extended the communication options for students and faculty. In an environment where there is no physical contact or interaction with faculty members it is important for students to understand they can reach out to their instructor should they have any questions or need any clarifications. In this study the level of availability from the instructor was astounding especially at a graduate level, where in some instances students are only registered for one class per semester and may not have any other source to turn to – they are taking once course, only interact with one instructor therefore that one instructor is their only source for the academic term.

Sub-Theme: Personality - Body language, tone, listening/understanding

Teaching online synchronized courses has its difficulty already as you are teaching virtually and are unable to interact with your students personally. The teacher is looking at all his/her students, but the student's focus is only on the teacher, therefore it is important for the teacher to be composed and professional. In this given environment it can be difficult for the faculty member to stay focused, to notice the student's body language, to react appropriately to what students may be doing that is not acceptable. The instructor must be extremely knowledgeable of the topic, always use appropriate tone and listen to understand rather than respond, have passion, and create a simulated environment to promote learning. The following comments noted in Table 4 were taken from the observation notes and reflexive journal:

Table 4

Observation notes and reflexive journal

Observation	Findings
	*Instructor is aware and knowledgeable of all topics presented
	*Instructor motivates students to ask questions, add comments and provide feedback
A	*Instructor is highly confident but not overly excited or enthusiastic
	*Instructor is extremely knowledgeable, energetic, and motivating
	*Instructors know each student's focus and background and can relate this to topic

B	*Instructor is energetic, open, is extremely approachable, extremely knowledgeable on topics and current events to encourage students.
	*Instructor is extremely energized and excited when explaining items to student
	*Instructor's energy is amazing
C	*Knowledge of subject is exceptional
	*Instructor is extremely friendly and pleasant with students
	*Instructor motivates students and jokes with them
D	*Instructor is extremely confident, knowledgeable, focus and energized
	*Instructor uses sarcasm
E	*Instructor is very familiar with students and interact with them with sarcasm
	*Instructor is not as motivated and enthusiastic
F	*Most students' cameras are off; instructor does not encourage students to turn camera on while speaking
	* All cameras including the instructors are off.
	* The only content on the screen is the instructor's presentation
G	* It was difficult to know when students have questions or when they wanted to participate

It can be inferred from the data collected background and experience plays an important role in teaching style and persona. Adjunct faculty members tend to be more

engaging and excited about what they are teaching. Tenure or full-time faculty members were not as enthusiastic as the adjunct instructors. As stated by Hsieh (2021) and Sorbie (2015), the importance of interaction between faculty and students at a graduate level is important, as it increases academic performance, satisfaction, and creates a positive college experience. At the graduate level it is difficult for students to connect, therefore it is important for faculty members to engage their students and understand their challenges (Dews-Farrar, 2018). Graduate students balance careers, family responsibilities, and academic demands, therefor instructors' flexibility is helpful towards students' success (Farrell and Brunton, 2020). Instructors' role is not just to display information to students in the hope that they learn and retain the information, as discovered it goes beyond just presenting. Body language, tone, listening, understanding and knowledge of the topic and beyond is what was observed and created an engaging class for students.

Research Question 3 Findings

The third research question leans towards technology and how technology impacts/helps to promote student engagement in class? The third theme technology implication resulted in two sub-themes.

Theme 3: Technology

Technology is what drives today's world not just for education but for every aspect of our daily lives. Part of this study focuses on findings from the faculty member how technology impacts/helps to promote student engagement in synchronized classes. The findings in the research resulted in a mixed outcome of faculty's perspective of technology in a synchronized graduate level course. In some instances, the feedback from faculty members regarding technology usage during class were negative, however

in other instances faculty members welcomed usage of technology as it increased engagement during class. Out of the seven participants, two responded in a positive way towards technology, two were negative and three gave both positive and negative reasoning. The response was mixed because the university elected to change learning management systems - moving from Blackboard to Canvas and this was the first semester faculty members were using Canvas. As instructor C indicated,

> Technology has impacted students in both positive and negative ways. On a positive note, technologies have allowed students to be flexible with class participation (e.g., location/settings), allow access to useful tools (e.g., tools in Canvas), etc., it also negatively impacted student engagement. Of the most notable, students are becoming heavily reliant on the sources that are available online. In some cases, there was an issue with a lack of proper citation and/or paraphrasing despite referencing outside sources.

Sub-theme: Positive/Effective

Participants perspective on technology were mixed, however majority of instructors leaned towards technology in their classrooms; given the current pandemic everyone depended on technology and without it there wouldn't have been any online classes. All participants received formal training from the university to teach synchronized classes online, however the majority of participants were comfortable teaching online and attended additional training on online teaching. From the data the following were found from the different data sources, "technology gives a variety of resources with updated information, it is cost effective, motivating and engaging". As instructor A stated, "discussion boards serve like being in person then discuss virtually"

and instructor F stated, "good with streaming tools, videos from YouTube, more tools are available, students can research while in class, they can look up and refer to current events while teaching." Additional instructor D stated, "students can find answers when questions are being asked more quickly with online resources, they can research with the availability of technology and the internet, thus this information increases engagement." For instance, for those students that didn't get a chance to review the materials before class or research a topic before class, they can easily do so during class while other students are presenting or asking questions. During the individual virtual interviews, instructor G mentioned the following,

> Connecting virtually seems to be better than in person, as in person students are less engaged it seems in my class, however being on screen via the camera students tends to speak up more, maybe because they do not see the entire class in their view but are only seeing the instructor, however this has in my opinion increase participation with technology as they can quickly google something and share it with the class.

As mentioned by the instructor, having the ability to research updated information immediately aids in student's participation and engagement, as students can research the information instead of guessing and are more confident to share with their class. Participants were overall content with technology and resources available to them and their students but felt there could have been more available.

Sub-Theme: Negative/Ineffective

In any environment problems with technology will range from not having the right equipment to issues with experience. Although some faculty members did not see

technology as a problem, a few had their challenges while teaching synchronized online graduate level courses. Instructors teaching technology courses mentioned all the free software and virtual textbooks that are available however the university needs to approve the usage of these resources in order for them to be utilized in teaching.

As indicated by a coding instructor,

> Tools and resources are out there and available, however it is not currently available at our university. Submitting of assignment tools can be more effective especially for specific programs, for instance in my class I ask my students to write codes and submit as their assignment, they have to currently submit their codes via MS Word, there are software available that can be attached to my course where students can submit their coding via this software and it will immediately check the coding for them, however in the current environment I have to copy the coding that was submitted via MS Word and run it through the program to check for accuracy.

In this case tools are available however the university does not currently have it available for faculty and students to use. In another instance instructor C stated,

> Technology is a distraction as students are on their phone while they are in class, they can turn their camera off, and you don't know what they are doing. Excessive screen time is not good and in some cases students can cheat.

> Faculty members also felt given the current situation virtual learning is necessary however there can be unequal access to technology and there is less human interaction as well as distractions. Other faculty members also express that students and faculty are having a hard time adapting to the new platform and figuring out the new format of

course content and topic. In the finding's faculty members were a bit frustrated at times but worked together to get through the hurdles to make their online classes run smoothly.

Research Question 4 Findings

The final research question is to gather what activities promote or increase engagement during classes? Virtual meetings have their challenges themselves as it becomes difficult for faculty members to pay attention to each student. Instructors have implemented conversations verbally and via chats during classes to engage students. The central theme that emerged from this research is instructional methods which was divided into three sub-themes.

Theme 4: Instructional Methods/Techniques

The major theme that emerged during the analysis of the transcribed data was the different techniques and methods used by instructors to increase engagement. Each of the participants shared their experience and adaptation of these techniques due to the nature of the course being administered online. This theme resulted in three sub-themes, class discussion, presentation, and questions. Each participant has very different experience regarding teaching including the number of years teaching, adjunct versus tenure, professional background, and the numbers of years teaching online. Even though the participants are very different, the data revealed a common and persistent method used in synchronized classes to increase engagement.

Sub-theme: Discussion - Verbal and Chat

One of the first patterns observed was class discussions. Class discussion/participation were noted as a requirement on the course syllabus and scaled between 10-35% of students' grade. Understanding what method/techniques instructors

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were using to increase engagement was one of the first goals of the interview questions. In each of the interviews several questions were directed to understand the specific techniques/methods used to increase engagement. Out of the seven participants, five confirmed during the Covid-19 pandemic with the majority of classes being administered online in a synchronized format virtual discussion was the most effective way to engage students. Instructor B said,

> Working closely with students by having dialogue allowed me to better engage students. To improve students' engagement, I offered incentives for participation (e.g., extra credit).

Instructor E added,

> To increase students' engagement, I employ discussion and conversation in each class, and not just lectures with presentations. I call my students by name, and it is important to know my students and their background to connect to them and increase participation.

> Each course observed six of the seven started with students' discussion related to the day's topic. In the synchronized courses observed in this study the format was not lecture and PowerPoint presentation done by the instructors, but introduction of the topic that starts a class discussion. Students would either present their findings or discuss the day's topic. Every single participant interviewed indicated discussion, dialogue, and conversation was the number one technique/method used to engage students.

> In addition to verbal discussion five of the seven courses used the "chat" feature or written discussion during classes. As instructors were presenting or other students were presenting students would use the virtual chat features to ask questions and start

discussions. The instructor in some instances would also participate in the "chat"

discussion. As noted by instructor F,

> The virtual chat is like having a side discussion with a student or a group of
>
> students in class while the other are working on their assignment, it is a great way
>
> to have a private conversation or a mini group conversation with students
>
> virtually.

Instructor E stated the following,

In synchronize teaching to increase engagement using the virtual chat helps

student to express their opinion without verbally speaking, it gives them more drive and

confidence to write their message instead of speaking, therefore increase participation

and engagement. It helps those that are not strong speakers to express their thoughts via

chats.

In addition to virtual chats, instructors added polls via the chat during the class

time for students to participate and vote on their answers. This increased engagement

where all students in the class needed to vote and participate via this

method. Implementing discussions by students at the beginning of the class increased

participation.

Sub-Theme: Presentation - Live and Pre-recorded

The next theme that emerged from the data to address the main research question

of what instructors used to increase student engagement is presentation - live and pre-

recorded. Instructors in some cases uploaded their presentation prior to class so that the

student can review the presentation before class and be ready to discuss. With this option

the instructor is not as focused on presenting the presentation but discussing the actual

content of the presentation/class agenda rather than just going over a PowerPoint. In one instance instructor B does not even bring up the presentation for the day, rather the instructor encourages each student to pick a slide/point from the previously shared presentation to discuss. As stated by this instructor,

> My presentation for the class is uploaded a few days prior to class so that students can view them, in the presentation I include questions or points for students to think about and be ready to discuss in class - this increases class participation and engagement as students are prepared not knowing who will be called to discuss the topic.

Faculty and students were allowed to record or upload their assignments before class; other classmates were able to review the material and be ready to discuss during class. In the sports management class observations, a student has recorded his exercise method used which was done outdoors the day before, the student then showed the pre-recorded video to start the discussion of the day related to the topic. Given the online synchronized course, doing this demonstration during class would have taken up a lot of time however with the pre-recorded element students were able to watch and respond immediately. Discussions that included presentations by the student created a comfortable environment for other students to respond and engage to support their fellow classmates.

Sub-Theme: Questions - Open ended and Current events

Another popular theme that emerged from the data collected via interview and class observations were the different types of questions being asked. Instructors in their presentation and live class asked open-ended questions. In instances where the questions

were not understood the instructors would reword the questions which increase

participation. As instructor A mentioned in the interview,

> Asking open-ended questions encourages thinking, knowing your students and
> asking questions specific to them or their field increases discussion and
> participation.

An additional method that demonstrated a high increase in engagement is

questions related to current events. For instance in one of the class I observed titled

"Legal Aspects of the Healthcare System" the topic of the day per the syllabus was on

"parental rights on medical treatment" the engagement level was moderate and the

instructor sensed this therefore the instructor discussed how the student would react if

their parents have to choose their treatment with Covid19 of which they may not agree

with, this increased class discussion and participation, 100% of the class had feedback

and participated in the discussion. Five out of the seven courses observed incorporated

current events into the lesson/topic of the day, where all students were familiar with the

topic and were able to participate with ease. The initiation of open-ended questions

stimulates thinking and sharing of ideas that created an engaging class. Students shared

information with each other, learned from each other, and were comfortable with this

type of learning as it increased engagement.

Conclusion

This chapter reported the findings that emerged from the data analysis. This

chapter is organized into four main themes and included sub-themes. The main themes

course modification, faculty's role, technology, and instructional techniques specifically

discussion was a major factor to increase engagement in a graduate level synchronized

course. In relation to the research questions, the findings have identified a combination of techniques used in teaching online graduate level courses to increase student engagement. The next and final chapter provides implications of findings, relationship to prior research, limitations to this study, recommendations for further practice, and recommendations for further research.

CHAPTER 5

Introduction

This chapter will discuss the interpretation of the findings within each of the four research questions, the implications of those findings, and relationship to prior research. This chapter will also discuss the limitations of the study and recommendations for future research and practices. This qualitative case study focused on faculty's perspective on synchronized graduate level courses at a private university in New York. The study aimed to address four research questions - the first research question is to understand what methods and techniques used to teaching online synchronized courses increases engagement at a graduate level. The second research question explored how faculty handle the different engagement levels of students. The third research question focuses on technology in student engagement. Lastly, the fourth question focuses on what specific activities promote engagement during synchronized online classes. As discussed in Chapter 3, the data collected in this study consisted of individual interviews, course observations, and document analysis. Four themes emerged from the data that was examined and analyzed: a) course modification; b) faculty's role; c) technology; and d) instructional techniques. The course modification and technology theme discussed the topic of assignments, group projects, lecture style, and technology which closely align to Connectivism Theory. The second theme regarding faculty's role relates to self-regulated teaching/learning that is connected to Engagement and Connectivism theories. The instructional technique's theme incorporates discussion, presentations and questions connected to the Engagement Theory. This study can help both instructors and

educational institutions build awareness of the necessary techniques, tools and training needed to successfully teach a synchronized course online.

Implications of the Findings

Continuous Course and Instructional Modification

Academic institutes have an important role to play when developing course contents and keeping modality in mind (Cooper, 2001). Instructors are the leaders of their classrooms and plays an important role in student engagement (Bustamante, 2021). Instructors understand the environment and what method/technique can be incorporated to create a successful learning experience. Keeping this in mind, this research found changes to course contents such as assignments, group projects and lecture style increased engagement. As discovered a course map/plan created for a face-to-face course will not be successful in an online course. Modifications needed to be made to keep students engaged in a virtual environment; therefore, adjusting assignments, deadlines, lecture style, and ways to do assignments were implemented to make sure students were learning what they needed to in this type of teaching modality. As suggested by Leiber (2020) when implementing resources and more flexibility it encourages students to play an active role in learning. As indicated by Hart (2012) it is important to encourage students to play an active role in sharing and contributing to content when learning. This gave the students the opportunity to work together, share what they know, explore new technology, share what they have discovered and learn from each other. Utilizing virtual resources, collaboration, combines previous information with current information to create new understanding and meanings relates to Connectivism Theory (Siemens, 2004),

and group collaboration derive from the Engagement Theory (Kearsley & Schneiderman, 1999).

Instructional methods that apply to face-to-face teaching will not be successful via online teaching (Bustamante, 2021). This research found implementing discussions, presentation and open-ended questions were the techniques used to increase engagement. Faculty members used virtual chat and virtual polls to encourage students to engage in the course if they notice the student may not be interested. Incorporating videos, current events and guest speakers increased engagement. Given the virtual environment it is difficult to gage the different levels of engagement but there are many resources available that can be incorporated in the synchronized courses to aid in teaching. Therefore, it is important for educators to search for new knowledge consistently and continuously as supported by the Connectivism theory that can guide them towards information about e-learning environments (Siemens, 2004).

Technology and Resources

Technology is what enables synchronized learning, from the data collected it can be concluded the majority of instructors encourage the use of technology during classes. The justification is that students can find the answers they need in order to participate which increases engagement. Though the feelings on technology were mixed, many participants agree technology has reinvented learning with endless free resources available to students to learn from. In addition, digital tools are available and can be implemented were discussed. Institutions today are working towards matching their technology to meet online learning objectives, and faculty members' needs in teaching classes online successfully. The strive to improve independently and seek information

leads to self-regulated learning/teaching learning (Harris & Graham, 1999; Schraw, Crippen, & Hartley, 2006; Shunk, 1996). Participants expressed the importance of identifying and employing the best online tools for interaction and teaching synchronized classes. From the interview's participants expressed the need for schools to use digital resources to support teaching and learning. From a faculty perspective, technology provided students with easy-to-access information. It allowed students the opportunity to practice what they learned. It allows students to explore new subjects in depth to understand concepts and theories. Technology from what this research found aids in students learning via critical thinking when incorporating current events, rather than just memorizing facts. Technology allowed for group discussions and better communications means as well as using better learning techniques such as videos, chats and live events into teaching and learning.

Using digital textbooks, portfolios, learning games and real-time feedback on teacher and student performance are a few of the incentive's instructors indicated should be incorporated as it connects to Connectivism Theory. It is essential to note technology system design for online teaching is not just the devices and software, it involves a system that includes the instructional requirements for online teaching. Findings also revealed that technology is extremely important and needs improvements at the university level. Instructors also voiced their concern of the availability of resources from the student's end, for instance adequate bandwidth speed and hardware requirements. Without the necessary resources' students will not be able to employ tools available.

Continuous Learning and Persona

According to the participants, continuous learning about technology and current events promoted discussions and dialogue. Instructor's constantly research new techniques, videos, exercises, and resources they can share with their students to increase participation. Faculty members felt it was extremely important to make sure they are aware of the changes in technology and keep up with current events to keep their students engaged. Continuous learning is a top priority for faculty members that participated in this study - as faculty members stated if they are not knowledgeable not just about what they are teaching but about the environment and tools they are using it makes teaching difficult and supporting their students impossible.

Across the board participants expressed the importance of knowing their students - not just by name but by their interests. Instructors understand that given the Covid-19 pandemic students are going through a tough time, therefore it may be difficult for students to be able to focus. Instructors express the importance of their personality as well when teaching. Their body language and expressions can be interpreted differently by their students especially in a virtual world; therefore, it is very important to pay attention to their expressions and gestures while teaching online. Faculty also understand graduate students are balancing work, family, and school therefore they have many other responsibilities, thus it is important to know their students so they can focus on their interests to engage them. As online instructor's the goal that was presented was faculty working towards mentoring their students to create an online experience that facilitates interactions.

Online learning and teaching require self-direction, motivation and self-regulations as can be inferred from self-regulated theory (Harris & Graham, 1999;

Schraw, Crippen, & Hartley, 2006; Shunk, 1996). Online students required additional

resources, instructor support, peer support and environmentally compatible course design

in order to be successful.

Instructor's personality, availability and communication with students created a

comfortable environment for students to be able to participate more. It was significant for

instructors to set a certain persona with their students, to create a learning experience for

students to share their ideas while keeping in mind the requirements for the course given

the virtual learning environment. Additionally, instructors express their need to be

available and have open communication with their students. In a virtual world it was

difficult to connect with students, but instructors could make it work. Having individual

meetings before or after classes, virtual office hours, phone and email communications

eliminated that barrier of communication via synchronized classes. Participants expressed

that continuous and frequent communication to get to know their students, relate to them

on a more specific level, and incorporate their focus in class, which increased discussions

(Johnson, 2011).

Lastly, instructors also indicated that providing timely, relevant, and actionable

feedback to their students shows that you are there and care about what they are doing

promotes engagement. These practices are components of self-regulated teaching and

learning. Instructors also reached out separately to students that seem distracted or not

engaged in class to check in and encourage participation. Incorporating the different

aspect of Connectivism theory to understand how students learn and interact in said

environment aid in instructors reducing the lack of engagement in class. Faculty's

knowledge, the way the materials were delivered, faculty's tone, passion, and personality

stimulate students in dialogue and discussions as we learned from the Engagement

theory. Lecture style played an important aspect in engagement during classes. Faculty

members did not present their materials and lectures; they asked questions, stimulated

discussions, had students present on the day's topic, and incorporated group work within

their class session. these techniques discovered correspond with the description of

Connectivism theory, Engagement theory, and self-regulated learning/teaching. Being in

person there is control over the class; however, in a virtual environment where students

are in their own environment with many distractions, changing lecture style was essential

in order for students to learn and be engaged.

Relationship to Prior Research

This study adds to previous research done the faculty's perspective on online

student engagement. Barkley and Major (2020) stated that there is a lack of research on

how instructors teach online courses. Instructors are the front of online teaching;

therefore, their viewpoints must be considered. Previous studies as noted in chapter 2,

focus on students' perspective on engagement (Blackmon and Major, 2012), international

student engagement at a community college (Wang & BrackaLorenze, 2018), and online

degree students' engagement (Farrelle and Burton, 2020). Further research looked at the

instructor's perspective on engagement in high school (Sorbie, 2015), undergraduate core

level (Hetzels et al., 2000), undergraduate nursing students (Kuhl, Kinzie, Schuh, and

Whitt, 2005), and community college freshmen students (Hsieh, 2021). The findings

from this study helped to reduce the gap in research on faculty's perspective on student

engagement in an online synchronized class at a graduate level. This research is a

continuation of research done by Bollinger, Shepherd, and Bryant (2019), and recently

research on student-centered learning (Hsien, 2021) in finding out what is necessary to increase student engagement in an online class.

The key findings that answer the research questions highlight the importance of discussions, course modification, instructor's role, and technology in student engagement. Actively involved students learn in any environment as noted by Hiltz et al. (2000). Discussions are the most popular instructional technique used in all synchronized classes. Dialogue and conversation increased participation and engagement (Hsieh, 2021). In addition to the discussion, group work, presentation, and open-ended questions - building a community are all instructional techniques used to increase engagement in an online class (Bolliger et al., 2019). Incorporating open-ended questions, and adding challenging questions related to current events and student's experience were all demonstrated in this study and the research done by Barkley and Major (2020).

As demonstrated by data collected, course modification played a huge part in successfully teaching a synchronized online graduate level course. As noted by Watson & Pecchioni (2011), and Carr (2014) which coincide with the findings of this research, course design and modification is essential to adapt to the environment and modality of administration. The findings in this research demonstrated adjustment to assignments, deadlines, and course requirements, similarly to the findings by Kearns (2012). Amendment to course design and curriculum is necessary depending on the environment the class is being presented. Considering resources and limitations of physical contact are key factors when teaching classes online.

Additionally, the faculty's role as highlighted by Chickering and Gamson's (1987) to incorporate good teaching practices and building a learning community were

discovered by this study (Wang & BrckaLorenza, 2018). Faculty members shared their personal experiences, included guest speakers to relate to the student's concentration, and took time out of their regular business hours to assist their students (Bolliger et al., 2019).

Technology is evolving by the second and it is essential for academic institutes and educators to keep up with this trend. Technology is beneficial provided resources are available for the students and instructors to access and utilize as discovered in this research. Online learning is growing, not just with the Covid-19 pandemic, therefore it is necessary for institutes and educators to constantly keep updated. As predicted by the U. S. Department of Education the trend for online learning is increasing, thus being able to accommodate this is vital.

Limitation of the Study

A limitation to this study is the diversity in subject of the participants. The participants included three graduate level instructors in sports education, two graduate level instructors in computer software and coding, and two graduate level instructors in legal and security policies. Including instructors from different concentrations of teaching will further justify the findings. Additionally, based on the response to participate, it can be presumed that those instructors who participated in the study are comfortable and experienced in teaching online synchronized classes. Subsequently, it would be interesting to gather perspective from those instructors who were new to synchronized teaching. The research and data collection process took place during the Covid-19 pandemic, which prompted the majority of schools to use an online remote learning environment. All interviews, data collection, and observations were conducted remotely. Given the situation on-site access where not possible which would have allied the

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researcher to gather more information and interview the instructors in their office setting. In addition to the sample subject limitation, the findings within this study may be limited to the current Covid-19 pandemic and may not be generalized to other circumstances and situations.

Since the research of this study was based on one college within the university over an academic semester, it also has limited generalizability. Including different departments within the university may accumulate a more diverse perspective to which the data collected can be compared. Additionally, the results are not generalizable to other departments within the university. Lastly, another notable limitation of this study was the lack of longevity. The data collected for this study was conducted during the spring 2021 academic semester from January 2021 through May 2021 (approximately 5 months). A longer study can capture the changes made over time that showcase increase in engagement.

Recommendations for Future Practice

The goal of any research study is to produce information that is beneficial to a particular field. In this study, the findings imply that improving student engagement in a graduate level environment requires modification, adaptation, continuous learning, technology, and self-regulation. Research is limited as to what increases engagement at graduate level online courses and the findings from this study contributed to existing literature on faculty's perspective on student engagement.

Findings from this research can aid educators and educational institutes to improve their curriculum and the quality of teaching that will meet the needs of their students'. Incorporating discussions verbally and via chat as well as presentation should

be incorporated more in online synchronized classes. Using the virtual discussion boards to encourage students to prepare for class should be considered a tool to be used in face-to-face and online courses. Additionally, the instructor's perspective from this study provides an outlook to understand what instructors visualize as being needed to encourage, support, and engage their students in online learning. The findings from this study also revealed that course modification is essential when teaching online. Findings revealed that modifications to course content and resources are necessary (e.g., flexibility in deadlines, modification to assignments, implementing group work).

Additionally, as the Covid-19 pandemic caused instructors to employ technological tools, additional professional development about these tools should be offered. Accordingly, what necessary training and resources such as digital textbooks and additional software that are needed by faculty members to teach online classes successfully to overcome their many challenges should be considered. The researcher recommends a study on additional resources that can be incorporated in online teaching to increase response time to students. Research on incorporating additional software or having it available to faculty members to support their students can improve learning. Professional development opportunities for instructors to independently venture out to learn about additional tools should be ongoing.

Lastly, the findings from this study revealed the importance of technology in synchronized teaching. Incorporating new technical tools and resources to increase communication such as implementing virtual chats and discussions boards may assist instructors in communicating with students to increase collaboration and

engagement. Technology is evolving quickly; it is important and necessary for continuous and collaborative learning.

Recommendations for Future Research

Further qualitative studies should investigate what resources are needed for faculty members to transfer what is done in a face-to-face environment into the online classroom. Did faculty members have the necessary resources to prepare to teach their courses online via a synchronized method? Were there the necessary technology and tools available for faculty members to utilize in their online classes? A future study that offers an in-depth analysis of faculty's perspective of engagement via online courses over a period of time is beneficial to educational institutions. Research on course modification details and technology that is available is necessary. In addition to pedagogical skills, communication skills, and time management skills, technology skills should be assessed.

Another recommendation for further research would be to study the face-to-face course materials and its adaptability to the online settings. Course work, the necessary software, and resources needed would be an area that should be studied before any decisions are made to teach a course in an online environment. A phenomenological study on the similarities and differences between virtual teaching and face-to-face teaching environments could provide data to aid in online success. For example, participants indicated they liked using the discussion boards in the online class as it helps students to prepare before class and participate in discussions. Additional research in this area will aid in concluding if it is beneficial to incorporate the virtual discussion boards into face-to-face classes as well. This study showed that faculty value their interactions with students in the virtual world. Instructors expressed specific tools that can enhance

their virtual interactions, therefore additional research on areas related to communication and interaction between students and instructors should be explored.

There are also several ethical considerations that should be explored further in the virtual learning environment. For instance, faculty members are recording their lectures which includes chat information that is saved. Personal experiences shared are also being recorded and saved, therefore research in these areas is needed. Covid-19 pandemic has eliminated the digital divide that exists between educational institutions globally. As prior research pointed out, the lack of resources and access to resources necessary for effective online teaching is not new (Leiber, 2020). Studies should further investigate faculty preparation programs and determine if the programs are beneficial to instructors to teach online classes. As prior studies have stated, many instructors consider themselves less prepared to teach online (Singleton, 2017).

Conclusion

After observing, interviewing and listening to the stories of our instructors from the graduate level, the researcher identified several conclusions: a) instructors are extremely knowledgeable and passionate about teaching virtually; b) instructors take it upon themselves to research and implement new technology, resources, current event, and student's concentrations to incorporate into their teachings; c) student engagement on a virtual synchronize level compasses of multiple entities such as discussions, presentations, questions, current events, technology, resources, faculty's role and modification to course contents; d) instructors try to build learning communities with their students; and, e) instructors being prepared to learn, teach, and assist with technical challenged - all of which answered the research questions. Since instructors are the

facilitators of courses, it becomes essential to create a supportive and collaborative environment for their students. This study shows that instructors desire knowledge, and they independently make efforts to improve their teaching as they see many unique techniques that can be used in the virtual world of teaching to increase student engagement.

In conclusion, the framework for this study, Connectivism theory, Engagement theory, and self-regulated learning theory, illustrated the faculty's perspective on graduate-level student engagement. As discussed in this chapter after observing, listening, speaking, and reviewing several graduate level faculty members, it is evident that teachers go beyond what is required to support their students and encourage their students in the online environment. The reason that can be given for this is that each instructor approaches the virtual teaching world with a pedagogical eye; they prepare and implement techniques that can aid in them delivering the course materials to students focusing on teaching and learning.

APPENDIX A- IRB Approval

ST. JOHN'S UNIVERSITY

Federal Wide Assurance: FWA00009066

Apr 13, 2021 4:14:25 PM EDT

PI: Ambeeka Jewnandan
CO-PI: Barbara Cozza
Dept: Ed Admin & Instruc Leadership

Re: Initial - IRB-FY2021-348 *Ed. D Dissertation*

Dear Ambeeka Jewnandan:

The St John's University Institutional Review Board has rendered the decision below for *Ed. D Dissertation*.

Decision: Exempt

PLEASE NOTE: If you have collected any data prior to this approval date, the data must be discarded.

Selected Category: Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Sincerely,

Raymond DiGiuseppe, PhD, ABPP
Chair, Institutional Review Board
Professor of Psychology

Marie Nitopi, Ed.D.
IRB Coordinator

APPENDIX B - Interview Protocol

Opening:

Thank you for taking the time to participate in this interview. Your participation in this interview will support my research study on instructors' perspective on student engagement in an online synchronized graduate level course. The goal of this interview is to discuss what techniques/methods that are most effective to increase engagement in an online class. If you decide at any point during the interview that you would no longer like to participate, please let me know.

Overview:

This will be a three-part interview. The first interview will be to understand your background and experience. The second interview will occur after the course observation and review of the syllabus. The final interview will be to go over what was collected to confirm accuracy of what was noted. The discussion, materials, and transcript from the interview are completely confidential. When the results of the interview are shared your identification will not be included. Please let me know if there are any questions before we begin?

Interview Questions:

1. What specific courses do you teach?

    a. How many years have you been teaching?

    b. How long have you been teaching at this level?

    c. How many years have you been teaching at this university?

2. What challenges have you faced when teaching online classes especially now with the Covid-19 pandemic and most of the university's courses are administered online?

   a. Did you make any changes to your syllabus, assignment, or teaching techniques to accommodate for online classes?

   b. What new techniques have you implemented or what have you changed to accommodate for online classes?

   c. Did you receive any professional development/training before teaching online classes?

3. What methods/techniques have you used to increase student engagement during classes?

4. How do you respond to the different levels of engagement from students?

5. How has technology impacted student engagement?

6. What from your experience techniques/methods has been the most effective in increasing student engagement?

Closing:

Thank you for taking the time to share your thoughts about your experience with student engagement in an online synchronized class. Your feedback will provide the data needed for my analysis to answer my questions that can be beneficial to the university's committee.

APPENDIX C- Observation Notes Outline

FIELD NOTES LOG SHEET
Date: _____ Time_____
Field Notes for (Site) _____
Setting _____

General Notes

APPENDIX D- Coding Matrix

TABLE 1	# of Obs.			
Class Observation				
Syllabus				
Interview				

APPENDIX E- Participant Consent Form

Dear Participant:

Thank you for volunteering to participate in a research study to investigate student engagement in an online synchronized course. I will be conducting this study as part of my doctoral dissertation for St. John's University, Department of Administration and Instructional Leadership. This study will help to better inform educational institutions on implementing mandated curriculum changes when teaching online courses.

This portion of the research study will consist of individual virtual interviews lasting from 20 – 30 minutes. Web recordings of the virtual interviews will be made so that the data can be transcribed and analyzed. You may review the recordings and request that all or any portion of the recordings be destroyed. All virtual recordings will be kept secured on a password protected drive and will be destroyed at the conclusion of the study. Pseudonyms will be used during transcription for all proper names to maintain confidentiality and anonymity. All consent forms will be kept separate from the transcription data to ensure that the names and identities of all participants will not be known or linked to any information provided. Participation in this study is voluntary and at any point during the study you have the right to end your participation.

All responses and feedback will be confidential and anonymous throughout the entire research study. This study has been approved by the Dean of your Schools and the Institutional Review Board of St. John's University.

If you have any questions or concerns, please email me at jewnanda@stjohns.edu. You may contact my mentor, Dr. Barbara Cozza at cozzab@stjohns.edu. For questions

about your rights as a research participant, you may contact Marie Nitopi, Ed. D of the

University's Human Subjects Review Board, St. John's University, 718-990-1440.

I truly appreciate your time and participation in this study.

Sincerely,

Ambeeka Jewnandan

Agreement to Participate
Yes, I agree to participate in the study described above.

_____ _____
Participant's Signature   Date

_____ _____
Researcher's Signature   Date

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success. The University of North Dakota, ProQuest Dissertations Publishing, 2016. 10249816.

Vita

Name	*Ambeeka Jewnandan*
Baccalaureate Degree	*Bachelor of Science, St. John's University, Queens, NY* *Major: Computer Science*
Date Graduated	*May, 2000*
Other Degrees and Certificates	*Master of Science, Hofstra University, Hempstead, NY, Major: Education Leadership and Policy Studies* *Certificate in Human Resources Management (2009)*
Date Graduated	*May, 2009*