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**GRADUATE STUDENT PERCEPTIONS OF COURSE DESIGN AND
MATERIALS, TEACHER PRESENCE, AND PEER ENGAGEMENT IN
SYNCHRONOUS AND ASYNCHRONOUS ONLINE COURSES**

Sara Caniglia Schulte

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**GRADUATE STUDENT PERCEPTIONS OF
COURSE DESIGN AND MATERIALS, TEACHER
PRESENCE, AND PEER ENGAGEMENT IN
SYNCHRONOUS AND ASYNCHRONOUS ONLINE
COURSES**

By

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ABSTRACT

GRADUATE STUDENT PERCEPTIONS OF COURSE DESIGN AND MATERIALS, TEACHER PRESENCE, AND PEER ENGAGEMENT IN SYNCHRONOUS AND ASYNCHRONOUS ONLINE COURSES

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University of Nebraska, 2023

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The purpose of this study was to examine graduate students' perceptions of online synchronous and asynchronous courses in peer engagement, teacher presence, and course design and materials. It further compared differences in synchronous and asynchronous courses, and whether graduate students' perceptions differed due to student age, number of courses taken, student gender, and student part/full time status.

Online courses continue to be in demand well after the COVID19 pandemic forced universities to shift to remote learning. Students, especially nontraditional students, often prefer the convenience and flexibility synchronous and asynchronous courses have to offer (Croxtton, 2014; Yamagata-Lynch, 2014). This study analyzed survey responses from masters, specialist, and doctoral students in a College of Education, Health, and Human Services regarding their perceptions of teacher presence, course design and materials, and peer engagement in online synchronous and asynchronous courses. This study found a difference in perceptions between synchronous and asynchronous students in teacher presence, course design and materials, and peer engagement. A statistically significant relationship in respondent's perception

between age and peer engagement, age and course design and materials, as well as course load and peer engagement were also analyzed.

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In 2013, I received my master's degree in educational leadership. When I received the letter notifying me that I had passed my comprehensive exam, I called my dad to tell him that I had earned my degree. His response was, "Great, now when are you getting your doctorate?". I laughed and added that to my list of things to accomplish.

Now 10 years later, I am finishing my doctoral degree. There is nothing you can't accomplish when you put your mind to it (or your dad says you should). Like in most things, your dad is probably right. So first and foremost, I thank my dad for lighting this fire, I wish you were here to see it happen.

Next, I thank my husband and three kids for constantly asking if I am a doctor yet and why it's taking so long. You would be surprised how motivating it is to make this line of questioning stop! I have deep gratitude for my mom, Michel, and all her encouragement. I am grateful to both my mom and mother-in-law, Mary Jo, for flying to Seattle to babysit kids so that I could work. This would be impossible without you both.

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CHAPTER 1

INTRODUCTION

Remote or distance learning is defined as a way of studying in which students do not physically attend a school, college, or university. Rather they study from where they live while being taught over the internet (Linnes, et al., 2022). While the Covid19 pandemic increased distance education's necessity, online learning is not a new concept. The development of the personal computer transformed learning in the 1990s and online learning began to grow considerably in the 2010s. With increased consumer access to technology, more opportunities for distance education became available. Students today have more access to educational applications, devices, and online schooling. Although the options for online learning are more accessible, more access does not necessarily result in effective implementation or improved learning outcomes (Barbour, 2017; Neumann, et al., 2021). Universities see the need to keep online programs available to students. However, to ensure students are satisfied with their courses, colleges need information on what motivates students when learning remotely.

Distance education courses provide students with flexible learning opportunities. In the fall of 2020, some 75% (11.8 million) of all undergraduate students were enrolled in at least one distance education course, and 44% (7.0 million) of all undergraduate students exclusively took distance education courses. The number of undergraduate students enrolled in at least one distance education course was 97% higher in 2020 than prior to the pandemic in the fall of 2019 (11.8 million vs. 6.0 million). The number of undergraduate students exclusively enrolled in distance education courses was 186% higher in 2020 than in 2019 (7.0 million vs. 2.4 million) (NCES, 2022).

At the same time, universities throughout the United States are struggling to retain students. A decline of 3.2% in undergraduate enrollment in the fall of 2021 follows a similar drop of 3.4% the previous year, the first fall of the pandemic, according to research from the National Student Clearinghouse Research Center (2022). In hopes of retaining current students and recruiting new students, universities continue to offer online courses, including synchronous and asynchronous options, despite no longer facing social distance policies and mask mandates.

Distance learning has become popular to make educational opportunities accessible for a wide range of audiences, and this delivery approach offers flexibility in participating, ease of access, and convenience (Croxtton, 2014; Yamagata-Lynch, 2014). Universities are responding to this trend by providing more online courses that meet synchronously through an online platform such as Zoom or Microsoft Teams at an agreed-upon scheduled time, as well as asynchronous courses that allow students to complete work independently, never meeting live with peers or an instructor.

These formats, while providing more flexibility, present new challenges in teaching. It can be difficult to implement the same elements of quality teaching known to be effective in a face-to-face course in an online course. Even though colleges have the infrastructure for delivering education online, some challenges need to be addressed that are not due to the technical limitations, but rather to how students can adapt to the situation and make use of the systems provided by the institution (Gonzales, Sandness, & Fagerness, 2021). Elements of a strong course design include creating activities that require engagement in materials and discussions. Access to peers as well as the relationship with the instructor may be changed when learning online as well. These elements are all critical parts of meaningful learning experiences. Smittle (2003)

discusses Principles for Effective Teaching in developmental education, noting that “The guidelines suggest that good practices encourage student-faculty contact, promote cooperation among students, encourage active learning, give prompt feedback, emphasize time on task, communicate high expectations, and respect diverse talents” (p.10).

Instructors who have taught these elements in traditional courses that meet face-to-face may struggle to provide these same experiences online. A strong teacher presence often is different online. Instructors are not as naturally available for questions and response to student feedback promptly when it is sent over email rather than asked in class. It can be difficult to create a layout of the material for distance learning classes that is user-friendly while still creating an environment that promotes collaboration and community.

Remote learning activities, as with any teaching activity (including traditional learning), involve the reasoned and guided construction of knowledge through an interaction between instructors and students. Whatever the means through which teaching is exercised, the aims and principles do not change. Therefore, remote learning is proposed as a set of teaching methodologies and strategies aimed at creating a new learning environment that is capable of exploiting the potential of the web and multimedia (Linnes, et al., p. 3).

Online education programs are growing more popular. Studying what elements of online programs are working and what needs to be improved can help to retain and recruit students, as well as increase achievement. By determining what students perceive as effective, universities can put more emphasis on these elements to meet the needs of this growing population.

Problem Statement

Universities continue to embrace the surge in online course enrollment, but to retain students, it is necessary to understand what students perceive as effective in an online course. Elements of strong course design should be applied to online courses but need to be facilitated differently. “The implications for practice are that online courses require purposeful design not just for cognitive and behavioral engagement, but also for social, collaborative, and emotional engagement (Tualaulelei, et al., 2022, p. 200). Determining how to create courses with a strong teacher presence, opportunities for peer interactions, and course content that is clear and meaningful can help to create a sense of community in the university.

Understanding that these elements look differently in synchronous and asynchronous courses is one step in addressing students’ needs. Ultimately, college and university administrators, instructors, and course designers will provide online learning opportunities for students that are satisfying, promote deep and meaningful learning, and create environments in which students choose to persist (Croxtton, 2014). Courses in which students meet, even remotely, can provide a very different experience for students than those that are asynchronous. A student’s perception of what works in synchronous and asynchronous classes can give teachers the information needed to create effective online courses.

Purpose of the Study

Therefore, the purpose of this study was to explore the perceptions of graduate students in synchronous and asynchronous courses related to the university community, teacher presence, peer connection, and course content and materials.

Research Question

What are graduate students' perceptions of online synchronous and asynchronous courses related to teacher presence, peer connection, and course content and materials?

Design of the Study

To help gauge the individual views and experiences of graduate students in online courses, the Student Perception of Online Courses (SPOC) Survey was developed (See Appendix A). This survey measured student perceptions based on their experiences in online synchronous and asynchronous courses at the graduate level. The survey contains a spectrum of questions about teacher presence, connections with peers and community, and course content and materials. The survey uses a mix of multiple-choice questions, questions using a Likert scale of 5 points ranging from “never” to “always” and open-ended questions.

The survey was distributed electronically to all graduate students enrolled in online courses in the college of education at a Midwest metropolitan university. Students who consented to participate in the study had two weeks to complete the survey. Analysis of research questions was analyzed using percentages, means, and medians.

Theoretical Framework

Understanding how to apply elements of effective teaching to an online synchronous and/or asynchronous course is a study of student motivation—and the instructor use of motivating strategies. Using Maslow's Hierarchy of Needs can connect students' needs to elements of an online course. According to Maslow's theory, human needs form an “integrated hierarchy,” in which basic needs such as safety, belonging, connection, and self-esteem must be satisfied to a certain degree for one to move toward becoming all that one is capable of becoming: *self-actualization* (Maslow, 1998). When

students are given the tools to meet their needs, they achieve self-actualization which inspires motivation.

Figure 1. Maslow's Hierarchy of Needs (McLeod, 2022)



Abraham Maslow's concept of a Hierarchy of Needs was first introduced in 1943. This hierarchy focused on what made people happy believing that when these basic needs are met, people gain a sense of self-actualization. Self-actualization, Maslow theorizes, naturally develops a motivation to succeed. According to Maslow, individuals that are self-actualized have satisfied their basic needs enough that they are able to focus on growth, wholeness, and integration (Maslow, 1998).

Maslow's hierarchy is usually displayed as a pyramid. The base level of the pyramid is psychological needs; these are elements that are necessary for survival. This includes food water, breathing, and shelter. The next level is the need for safety or security, once a person's psychological needs are met, people then seek order or structure. The third level is social needs, which focuses on the feeling of belongingness or love. The final level before self-actualization is esteem, this is the desire for validation

and recognition. Finally, the top of the pyramid is self-actualization. Self-actualization occurs when all other needs are met.

Understanding how students are motivated to succeed can help university instructors to format classes that increase motivation through successful design and implementation. Strong courses can increase student enrollment, keep students engaged in course content and retain students in current programs at the university. This study examined the areas of course design and materials, teacher presence, and peer engagement to determine what elements students perceive as the most valuable.

Significance of Study

Focusing on students' perceptions of online courses helps to determine what students believe to be important in an online course. The information helps instructors align their teachings to meet the needs of their student population. Marcus Knowles (1980) created andragogy, the adult learning theory, which focuses on the motivation of adult learners. For example, as learners mature, they have a stronger self-concept, meaning adults are more driven and independent in how and what they choose to learn. Their personal and professional experiences have an impact on their education which increases their readiness to learn. Because adult learners are invested in their education, they are more likely to apply their learning to their experiences immediately. Adults want information that applies to their own lives. Listening to the voices of adult learners in university courses gives instructors valuable information on how courses can be developed to motivate adult learners.

The quality of online programs is based on student satisfaction and achievement. Universities that are looking to retain their current student population and grow future student enrollments should pay attention to what students feel is lacking and where

students feel successful. This information ensures a positive learning experience. “Education, particularly the higher education sector, is a key driver of economic growth. The latter is becoming an increasingly competitive market, and student satisfaction has become an important component of quality assurance” (Linnes, et al., 2022, p. 6). By using the information from The Student Perceptions of Online Courses survey, universities may be better able to determine student satisfaction with course design and materials, peer interactions, and teacher presence. This information could be used to determine what types of professional development are needed for instructors, what technologies are necessary, and how instructors can develop courses in which adult learners feel motivated and engaged.

Each year, teachers experience new challenges to refine and expand their teaching practices. Each year, teachers face new students with different learning needs. They strive to implement new technologies in their classrooms to accelerate learning. Benchmarks for student learning continue to change. New research on effective instruction is released. New colleagues and leaders join the faculty to support teaching practice and student learning. Systems of professional learning are the only way to ensure these challenges become opportunities to improve student and educator performance. (Killion & Hirsh, 2011, p 12)

The results of this study improve the effectiveness of distance education programs, by providing information for making course design and delivery more efficient and engaging for adult learners and determining what types of interactions students feel they are missing. Universities can use the information from the survey to design systems of professional learning to address areas of need highlighted in the survey results and to

help support the development of university policies and procedures that support online learners.

Organization of the Study

This study takes on the format of a five-chapter dissertation. The first chapter is the introduction which introduces the purpose of the study, operational definitions, and theoretical frameworks. The literature review covers online learning, course design and materials, teacher presence, peer interactions, and community. Following the literature review, Chapter 3 describes the subject selection, methods of data collection, statistical analysis, instrument selection, and ethical considerations. The results of the study are detailed in Chapter 4. The summary of the results and implications of the findings are in Chapter 5.

CHAPTER 2

REVIEW OF LITERATURE

Enrollment in online courses has continued to grow significantly since the Covid19 pandemic began in 2020. Universities see the benefits of continuing to offer online courses both for student and instructor convenience and affordability. Multiple degree options are now online in hopes of retaining students and increasing enrollment by recruiting out-of-state and non-traditional students. The challenge lies in replicating the face-to-face experience in an online synchronous or asynchronous course. Transferring instructors face to face knowledge and technique to classrooms that meet only virtually, or not at all, can be challenging.

This research study aims to understand the perception of graduate students on asynchronous and synchronous online courses at a Midwest metropolitan university in the College of Education, Health, and Human Services in the areas of course design and materials, teacher presence, and peer interactions. Understanding student perceptions of online courses in these areas helps instructors determine what motivates students. It also helps universities to develop professional learning opportunities and technology support for areas that need improvement. “Future practice and research should continue to explore where academic development should be situated in academic institutional systems so that it continues to be recognized and valued as an integral part of academic planning and decision-making” (O’Toole, O’Sullivan, O’Brien, & Costelloe, 2022, p. 210).

Elements of Effective Online Teaching and Learning

Elements of effective teaching continue to change with the additions of new technologies, student expectations, and diversity. Instructors are continuously learning

and modifying what works in classrooms to meet the needs of their current student population. At the university level, students expect to not only gain knowledge in their courses but also develop a professional network of peers. Students learn by engaging in discussions that promote critical thinking. Instructors work hard to develop courses that provide all these elements, but this can be a challenge for instructors, especially moving to online formats. Teachers who focus on continuously learning what motivates students will create courses that increase student collaboration and engagement while building student knowledge.

Student success depends on effective teaching — not just occasionally, but every day in every classroom and school. Effective teaching impacts students' academic, physical, social emotional, and behavioral well-being. Effective teaching occurs best when all education stakeholders, including parents, policymakers, community members, and educators, share responsibility for continuous improvement and student achievement. For teachers in classrooms, effective professional learning is the single most powerful pathway to promote continuous improvement in teaching (Killon & Hirsch, 2011 p.10).

Learning what motivates students helps to increase course engagement and promote learning. Teachers who use research and data to guide course content and activities provide students with a valuable learning experience that may increase their desire to continue. Creating opportunities for students to collaborate and develop tasks that promote the application of course content to real-life scenarios may result in more motivation and engagement from students. Gayeski (2007) discusses the importance of building connection through knowledge, not novelty, stating,

A knee-jerk reaction to merely infusing courses with multimedia and Internet resources may only lead to further disconnects with this generation. More powerful strategies will effectively build on their experiences, goals, family and peer support, and personal motivations, with technology as a given rather than as a contrived feature. (p.38)

Building on student backgrounds and experiences can naturally promote student interaction. Instructors who take time to learn about their students and engage in discussions that promote inclusivity continue to encourage positive relationships and a course community to increase motivation.

Adult learners expect their professional experiences and time to be respected and the course to be designed around professionals. Realistic timelines and multiple options for assignment formats and submissions allow students to connect deeper to content. Instructors understand that learners will have different learning styles, and they will require time to reflect and process the material and use the support of their peers. Successful courses include clear instructions and expectations for students with opportunities for collaboration and interaction. Designing courses to promote student engagement requires educator knowledge about the technology, their learners, discipline-specific content, and instructional design (Tualaulelei, et al., 2022).

Asynchronous and Synchronous Online Learning

Instructors can design courses differently based on the course delivery format. Although many elements of online courses are similar, the differences in synchronous and asynchronous delivery may play a role in how a course is formatted.

Students taking a synchronous online course meet live with their peers and an instructor remotely at an agreed-upon date or time. Students in synchronous courses can

interact immediately, receiving immediate feedback and engaging in live conversations. Lectures are typically delivered in real-time, and discussions can increase student engagement and learning, which allows students and instructors to interact and respond as well as build a sense of community (Matta Abdelmalak, 2015). Because students can instantly communicate with others, they are likely to feel less distanced from others.

On the other hand, some students in synchronous courses may not have enough time when working in a synchronous environment to reflect deeply on either the content or their peers' comments before they were required to make responses (Falloon, 2011). Some students may feel more anxious and less engaged in a synchronous course because they are not given enough time to contemplate their answers or reflect on the course content.

Asynchronous courses are delivered with the students and teachers never meeting together at the same time. Typically, weekly modules containing the lectures and assignments for an assigned topic are provided and students complete tasks individually. Asynchronous learning provides opportunities for reflection before responses which supports some students, but social interactions are not immediate which can frustrate others. Students also lack the opportunity to receive immediate feedback and interact with their peers and instructors in real-time (Francescucci & Rohani, 2019; Wang, 2008). While immediate interaction does not occur, asynchronous learning does offer more flexibility in that students are not required to be online at a specific time and students are allowed to complete their work at their convenience, creating self-directed learners.

Despite the course delivery method, The instructor will work to build content that meets the objectives of the course facilitating assignments and activities that promote engagement and collaboration and are user-friendly for students. Understanding the

perspectives of students on course delivery format allows instructors to create courses that address student needs and increase student motivation.

Teacher Presence

Being aware of student needs and making necessary adjustments to course content and activities is necessary to ensure students are engaged and motivated to learn. To accomplish this, instructors need to have an online presence. Students should feel as though the instructor is a vital resource in the course. Teachers with strong presence online should be easy to contact, and they should participate in discussions and offer timely feedback to students' questions and concerns. In a face-to-face course, instructors have the benefit of being physically present with students. Being face-to-face with an instructor can increase valuable discussions based on course content and questions. Side conversations between peers are more likely to occur without a mute/unmute button getting in the way. These scenarios can lead to positive peer relationships which increases student motivation. Being physically in the same room also allows for immediate feedback from both students and instructors. This allows for more flexibility in activities and assignments based on student needs and questions clarified faster.

In online courses, this immediacy is more difficult. Instructors work to create an online environment that promotes interactions. Instructors do these things by establishing their online presence. Richardson & Lowenthal (2017) discuss social presence as the first element of teacher presence, it is the ability “to project their personal characteristics into the community, thereby presenting themselves to other participants as ‘real people’” (Garrison, et al., p. 89). The second element, teaching presence, involves instructional management, building understanding, and direct instruction. Establishing instructional

management, building understanding, and providing direct instruction can be accomplished with a structured and user-friendly course design and quality materials.

Instructor social presence begins at the course design phase of an online course. Online courses reflect the design decisions of those designing the courses. Therefore, it is important, whenever possible, to design courses that reflect not only personality but most importantly instructional values (Dunlap & Lowenthal, 2013).

Instructors who provide insight into their personal and professional life experiences may make a deeper connection with their students. These connections are what make instructors more approachable, which leads to a strong online social presence. Combining social presence with instructional management and direct instruction can help to build an understanding of course content. Online instructors can accomplish this by providing specific and timely feedback on assignments and creating activities that promote critical thinking and real-world application.

Teacher presence does not stop at the design stage of a course, Communicating with students during a course is the strongest way that instructors can establish their instructor social presence. Instructors communicate with students in a variety of ways; for instance, they post announcements, send emails, take part in asynchronous and synchronous discussions, and they provide feedback and assessment. Each of these types of communication provides instructors an opportunity to establish their instructor social presence (Richardson & Lowenthal, 2017). Instructors who have established elements of a strong teacher presence will likely motivate students through the connection that is made in the interactions.

Effective Online Course Design and Materials

Incorporating these elements into an online course can be challenging. The

instructor needs to understand the technology and course delivery system to ensure student understanding of important elements of course content and maintain positive interactions. The online design of the course should be easy to use with materials and resources easily accessible. Course content should have multiple means for representation, allowing students to access course content in a variety of ways. The instructor should design activities and assignments that encourage collaboration with peers and the teacher to create opportunities for interactions and discussions.

Designing an effective course can take considerable time and effort for an instructor, and often unplanned changes in timelines and content occur based on the need of students and their experiences. Using data and assessments to determine learning needs can help drive instruction and ensure student success and motivation. Face-to-face curriculum cannot simply be transferred to an online format. Courses must be designed with flexibility using a variety of online mediums and organized sequentially from simple to complex in clear and concise steps. Student engagement can lead to a successful online learning experience when fit-for-purpose technology, quality instructional design, learner dispositions, and skills, and educator knowledge and pedagogies specific to online teaching converge (Buckingham Shum & Deakin Crick, 2012; Gedera, 2014; Langub & Lokey-Vega, 2017).

Building Positive Culture

Connecting with real people can be one of the most challenging parts of teaching and taking an online course. Interaction between peers to peers as well as peers to an instructor can be difficult to facilitate but is often seen as one of the most important parts of courses both in person and online. Instructors who create these opportunities will

likely see an increased sense of motivation in their students which will naturally promote course and content engagement.

Peer Interactions

To increase peer connections instructors should create opportunities for students to interact in a way that allows learners to improve their content knowledge and skills. Teachers who use multiple methods of communication with students can help to facilitate these interactions by increasing the chances for conversations and discussions around course materials. Meaningful learning through the reciprocal exchange of information and the sharing of ideas will keep students engaged and build professional relationships. These positive and frequent interactions carry to peers. Peer-to-peer interactions have been known to enhance the learning experience for students in a wide array of contexts, including online courses (Swain, Shofner, Fagan, & Marbach-Ad, 2022). Students who make connections to their peers in online courses are more likely to participate in discussions and share their own opinions, especially when they may differ from the majority. Technology-mediated courses such as those delivered in pure e-learning or hybrid learning modes allow students some flexibility in engaging in their courses in their own space and time (Holsapple & Lee-Post, 2006) and facilitate interactions otherwise not possible in traditional classrooms. Instructors who create opportunities for interaction and collaboration in online environments can likely see an increase in engagement and motivation in online courses.

Community

A student's sense of community is important to the learning process. Instructors who take the time to facilitate these interactions will increase course engagement and student motivation. Studies have connected students' experiences in learning

communities with positive learning outcomes, satisfaction with the learning experience (Neu, & Cleveland-Innes, 2008; Richardson & Swan, 2003; Moisey), and enhanced learning achievement (Overbaugh & Lin, 2006).

Finding a sense of community in online classes can be challenging. Access to university resources and networks of support such as online technical support, affordable internet options, software availability, and access to general health and mental health services can help students feel connected to their institution. These resources allow a student to feel supported by their university community. Garrison et al. (2000) believe that to form a community online, a sense of social presence is required among participants. Social presence is “the ability of participants in the community of inquiry to project their personal characteristics into the community, thereby presenting themselves to others as ‘real people’ (Garrison, et al., p. 94). Opportunities to increase peer interaction can help to establish this feeling. Facilitating discussions that respect differences in opinion and diversity of experiences are meaningful for students. Students who feel as though a true sense of themselves can be shown in a classroom can increase their social presence, increasing motivation and learning. Instructors who provide opportunities for collaboration and interaction can help students develop a sense of community.

Summary

Online learning continues to grow, especially at the university level. To retain current students and increase future enrollments in online programs, distance education courses need to be effective. Current studies show that a strong teacher presence, user-friendly course design, and being able to interact with peers, as well as the instructor, are valuable elements of online courses. Determining what aspects of the elements motivate

adult learners in online courses helps instructors to create effective online programs that meet students' needs.

CHAPTER 3

METHODS

Online courses are continuing to grow in popularity at the university level. To increase enrollment, retain current students and help students achieve, universities need to determine what students perceive as motivating when learning online. Research points to a strong teacher presence, opportunities for interaction, and a user-friendly course design that encourages students to engage and connect. “Ultimately, college and university administrators, instructors, and course designers need to provide online learning opportunities for students that are satisfying, promote deep and meaningful learning, and create environments in which students choose to persist” (Croxtton, 2014, p. 320).

To determine the perception of graduate students taking online asynchronous and synchronous courses, a cross-sectional survey focusing on course design and materials, teacher presence, peer engagement, and community was developed. This survey was distributed to graduate students in the college of education who are currently taking online classes, both synchronous and asynchronous. Surveys help researchers to develop trends, determine individual opinions, and identify important beliefs and attitudes (Creswell & Creswell, 2018). Determining what elements of online courses motivate adult learners provides instructors and universities with important information they can use to improve online course design and delivery.

Research Questions

Student perceptions were explored through a cross-section survey of current graduate students enrolled in online courses within the College of Education, Health and Human Services at a Midwest metropolitan university. The central question guiding this study was:

What are graduate students' perceptions of online synchronous and asynchronous courses related to teacher presence, peer connection, and course content and materials?

Sub questions included:

1. How positive are the perceptions of graduate students on the factors of course design and materials?
2. How positive are the perceptions of graduate students on the factors of teacher presence?
3. How positive are the perceptions of graduate students on the factors of peer interactions and community?
4. Do perceptions differ in asynchronous and synchronous courses?
5. Do graduate students' perceptions of online learning vary based on age, student status, gender, and the number of online courses taken?

Instrument

The survey, Student Perceptions of Online Courses (SPOC), contains a spectrum of questions about teacher presence, peer engagement, and course content, and materials. The survey used a mix of questions including questions with multiple answers, questions using a Likert scale of 5 points ranging from “never” to “always” and open-ended questions (See Appendix A).

The survey measured students' perceptions of asynchronous and synchronous courses in the areas of course design and materials, peer engagement, and teacher presence. Students who met this criterion and consented to be part of this study, completed the survey to determine their perceptions of online learning in asynchronous and synchronous online classes.

Participation was voluntary and consent was confirmed at the beginning of the survey. All students who consented to participate in the study began the survey by answering two multiple-choice questions. The first question asked students to mark areas that apply to why they participate in an online course, and the second asked which choice makes students less likely to participate in online courses.

The next block of questions includes 4 Likert scaled, and 4 short answer questions based on student experiences in online synchronous and asynchronous courses. Students completed the areas of the survey that best fit their experiences. If students took both asynchronous and synchronous courses, they completed the first section focusing on synchronous courses and then they completed the next section focusing on asynchronous courses.

The third section included two Likert-scaled questions and two short answer questions regarding university experience and resources and any additional information they would like to share with the researcher, including their contact information if they were willing to be contacted for further questions.

The final survey block included 6 multiple-choice questions regarding general demographics including age, gender, graduate department, degree, student status, and the number of online courses taken throughout their graduate experience.

The survey was developed with the assistance of fellow university instructors and marketing professionals to increase student likeliness to participate. The survey was piloted with graduate students from other university programs who have taken online courses at the graduate level. Multiple meetings with dissertation committee members were held to review and revise as needed. Finally, the survey was sent to members of the university community to receive more feedback and validation. Feedback from instructors with over 75 years of combined teaching experience, including a professor of sociology, an instructional design specialist from the university's Division of Innovative and Learning-Centric Initiatives, and an associate professor from the College of Information Science and Psychology provided guidance. Likert-scaled questions were reduced from 34 questions to a total of 20, and demographic information was added to allow for use in future research.

Participants and Procedures

Data was collected about the number and nature of graduate students taking online courses from the university's College of Education, Health and Human Services. The College includes two post-masters or doctoral programs in the areas of educational leadership and educational specialist, both 100% online. Master's programs are offered in educational leadership, literacy, special education, secondary education, and elementary education. Multiple concentrations and endorsements are offered in these areas, including leaders in instructional technology, and improvement in instruction.

While many courses in these programs are available online, students enrolled in these master's programs are also required to also take traditional, face-to-face courses as part of their plan of study. The college had 825 graduate students enrolled in graduate programs as of fall 2022. This number includes both online and traditional enrollment.

Graduate students from the education department of the university were chosen as the participants in this survey based on their experience in education. Students who have already received an undergraduate degree most likely have had a college experience. The varying experiences provide interesting insight into the similarities and differences students face in traditional and online courses. Graduate students are also already experienced in their field, they are looking to enhance their current profession, which means these learners expect a positive online experience. Effective teachers understand effective teaching. Their insight into areas of improvement can be valuable to instructors. A total of 116 graduate students, approximately 20% of students in this college taking online courses according to the Systems Intelligence and Data Analysis (SIDA) Department of the university, completed this survey. Most participants were female (86%), part-time students (68%) ranging in age from 21-50 years old.

Data Collection and Analysis

The survey, Student Perceptions of Online Courses (SPOC) was distributed and available to students during a 2-week window of time. Instructors in the college electronically distributed a link to the survey to graduate students currently enrolled in online courses, both synchronous and asynchronous through Canvas. All participants had taken at least one online course. Participation in the completion of the survey was voluntary, students provided consent to participate to begin the survey.

The survey used a mix of questions including questions with multiple answers, questions using a Likert scale of 5 points ranging from “never” to “always” and open-ended questions. The SPOC can be found in Appendix A.

Data was collected in Qualtrics. All data was collected anonymously. Analysis of the research questions 1-3 was completed using percentages, means, and median.

Demographic data in question 5 was analyzed through a ranked ANOVA. Open-ended questions were not analyzed as data but was used to interpret numerical responses from Likert scales in Chapter 5 conclusions.

Assumptions, Limitations and Delimitations

The SPOC survey focuses on students' perceptions, so an assumption was made that all respondents responded honestly to all items. The survey was conducted at one testing site in graduate programs in one college. As an exploratory study, this study does not compare and contrast specific graduate programs. There was not permission to compare programs.

CHAPTER 4

RESULTS

The purpose of this study was to examine graduate students' perceptions of online synchronous and asynchronous courses in peer engagement, teacher presence, and course design and materials. It further compared differences in synchronous and asynchronous courses and whether graduate students' perceptions differed due to student age, number of courses taken, student gender, and student status.

The SPOC survey was used to gather information from graduate students in the College of Education, Health and Human Services who were taking at least one online, synchronous, or asynchronous course. A total of 116 graduate students, approximately 20% of students in this college taking online courses according to the Systems Intelligence and Data Analysis (SIDA) Department of the university, completed this survey. Of those 116 participants, 86% were female and 56% were part time students. Participants ranged in ages from 21-51 years old. Three participants were over 60 years old. The survey link was posted as an announcement by instructors teaching online classes. Students who chose to participate completed the survey through an anonymous online link.

Part 1 of the SPOC consisted of two questions used to determine why students were more or less likely to participate in online courses. Students were given a list of options and options to write in an alternate answer.

Part 2 of the questionnaire consisted of questions regarding perceptions of peer engagement, teacher presence, course design, and materials in synchronous courses. Responses were recorded using a Likert scale ranging from *never* to *always*. Responses

were recorded on a Likert Scale ranging from *Never* to *Always*. An answer of *Always* received 5 points. An answer of *Most of the Time* received 4 points. An answer of *About half the time* received 3 points. An answer of *Sometimes* received 2 points. An answer of *Never* received 1 point.

Part 3 of the questionnaire focused on these same elements, peer engagement, teacher presences, and course design and materials in asynchronous courses. Students were given the option to complete both Part 2 and Part 3 if they had taken both synchronous and asynchronous courses or to complete only the part that applied to the courses they have completed, asynchronous or synchronous.

Part 5 of the survey asked students from both synchronous and asynchronous courses about their experience with the university community. This section focused on student knowledge of available university resources and events and student perception of the university community for online students. Part 6 of the survey solicited demographic information from the participant including age, gender, student status, number of online courses taken, and program.

Research Question #1 How positive are the perceptions of graduate students on the factor of course design and materials?

While the individual responses from participants ranged from 5 (*Always*) to 1 (*Never*), mean scores for each item ranged between 4.48 and 3.17 , suggesting positive perceptions. Data on the respondent's perceptions of course design and materials in synchronous courses ($n = 60$, $M = 4.21$, $SD = 1$) are displayed in Table 1. Data on the respondents' perceptions of course design and materials in asynchronous courses ($n = 71$, $M = 4$, $SD = 1$) are displayed in Table 2.

Research Question #2 How positive are the perceptions of graduate students on the factor of teacher presence?

The responses from participants ranged from 5 (*Always*) to 1 (*Never*), and items were mostly 4.0 *Most of the Time* or above, indicating positive perceptions. Data on the respondent's perceptions of teacher presence in synchronous courses, ($M = 4.25$, $SD = 1$) are displayed in Table 3. Data on the respondent's perceptions of teacher presence in asynchronous courses ($M = 3.84$, $SD = 1$) are displayed in Table 4.

Research Question #3 How positive are the perceptions of graduate students on the factors of peer interactions?

The individual responses from participants ranged from 5 (*Always*) to 1 (*Never*) and means ranged from 3.38 to 4.39 an overall positive response. Data on the respondents' perceptions of peer engagement in synchronous courses ($M = 3.50$, $SD = 1$) are displayed in Table 5. All synchronous responses were above 4.0, and several means of items in asynchronous responses were in the 3.0 *About Half the Time* response. Data on the respondents' perceptions of peer engagement in asynchronous courses ($M = 3.00$, $SD = 1$) are displayed in Table 6.

Research Question #4 Do perceptions differ in asynchronous and synchronous courses?

In the area of course design and materials, there was a significant relationship in the following statements:

- Assessments were a fair representation of what was being taught between synchronous ($M = 4.41, SD = 0.56$) to asynchronous ($M = 4.19, SD = 0.82$) ($p = 0.01, ES = 0.41$ large effect size).
- The course offered opportunities intended to build a sense of class community between synchronous ($M = 4.00, SD = 0.88$) to asynchronous ($M = 3.17, SD = 1.30$) ($p > 0.01, ES=0.83$ large effect size)
- The course provided activities that emulate real-world applications of the discipline such as experiential learning, case studies, and problem-based activities a significant difference was seen between synchronous ($M = 4.12, SD = 0.78$) and asynchronous ($M = 3.87, SD = 1.07$) ($p = 0.03, ES = 0.34$ moderate effect)

Data on course design and materials is displayed on Table 7.

In the area of teacher presence, a significant relationship was found between synchronous and asynchronous students in the following statements:

- I felt comfortable asking instructors for help and advice between synchronous ($M = 4.30, SD = 0.80$) to asynchronous ($M = 4.03, SD = 1.11$) ($p = 0.02, ES = 0.36$ moderate effect).
- The instructor showed genuine interest in individual students between synchronous ($M = 4.26, SD = 0.89$) to asynchronous ($M = 3.80, SD = 1.27$) ($p = <0.01, ES = 0.48$ large effect).

- Instructors motivated students to learn between synchronous ($M = 4.16$, $SD = 0.91$) to asynchronous ($M = 3.70$, $SD = 1.18$) ($p = >0.01$, $ES = 0.56$ large effect).
- My instructor created a feeling of community between synchronous ($M = 4.13$, $SD = 0.88$) to asynchronous ($M = 3.38$, $SD = 1.27$) ($p = >0.01$, $ES = 0.76$ large effect).
- Feedback on examinations and graded material was timely between synchronous ($M = 4.39$, $SD = 0.85$) to asynchronous ($M = 4.30$, $SD = 0.83$) ($p = 0.02$, $ES = 0.35$ moderate effect).

Responses from synchronous and asynchronous courses were compared using a Ranked ANOVA to determine whether values for one variable showed a significant relationship from another variable. Data on relationships between synchronous and asynchronous courses in the area of teacher presence is displayed on Table 8.

A relationship was noted between synchronous and asynchronous in the following statements related to peer engagement.

- I interacted with other students between synchronous ($M = 3.69$, $SD = 1.06$) to asynchronous ($M = 2.61$, $SD = 1.14$) ($p = >0.01$, $ES = 0.79$ large effect).
- *I was able to express my ideas and knowledge* between synchronous ($M = 4.02$, $SD = 0.98$) to asynchronous ($M = 3.74$, $SD = 1.13$) ($p = 0.01$, $ES = 0.39$ moderate effect).

- I felt I came to know other students in my courses between synchronous ($M = 3.18$, $SD = 1.09$) to asynchronous ($M = 2.26$, $SD = 1.13$) ($p = >0.01$, $ES = 0.85$ large effect).

- The course offered opportunities for learner-to-learner interactions in constructive collaboration between synchronous ($M = 3.59$, $SD = 1.00$) to asynchronous ($M = 2.83$, $SD = 1.33$) ($p = >0.01$, $ES = 0.64$ large effect).

Data on relationships between synchronous and asynchronous courses in the area of peer engagement is displayed on Table 9.

Research Question #5 Do graduate students' perceptions of online learning vary based on age, student status, and the number of online courses taken?

There was a significant relationship between age and course materials and design in asynchronous courses in the following statement:

- The course offered opportunities intended to build a sense of community ($p=0.043$, $ES= 0.42$). Students in ages 31-40 ($M = 2.76$) and 41-50 ($m=3.0$) ranked this lower than students in ages 21-30 ($m=3.42$) and 51-60 ($m=3.4$).

There was a significant relationship between age and peer engagement in asynchronous courses in the following statement:

- I desired more real-life interactions with other students ($p=0.002$, $ES=0.41$). Responses by age showed students ages 21-30 ($m=2.32$), ages 31-40

($m=3.19$), ages 41-50 ($m=2.13$), ages 51-60 ($m=2.20$) and older than 61 ($m=4.00$).

This information can be found in Table 11.

There is a significant relationship between course load and peer interaction for students in asynchronous courses ($p=0.01$, $ES=0.41$). Students taking 1-3 courses ($m=2.17$), and more than 6 courses ($m=2.68$) rank this less positive than those taking 4-6 courses ($m=3.40$).

A significant relationship was found between teacher presence and course load in synchronous courses ($p=0.04$, $ES=0.38$). Students taking 4-6 courses ($m=4.860$) ranked this are most positively, with students taking more than 6 next ($m=4.34$) and students taking 1-3 courses least positive ($m=3.86$). See Table 10.

Table 1*Descriptive Statistics for Students' Perception of Course Design and Materials in**Synchronous Courses (n = 60)*

	<i>M</i>	<i>SD</i>
The instructor(s) provided resources and instructions to help me navigate and understand Canvas.	4.23	0.88
I was able to navigate and understand the course modules and material.	4.30	0.67
Instructor presentations and lectures were presented in a manner that helped me learn.	4.20	0.75
I developed new skills based on the content of the course.	4.28	0.73
The assessments were a fair representation of what was being taught.	4.41	0.56
The course offered opportunities intended to build a sense of class community (ice breakers, meet your classmates, ask a question discussion forums).	4.00	0.88
The course provided activities that emulate real worked applications of the discipline, such as experiential learning, case studies, and problem-based activities.	4.12	0.78
I was able to provide descriptive feedback on course design, course content, course expectations, and ease of online learning.	4.14	1.03
Total	4.21	0.79

Table 2

Descriptive Statistics for Students' Perception of Course Design and Materials in Asynchronous Courses (n = 71)

	<i>M</i>	<i>SD</i>
The instructor(s) provided resources and instructions to help me navigate and understand Canvas.	4.20	0.91
I was able to navigate and understand the course modules and material.	4.48	0.65
Instructor presentations and lectures were presented in a manner that helped me learn.	4.13	0.84
I developed new skills based on the content of the course.	4.10	0.86
The assessments were a fair representation of what was being taught.	4.19	0.82
The course offered opportunities intended to build a sense of class community (ice breakers, meet your classmates, ask a question discussion forums).	3.17	1.30
The course provided activities that emulate real worked applications of the discipline, such as experiential learning, case studies, and problem-based activities.	3.87	1.07
I was able to provide descriptive feedback on course design, course content, course expectations, and ease of online learning.	3.89	1.13
Total	4.0	0.95

Table 3*Descriptive Statistics of Teacher Presence in Synchronous Courses (n = 60)*

	<i>M</i>	<i>SD</i>
I felt comfortable asking my instructor(s) for help and advice.	4.30	0.80
My instructor(s) showed genuine interest in individual students.	4.26	0.89
My instructor(s) motivated me to learn.	4.16	0.91
My instructor(s) created a feeling of community.	4.13	0.88
Feedback on examinations and graded material was timely.	4.39	0.85
Total	4.25	0.87

Table 4*Descriptive Statistics of Teacher Presence in Asynchronous Courses (n = 71)*

	<i>M</i>	<i>SD</i>
I felt comfortable asking my instructor(s) for help and advice.	4.03	1.11
My instructor(s) showed genuine interest in individual students.	3.80	1.27
My instructor(s) motivated me to learn.	3.70	1.18
My instructor(s) created a feeling of community.	3.38	1.27
Feedback on examinations and graded material was timely.	4.30	0.83
Total	3.68	1.13

Table 5*Descriptive Statistics of Peer Engagement in Synchronous Courses (n = 60)*

	<i>M</i>	<i>SD</i>
I interacted with other students.	3.69	1.06
I was able to express my ideas and knowledge.	4.02	0.98
I felt I came to know the other students in my courses.	3.18	1.09
I felt comfortable showing up as my authentic self.	3.72	1.01
I desired more real-life interactions with other students.	2.80	1.34
The course offered opportunities for learner-to-learner interactions in constructive collaboration.	3.59	1.00
Total	3.5	1.08

Table 6*Descriptive Statistics of Peer Engagement in Asynchronous Courses (n =71)*

	<i>M</i>	<i>SD</i>
I interacted with other students.	2.61	1.14
I was able to express my ideas and knowledge.	3.74	1.13
I felt I came to know the other students in my courses.	2.26	1.13
I felt comfortable showing up as my authentic self.	3.94	1.20
I desired more real-life interactions with other students.	2.60	1.34
The course offered opportunities for learner-to-learner interactions in constructive collaboration.	2.83	1.33
Total	3.0	1.21

Table 7

*Statistically Significant Relationships between Synchronous and Asynchronous Courses
in Course Design and Materials*

	<i>p</i>	<i>ES</i>
The assessments were a fair representation of what was being taught.	0.01	0.41
The course offered opportunities intended to build a sense of class community (ice breakers, meet your classmates, ask a question discussion forums).	<0.01	0.83
The course provided activities that emulate real world applications of the discipline, such as experiential learning, case studies, and problem-based activities.	0.03	0.34

Table 8

*Statistically Significant Relationships between Synchronous and Asynchronous Courses
in Teacher Presence*

	<i>p</i>	<i>ES</i>
I feel comfortable asking my instructor(s) for help and advice.	0.02	0.36
My instructor showed genuine interest in individual students.	<0.01	0.48
My instructor motivated me to learn.	<0.01	0.56
My instructor created a feeling of community.	<0.01	0.76
Feedback on examinations and graded material was timely.	0.02	0.35

Table 9

*Statistically Significant Relationships between Synchronous and Asynchronous Courses
in Peer Engagement*

	<i>p</i>	<i>ES</i>
I interacted with other students.	<0.01	0.79
I was able to express my ideas and knowledge.	0.01	0.39
I felt I came to know other students in my courses.	<0.01	0.85
The course offered opportunities for learner-to-learner interactions in constructive collaboration.	<0.01	0.64

Table 10

Perception variance between age, student status, and course load in Synchronous Courses

	Age	Student status	Course load
Course materials and design	$p = 0.12$ $ES = 0.60$	$p = 0.42$ $ES = 0.28$	$p = 0.52$ $ES = 0.26$
Teacher presence	$p = 0.44$ $ES = 0.36$	$p = 0.35$ $ES = 0.31$	$p = 0.04$ $ES = 0.38$
Peer engagement	$p = 0.47$ $ES = 0.47$	$p = 0.198$ $ES = 0.31$	$p = 0.13$ $ES = 0.29$

Table 11

*Perception variance between age, student status, gender, and course load in
Asynchronous Courses*

	Age	Student status	Course load
Course materials and design	$p = 0.043$ $ES = 0.36$	$p = 0.11$ $ES = 0.30$	$p = 0.08$ $ES = 0.35$
Teacher presence	$p = 0.64$ $ES = 0.33$	$p = 0.92$ $ES = 0.06$	$p = 0.64$ $ES = 0.361$
Peer engagement	$p = >0.01$ $ES = 0.41$	$p = 0.11$ $ES = 0.27$	$p = 0.01$ $ES = 0.41$

Table 12*Factors making students more likely to participate in an online course*

<i>Choice</i>	<i>Checked Percent</i>	<i>Confidence Interval</i>	<i>Checked Count</i>	<i>Sample Size</i>
<i>Flexible learning schedule</i>	87.7%	80.1% to 92.7%	93	106
<i>Convenience</i>	75.5%	66.5% to 82.7%	80	106
<i>Independence (allows me to go at my own pace)</i>	64.2%	54.7% to 72.6%	68	106
<i>Cost-savings (spend less on gas money, childcare, parking, etc.)</i>	65.7%	55.9% to 74.3%	65	99
<i>Course accessibility</i>	53.8%	44.3% to 63.0%	57	106
<i>Student centered teaching approaches</i>	24.5%	17.3% to 33.5%	26	106
<i>Diverse learning opportunities</i>	18.9%	12.6% to 27.4%	20	106
<i>Technology centered</i>	14.2%	8.8% to 22.0%	15	106
<i>Lack of face-to-face interactions</i>	7.5%	3.9% to 14.2%	8	106

Table 13*Factors making students less likely to participate in an online course*

<i>Choice</i>	<i>Checked Percent</i>	<i>Confidence Interval</i>	<i>Checked Count</i>	<i>Sample Size</i>
<i>Lack of face-to-face interactions</i>	63.0%	52.8% to 72.2%	58	92
<i>Technology centered</i>	22.8%	15.4% to 32.4%	21	92
<i>Independence (allows me to go at my own pace)</i>	13.0%	7.6% to 21.4%	12	92
<i>Diverse learning opportunities</i>	10.9%	6.0% to 18.9%	10	92
<i>Student centered teaching approaches</i>	9.8%	5.2% to 17.6%	9	92
<i>Course accessibility</i>	6.5%	3.0% to 13.5%	6	92
<i>Flexible learning schedule</i>	4.3%	1.7% to 10.7%	4	92
<i>Cost-savings (spend less on gas money, childcare, parking, etc.)</i>	4.7%	1.8% to 11.5%	4	85
<i>Convenience</i>	1.1%	0.2% to 5.9%	1	92

CHAPTER 5

CONCLUSIONS AND DISCUSSION

Online courses, both synchronous and asynchronous, are continuing to be a prominent method of course delivery at the university level. Determining what students perceive as effective in online courses can help instructors to develop courses that increase student engagement, retain current students, and increase new student recruitment. This study aimed to gain insight into the perceptions of graduate students taking online synchronous and asynchronous courses in the areas of course design and materials, teacher presence, and peer engagement. It further analyzed whether graduate students' perceptions of online learning vary based on age, student status, gender, and the number of online courses taken.

The following conclusions were drawn from the study.

Course Design

Significant barriers to learning can be addressed in how a course is designed. When asynchronous students were asked about barriers to their learning, 8 out of 20 students discussed that expectations were often unclear, and some students even felt as though they were “teaching themselves.” Six out of the 20 comments mentioned the lack of connection they felt in asynchronous courses as a significant barrier to online learning. One student stated, “...feeling disengaged and not knowing the professor or classmates very well, it’s hard to ask for help.”

Synchronous students also ranked course design and materials highly ($M = 4.21$). Students in synchronous commented that required check-ins with virtual meetings kept them accountable. Eight out of 21 comments stated that they liked the flexibility of the schedule but preferred to meet virtually to be able to ask questions and be sure they were

on the right track with their learning. One student stated, “The weekly or bi-weekly classes via Zoom have been great for accountability. I tend to struggle with asynchronous classes as I do not feel motivated because I am not meeting with the instructor on a regular basis.”

Synchronous students identified specific barriers to online courses, stating that scheduling online courses was often challenging, and it could be difficult to stay engaged for extended periods of time over zoom. Three out of 21 students stated that technology issues were often a barrier for learning and that they “miss the face-to-face connection with peers and staff.” One student stated, “It is very difficult to complete a master’s program and work full time as a teacher. The ‘in person’ (synchronous) classes mostly just reviewed what we needed to learn on our own. It felt very much like I was teaching myself. It was hard to build relationships with professors and feel like I was successful

Asynchronous courses had the highest positive perceptions in course design and materials ($M = 4.0$). Out of 20 comments from asynchronous students, 13 stated that working at their own pace was the most helpful to learning in an online class. Another student reported, “My current class gave specific instructions on researching information from the library. I am 26 years into teaching, and this is my second online class. I appreciate all the detailed instructions on what is expected from the instructor.”

Generally, overall perceptions of course design are positive, however students have identified significant barriers to their learning that can be addressed in how a course is designed. Explicit instructions and expectation on course tasks and assignments will help students to understand course requirements. Creating timelines for suggested task completion can help provide students guidance for work completion and allow them to stay on track for assignment or project deadlines. Increasing opportunities for instructor

and peer interaction within the course format can give students more opportunities for interaction and to ask questions and get help when needed.

Teacher Presence

Online courses need more positive teacher-to-student interactions. The results of this study showed that the overall perceptions of students in synchronous courses ($M = 4.24$) were higher than the perceptions of students in asynchronous courses ($M = 3.68$) in teacher presence. However, in both synchronous and asynchronous courses, students ranked the statements, “the instructor created a sense of community” synchronous ($M = 4.13$, $SD = 0.88$) to asynchronous ($M = 3.38$, $SD = 1.27$), “my instructor motivated me to learn,” ($M = 4.16$, $SD = 0.91$) to asynchronous ($M = 3.70$, $SD = 1.18$) and “my instructor showed genuine interest in individual students,” ($M = 4.26$, $SD = 0.89$) to asynchronous ($M = 3.80$, $SD = 1.27$) lowest in this section.

This emphasizes the need for more positive teacher to student interactions within asynchronous and synchronous courses. Out of 20 comments from students in synchronous courses, 8 of those focused on one-on-one interactions with the instructor and how time to meet individually with the instructor was beneficial to their learning. Students in asynchronous courses focused more on the need for timely responses to emails and feedback on assignments, emphasizing that weekends and evenings were the time they were most likely working, but this was also the time that instructors were unavailable for quick responses.

Understanding that being accessible to students through intentional interactions, especially when not meeting synchronously, can provide a buffer for the lack of face-to-face interactions. One student wrote that they “liked knowing that their instructor was a real person.” This highlights the number of times a course has lacked a presence or voice

from the instructor. Making time for teacher to student connection creates a sense of community and motivates students to work harder in their courses. Instructors who show students that they are genuinely interested in them as an individual positively impacts student motivation. This is reinforced in the research from Zilka et al., (2018), in which an active learning community created by the instructor through strong teacher presence greatly influenced the quality of the learning process and reduced transactional distance and increased students' sense of belonging.

Universities that promote the importance of teacher presence in their courses are likely to see an increase in engagement and motivation. Instructors that show their students they are listening through timely, specific, feedback, personal and professional connections to experiences, and valuing opinions and perspectives impacts how a student performs in a class.

Peer Interactions

Engagement. Peer engagement and interactions are lacking in online courses. Students' positive perceptions rank lowest in peer engagement in both synchronous ($M = 3.5$) and asynchronous ($M = 3.0$) courses. Both synchronous and asynchronous students felt that they did not come to know other students in their courses, and they desired more real-life interactions with other students (See Tables 5 and 6).

Understanding that opportunities for interactions are important to students requires instructors to focus on what types of interactions students feel are most valuable. Students in synchronous courses stated that break out rooms during Zoom meetings were the most valuable aspect of student interactions in 14 out of 20 comments followed by discussion boards in 5 out of 20 comments. Students in asynchronous courses indicated that typically the only interactions they had with other students was through discussion

boards. This was mentioned in 10 of 20 comments from asynchronous students. However, perceptions of discussion boards varied. One student stated “I really dislike message boards as they tend to be inauthentic. It is very difficult to build in any interactions to asynchronous courses.” Another student stressed this point stating, “I feel like answering and commenting on discussion questions did not engage students and did not facilitate thought provoking conversation.” One student noted that using discussion boards was a beneficial interaction, stating, “At the beginning of class, getting to know the other students was a positive interaction. I also enjoyed the discussion board and hearing the perspective of the other students and their knowledge.”

Meaningful peer interactions can be difficult especially when students do not meet synchronously. Implementing activities that include purposeful interactions with other students to express their ideas and knowledge is important to student learning and engagement. Teachers who encourage a learning community increase teacher and social presence, while those who lack a learning community maintain distance, reduce feedback, and create an increased feeling of transactional distance in students (Zilka, et al., 2018).

Student age and peers. While the sample was relatively small, it was interesting to notice that the perception of peer engagement varied dependent on age of the student. The students who craved peer interaction the least were ages 21-30 ($M = 2.32$), ages 41-50 ($M = 2.13$) and ages 51-60 ($M = 2.20$). This might be because younger students, those ages 21-30 have been exposed to technology the most. These students are used to interactions through text messages and social media and may not rely as heavily on face to face or live interactions. Students ages 41-60 have likely established a professional and personal community outside of their online courses, so having the connection inside the

course is not as important. It is likely that students in this age category do not crave the interaction as much because they are more focused on completing the work to gain their degree or certificate.

Students ages 31-40 ($M = 3.19$), and older than 61 ($M = 4.00$) ranked the need for interaction with peers higher. Students ages 31-40 are likely just beginning to feel confident in their current professional life and understand the value of networking and reflecting with peers. Gaining more insight into their profession by interacting and troubleshooting with professionals in similar situations can be a great benefit to each other. Three students older than 61 took this survey, approximately 4% of total participants. While it is important for all students to have a voice in this survey, due to this small number, any generalizations of this age group cannot be determined.

Course load and engagement. The results showed a significant relationship between course load and peer interaction for students in asynchronous courses ($p = 0.01$, $ES = 0.41$). Students taking 1-3 courses ($M = 2.17$), and more than 6 courses ($M = 2.68$) rank peer interaction less of a need than those taking 4-6 courses ($M = 3.40$). Students who are taking 4-6 courses may rank peer interaction higher because they are taking courses more than once with the same students, so they have more opportunities for interactions with the same people. One student stated they preferred it when they already knew a classmate, because they already had their contact information. Student taking 1-3 courses may not have as many opportunities with the same students, so they do not feel as comfortable interacting with new faces. They may also like be adjusting to online learning format and working through the technology and course expectations.

Age and course design. There was a significant relationship between age and course materials and design in asynchronous courses when asked if the course offered

opportunities intended to build a sense of community ($p = 0.04$, $ES = 0.42$). Students in ages 31-40 ($m=2.76$) and 41-50 ($m=3.0$) ranked this lower than students in ages 21-30 ($m=3.42$) and 51-60 ($m=3.4$). These results mimic those between age and peer engagement. Younger students tend to feel comfortable completing tasks and interacting virtually, while older students ages 41-60 may be more focused on the completion of their program and balancing their work and home life. Students ages 31-40 use the course to build connections and network to get ahead professionally.

Synchronous vs. Asynchronous

While overall perceptions of students in synchronous courses were higher than the perceptions of students in asynchronous courses, when asked whether students would choose synchronous or asynchronous courses in the future more students chose asynchronous (35%) over synchronous (19%), while 39% chose either.

Even though students perceive their synchronous experiences as more positive in teacher presence, course design, and peer engagement higher, convenience and flexibility of asynchronous courses is more powerful for retainment. Students value their time and ability to complete their work on their own schedule, even when it means that they may face significant barriers in their learning, such as a lack of interactions with teachers and peers.

When asked what factors make students more likely to participate in online courses, most students stated that flexible learning schedule (87%) was the reason most students were likely to take online courses, with convenience being the next most popular at 78%. Independence (64%), being able to complete the work on their own timelines, and cost savings (65%) were next. Diverse learning opportunities, student centered

approach, lack of face-to-face interactions and technology were also noted but considerably less significant at under 25% (See Table 12).

Flexibility and convenience are important to graduate students. Students taking graduate courses are more likely to be working a full-time job, many students are balancing family responsibilities with professional duties and having the ability to work during their free time and at their own pace is a significant perk of online coursework. That Thi Thai et al., (2020) state "...flexibility (FL) is defined as providing a choice to students as to when, where, and what to learn (Collis et al., 1997). The authors confirm that online environments—compared with face-to-face learning environments—offer better opportunities for increasing flexibility in time (when to study?), place (where to study?), and pace (progress in a student's learning process.)"

Students commented that saving money on parking fees, childcare and commute were also factors that make students choose online courses. Being able to complete the course work on their own schedule, watch lectures or read texts when it works for them is likely to make students more inclined to choose an online option.

Students state that they are less likely to take online courses because they missed the face-to-face options that are lacking in online courses (63%). This number was significantly higher than any other factors present (See Table 13). Students like to be able to interact not only with their peers but also with their teachers. Personal connections and authentic discussions are valuable to the learning experience. Students feel valued when they are able to make genuine connections with teachers and peers. Twenty two percent of students stated that the course being technology centered made them less likely to participate in online courses. Technology can be intimidating for some

learners, and others may feel that they already spend too much time in front of a screen or at a desk and prefer in-person options.

While it is impossible to meet the needs of every student all the time, it is important to understand why students are choosing to complete their coursework in an online environment, and what about their online experiences makes them choose to return. Providing this information to a university can help to improve current online programs by ensuring that instructors are designating more time for students to engage with each other.

Realizing that a significant number of students feel intimidated by the technology requirements of an online course means universities need to promote technology support options to students. This could include introductory sessions or an online course open house to go over technology requirements and general expectations of online courses. These introductions should outline the resources and supports available to online students while offering time to explore ask questions. Being purposeful about providing resources and looking for ways to support students will increase student likeliness to enroll.

Discussion

Flexibility over quality. This research suggests that conclusions can be drawn from the responses of the individuals involved in the study and some suggestions for further study. First, the results of this study clearly indicate that student perceptions of online courses are more positive in synchronous courses in the areas of course design and materials, teacher presence, and peer engagement; however, more students are either equally or more likely to choose asynchronous courses when given the option. While this seems counterintuitive, what it tells universities is that students value convenience and

flexibility over quality of content. One student comment emphasizes this point by saying, “I know that I learn better in a synchronous environment. But as an adult who works full time, I am not willing to give up what little free time I have to go back to school. Online classes are not just a good compromise by allowing me to skip transit and complete my work at flexible times, they are also the only option I will entertain.” The goal for universities should be to give students both, the convenience and flexibility of an online course with quality content, and the positive interactions that students feel they are currently missing in online courses.

Meeting motivational needs. Connecting the research from this study with Maslow’s hierarchy of needs provides a framework for student success in online courses. Maslow theorizes that students must have satisfied one need before being able to move on to another to gain esteem and self-actualization. This same philosophy can be applied to factors that represent an online course. Students must have a strong base knowledge in one area before they are able to move through the hierarchy to achievement. All three are necessary to reach achievement, however students must be confident in the bottom factor before being able to continue to the next. This idea is represented in Figures 2 and 3, connecting student perceptions of online asynchronous and synchronous courses to Maslow’s hierarchy of needs. Asynchronous and synchronous courses have a different hierarchy as student perceptions differ.

Figure 2 Achievement in Asynchronous Courses

Students in asynchronous courses perceptions were the most expressive of their needs in the area of course design and materials. Course design and materials sets the foundation for achievement in asynchronous courses. This satisfies students physiological need in that it is the most fundamental, students know that they can always refer back to specific areas in the course when something is unclear. It is the food and water of asynchronous courses. Students need to be able to navigate the course easily through video introductions, clear instructions on how the course will be run including explicit information on student expectations and grading rubrics. Without a clear understanding of how their online asynchronous course will function, students will not be able to progress to further stages of achievement.

Once students have built a solid foundation in understanding the structure and the content of the course, they are able to move to the safety level, which in an asynchronous course is teacher presence. An instructor creates a strong presence by having a voice in the classroom through video lectures and reflections, taking time to personally interact with students through emails and feedback and creating an environment that feels

supportive to the learners. At this stage students understand the course expectations and they are able to connect with the instructor to ask questions and clarify information. This interaction with the teacher is the safety net, a place to fall back on if they are not able to find that information in the course content.

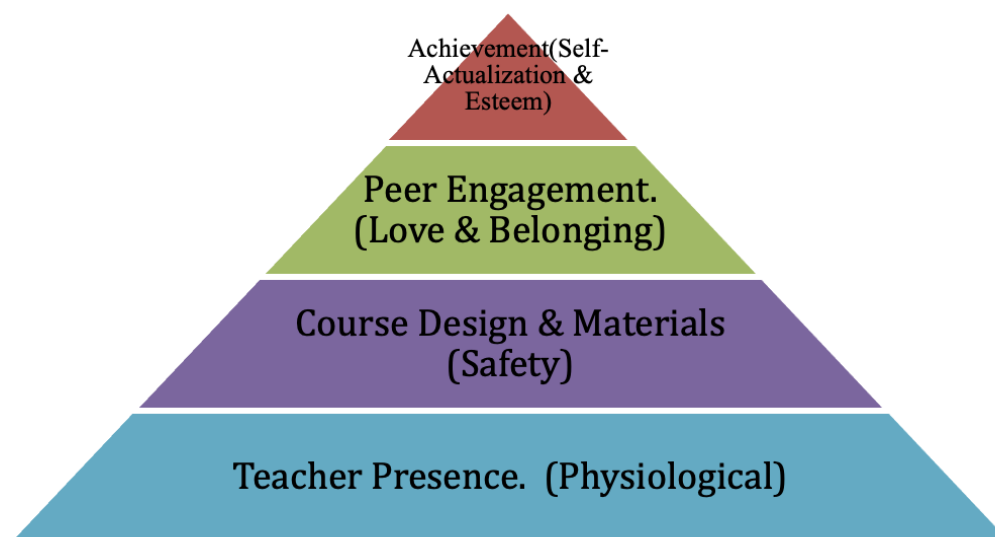
These two stages are flipped in synchronous courses. The physiological needs are met through teacher presence. Students know that they will be meeting with their instructor first in a scheduled synchronous meeting. They will be walked through the important elements of the course by the instructor including how the course is run, what is expected from the students and how assignments will be graded. Students have the added benefit of asking questions live and getting immediate answers. When in doubt, students know that they have another scheduled time set with the instructor to clarify anything as the course progresses.

When students feel supported and connected with their instructor they are ready to move on to the next level of the synchronous pyramid in which they become familiar with the course structure. Course design and materials meets the safety need in synchronous classes. Because students have designated times to meet with the instructor to fall back on, course design is not as important as it is in a synchronous course. Students still need strong course design to understand what is expected of them and to access the content, but synchronous students have the benefit of live lectures and task explanations that asynchronous students do not have. Once a student feels supported by the instructor they are able to dive into the course content with the understanding that the instructor is there for questions or clarification as needed at the next meeting.

Once the first two needs are met in both synchronous and asynchronous courses, students are ready to engage with their peers. Providing opportunities to share their

insights through meaningful discussions and collaborating on group projects or presentations satisfies the need for belonging and love. It is in this final step of the pyramid where achievement occurs through the feeling of esteem and self-actualization. Students feel confident sharing their content knowledge and experiences with peers, and as a result they have developed a higher level of engagement in the course. It is the connection of all three elements that motivate students, but one cannot happen without first building the foundation.

Figure 3 Achievement in Synchronous Courses



Implications for Practice

Understanding the differences between synchronous and asynchronous courses can help professors meet student needs in all aspects of online courses. While convenience and flexibility rank high in a students' reasons for choosing an online course, it is clear that if a student is choosing to enroll in a graduate program, they are also expecting to learn. One student stated, "I appreciated classes in which I was given real-life application assignments instead of busy work...this provided information that I could take directly back to the classroom and use immediately." Students are enrolled in

graduate level courses because they are looking for ways to improve their professional practice, and it is an instructor's job to guide them through the levels of achievement.

This study states asynchronous and synchronous students learn differently and because of this, instructors need to have a strong knowledge base of these differences to develop accessible and inclusive courses. Incorporating elements of universal design for learning to highlight strategies for effective comprehension of content by activating background knowledge through media or lectures. Focusing on big ideas to ensure clear understanding of the material is important for students to be successful when most of the learning happens on students' own time. Optimizing choice, not only in how students access the content but also how they can deliver their assignments, also supports all types of learners by allowing them to choose how they best access the material to increase their understanding. General accessibility options including closed captioning and appropriate course labels on all materials such as documents, tables and rubrics is also important to support learners with disabilities, such as vision or hearing impairments. "The UDL guidelines, used as part of an instructional design process, provide a structure to proactively design flexible pathways and provide options that can support all learners" (Rao, 2021 p.1). One student emphasizes this point by stating it was beneficial to student learning when instructors provided "variation, I think my professors were willing to try different activities and ideas to increase participation and understanding."

Having a strong teacher presence provides a layer of support and connection that can drive achievement. Polansky-Brock (2020) discusses the importance of instructors becoming a warm demander. Having conversations that infuse warmth and caring but also are assertive and intentional to ensure students understand you hold them to a high standard and want them to succeed. Video lectures that infuse real life application and

situations can provide opportunities for students to create a connection, especially if they have been in or are experiencing a similar situation. Short reflections on progress and video feedback on individual assignments provides more intentional connections that helps to make students feel supported. It is this level of purposeful connection that will move students to achievement.

Students in both synchronous and asynchronous courses stated it was easy to disengage or found it hard to engage because they did not feel they had made any connections with the material, instructors, or other students. One student stated simply, “I lacked motivation because the connection is not there with the class and instructor.” In order to achieve, students need to make the connection between the course and real people. Humanizing online learning can help create the positive interactions and “real” connections.

While discussion boards are often the norm for peer interaction, especially in asynchronous courses, students do not feel this is an authentic way to connect. For a more humanized online learning and teaching experience, activities should support significant class engagement using available digital tools. Just as with face-to-face classes, students and instructors will need to make time for class discussions and get to know each other. Instructors can create interactive and interesting lectures and media, intriguing questions that motivate deep thinking, individualized responses, and feedback to student work that considers their situation and how to best help them succeed (Warren, 2021, p.2).

Using student presentations to teach portions of course content showcases student’s knowledge and expertise and could naturally promote interaction when students have had similar experiences or want to ask questions. Projects that encourage

collaboration and opportunities for peer feedback promote positive interactions and naturally explore the course content. Students stated they wanted more assignments that were relevant to their profession, either providing a resource to be used or simply more information that could be used to support them in their current positions. Creating multiple opportunities for engagement promotes learning and increases the likeliness for achievement.

Recommendations for Further Research

This study was limited to those individuals enrolled in one college of a Midwest metropolitan university. A recommendation for further research would be to conduct a statewide or university-wide study. By expanding the survey population, the study could look at a broader scope of students and their experiences in different colleges and departments including synchronous, asynchronous, hybrid, and face to face.

It would also be important to find out the perceptions of instructors on the factors of course design and materials, teacher presence and peer engagement. Understanding instructor perceptions could give a new insight on what elements instructors are comfortable implementing and what feels difficult or too challenging to begin. This information could be combined with what areas of professional development best address the areas of course content and materials, teacher presence, and peer engagement in both synchronous and asynchronous courses. Do perceptions differ in courses that have completed specific professional development designed to address these concerns?

Summary

Online learning will continue to increase in popularity due to the flexibility and convenience this mode of learning provides. The challenge will be to keep the quality of courses high so that students do not feel they are missing elements of a quality course

because it is online. Expectations of online courses cannot be the same as face-to-face courses because they simply are not face to face. Online courses are structured differently than in person courses, and synchronous courses are structured differently than asynchronous courses by design. By doing this the instructor can effectively meet the differing needs of students in each type of course. Universities that focus on accessible course design including real world application of content and meaningful teacher and student interactions will likely retain students because they will feel successful in their achievement in any course.

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Appendix A

Student Perception of Online Courses

Survey Flow

Block: Online Learning (3 Questions)

Standard: Synchronous (8 Questions)

Standard: Asynchronous (8 Questions)

Standard: All (4 Questions)

Standard: Demographics (7 Questions)

Block: (0 Questions)

Start of Block: Online Learning

Q1

Informed Consent to Participate in Research Study

Title: Student Perception of Online Synchronous and Asynchronous Classes in the College of Education, Health and Human Services at The University of Nebraska at Omaha

Researcher: Sara Caniglia Schulte, Educational Leadership

You are invited to take part in a dissertation research study. This study is being conducted to determine graduate students' perceptions of online learning in both synchronous and asynchronous courses at The University of Nebraska at Omaha. It includes questions about interactions with your instructor and other students, as well as the accessibility of course content and a sense of community. All data is collected anonymously. Most participants can complete

this questionnaire in about 10 minutes, although individual progress will vary by how quickly you move through the questions.

You may decide not to complete the questionnaire for any reason at any time without a consequence of any kind. Your participation and responses to the questionnaire indicate your consent to participate in the study

PURPOSE OF THE STUDY

The purpose of this study is to explore the perceptions of graduate students in online synchronous and asynchronous courses related to the university community, teacher presence, peer connection, and course content and materials.

POTENTIAL BENEFITS TO SUBJECTS AND/OR SOCIETY

You may have the opportunity to reflect on your experiences as a student, which may enhance self understanding. Additionally, your responses to the survey will directly benefit your university and may benefit future generations of students.

POTENTIAL RISKS AND DISCOMFORTS

You may be uncomfortable answering some survey questions or may simply prefer not to answer some survey questions. Your participation in this study is strictly voluntary, and you will be under no obligation whatsoever to answer any questions you are not inclined to answer. You may choose not to answer any specific questions you do not want to answer and still remain in the study.

CONFIDENTIALITY

This survey is anonymous. The instrument does not collect any personally identifying information. The survey does ask respondents for permission to retain their email addresses for potential follow-up surveys. Only if the respondent explicitly and voluntarily answers “yes” and provides their email will the researcher retain this information. Please note that your responses will be used for research purposes only.

RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights, or remedies because of your participation in this research study.

Questions about the research: contact Sara Caniglia Schulte, scanigliaschult@unomaha.edu

I consent to the use of my data in this research (1)

Skip To: End of Block If Informed Consent to Participate in Research Study Title: Student Perception of Online Synchrono... != I consent to the use of my data in this research

Q2 Asynchronous and Synchronous online courses are prominent in many universities.

Asynchronous delivery means you can access your course and content virtually at any time and at your convenience. Students can log in and complete coursework as their schedule allows. Note that assignments may have due dates weekly or monthly depending on the course.

Synchronous delivery means you will be required to connect in real time at instructor-specified dates and times. This is often done through Zoom, but your instructor may use many methods to interact with you and your classmates. Synchronous delivery may also be called "live" or "real-time" instruction.

In order to understand why students are choosing online courses, this survey will ask you to think about your own experiences with online classes at UNO and which elements of your courses have been meaningful or may have created challenges

In your opinion, which of these makes you MORE likely to participate in an online course?

Mark all that apply.

Flexible learning schedule (1)

Convenience (2)

Course accessibility (3)

Diverse learning opportunities (4)

- Student-centered teaching approaches (5)
- Independence (allows me to go at my own pace) (6)
- Lack of face-to-face interactions (7)
- Technology centered (8)
- Cost-savings (spend less on gas money, childcare, parking, etc.) (11)
- Other (Please specify) (9)
-
- Other (Please specify) (10)
-

Q3 In your opinion, which of these makes you LESS likely to participate in an online course?

Mark all that apply.

Flexible learning schedule (1)

Convenience (2)

Course accessibility (3)

Diverse learning opportunities (4)

Student-centered teaching approaches (5)

Independence (allows me to go at my own pace) (6)

Lack of face-to-face interactions (7)

Technology centered (8)

Cost-savings (spend less on gas money, childcare, parking, etc.) (11)

Other (Please specify) (9)

Other (Please specify) (10)

End of Block: Online Learning

Start of Block: Synchronous

Q4 For the next questions, refer to your experiences in online courses where the content was delivered **SYNCHRONOUSLY**.

Synchronous delivery means that you are required to connect in real-time at instructor-specified dates and times. This is often done through Zoom, but there are many methods your instructor may have chosen to interact with you and your classmates. Synchronous delivery is also sometimes called "live" or "real-time" instruction.

In the event you have taken more than one online synchronous course at UNO, try to answer these questions about your experience with these courses overall. You may have had different

experiences with different instructors and/or courses, but think of your general feelings about online synchronous course delivery.

I have taken online SYNCHRONOUS courses. (1)

I have NOT taken online SYNCHRONOUS courses. (2)

Skip To: End of Block If For the next questions, refer to your experiences in online courses where the content was deliver... != I have taken online SYNCHRONOUS courses.

Q5 Consider your experiences with online **synchronous** courses and how you were able to engage with other students.

	Never (1)	Sometimes (2)	About half the time (3)	Most of the time (4)	Always (5)
I interacted with other students. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was able to express my ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

and knowledge.

(2)

I felt I came to
know the other
students in my
courses. (3)

I feel
comfortable
showing up as
my authentic
self. (8)

I desired more
real-life
interactions with
other students.

(9)

<p>The course offered opportunities for learner-to-learner interactions in constructive collaboration.</p> <p>(10)</p>	○	○	○	○	○	○	○	
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Q6 What types of student interactions and/or experiences were the most valuable to your learning in a **synchronous** course?

Q7 Consider your experiences and interactions with your instructors in your online **synchronous** courses.

	Never (1)	Sometimes (2)	About half the time (3)	Most of the time (4)	Always (5)

I felt comfortable
asking my
instructors for
help and advice.
(1)

My instructors
showed genuine
interest in
individual
students. (4)

My instructor
motivated me to
learn. (5)

My instructor
created a feeling
of community.
(6)

Feedback on
examinations
and graded
material was
timely. (9)

Q8 What types of interactions with your instructor do you feel were the most beneficial to your learning in a **synchronous** course?

Q9 The following questions focus on course content and materials in a **synchronous** course.

	Never (1)	Sometimes (2)	About half the time (3)	Most of the time (4)	Always (5)
The instructor provided resources and instructions to help me navigate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

and understand
Canvas. (1)

I was able to
navigate and
understand the
course modules
and materials. (2)

Instructor
presentations and
lectures were
presented in a
manner that
helped me learn.
(3)

I developed new
skills based on
the content of the
course. (5)

The assessments
were a fair
representation of
what was being
taught. (10)

The course
offered
opportunities
intended to build
a sense of class
community (ice
breakers, meet
your classmates,
ask a question
discussion
forums). (11)

The course provided activities that emulate real-world applications of the discipline, such as experiential learning, case studies, and problem-based activities. (12)	O	O	O	O	O
I was able to provide descriptive feedback on course design, course content, course expectations, and ease of online learning. (14)	O	O	O	O	O

Q10 What has been most helpful to your learning in an online **synchronous** course?

Q11 What has been the most challenging to your learning in an online **synchronous** course?

End of Block: Synchronous

Start of Block: Asynchronous

Q12 For the next questions, refer to your experiences in online courses where the content was delivered **ASYNCHRONOUSLY**.

Asynchronous delivery means you could access your course and content virtually at any time and at your convenience. Coursework could be completed as your schedule allowed. Assignments usually had weekly or monthly due dates depending on the course.

If you have taken more than one online synchronous course at UNO, try to answer these questions about your experience with these courses overall. You may have had different experiences with different instructors and/or courses, but think of your general feelings about online asynchronous course delivery.

I have taken ASYNCHRONOUS online courses. (1)

I have NOT taken ASYNCHRONOUS online courses. (2)

Skip To: End of Block If For the next questions, refer to your experiences in online courses where the content was deliver... != I have taken ASYNCHRONOUS online courses.

Q13 Consider your experiences with online **asynchronous** courses and how you were able to engage with other students.

	Never (1)	Sometimes (2)	About half the time (3)	Most of the time (4)	Always (5)
I interacted with other students. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was able to express my ideas and knowledge. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I came to know the other students in my courses. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt comfortable showing up as my authentic self. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I desired more real-life interactions with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

other students.

(9)

The course
offered
opportunities for
learner-to-learner
interactions in
constructive
collaboration.

(10)

Q14 What types of student interactions and/or experiences were the most valuable to your learning in an **asynchronous** course?

Q15 Consider your experiences and interactions with your instructors in your online **asynchronous** courses.

	Never (1)	Sometimes (2)	About half the time (3)	Most of the time (4)	Always (5)
I felt comfortable asking my instructor(s) for help and advice. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My instructors showed genuine interest in individual students. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My instructor motivated me to learn. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

My instructor
created a feeling
of community.

(6)

Feedback on
examinations
and graded
material was
timely. (9)

Q16 What types of interactions with your instructor do you feel were the most beneficial to your learning in an **asynchronous** course?

Q17 The following questions focus on course content and materials in an **asynchronous** course.

	Never (1)	Sometimes (2)	About half the time (3)	Most of the time (4)	Always (5)
The instructor provided resources and instructions to help me navigate and understand Canvas. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was able to navigate and understand the course modules and materials. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instructor presentations and lectures were presented in a manner that helped me learn. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I developed new skills based on the content of the course. (6)

The assessments were a fair representation of what was being taught. (10)

The course offered opportunities intended to build a sense of class community (icebreakers, meet your classmates, ask a question, discussion forums). (11)

The course provided activities that emulate real-world applications of the discipline, such as experiential learning, case studies, and problem-based activities. (12)	O	O	O	O	O
I was able to provide descriptive feedback on course design, course content, course expectations, and ease of online learning. (14)	O	O	O	O	O

Q18 What has been most helpful to your learning in an online **asynchronous** course?

Q19 What has been the most challenging to your learning in an online **asynchronous** course?

End of Block: Asynchronous

Start of Block: All

Q20 Consider how your experiences with online learning at UNO relate to your experience as a student of UNO.

	Never (1)	Sometimes (2)	About half the time (3)	Most of the time (4)	Always (5)
I felt part of the UNO community. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was made aware of student resources available to me (tutoring, counseling and psychological services). (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UNO works to create an inclusive experience for online student learning. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I was able to
expand my
professional
network through
connections
made in online
courses. (4)

The courses
provided access
to learner success
resources for
online learning
(tech help,
orientation). (5)

Q21 If given the choice, would you choose asynchronous or synchronous learning for future online courses?

Asynchronous (1)

Synchronous (2)

Either (4)

Neither (5)

Q22 What else do you want the researcher to know about your experiences with asynchronous or synchronous online learning?

Q23 If you would be willing to provide further information about your perspective on online synchronous or asynchronous learning, please include your email address.

All contact information will remain anonymous.

End of Block: All

Start of Block: Demographics

Q24 How many online college asynchronous and/or synchronous courses have you taken at UNO?

1-3 (1)

4-6 (2)

More than 6 (3)

Q25 Is the online course you are currently taking a required course to earn a degree and/or certification?

Yes (1)

No (2)

Q26 What is your age?

21-30 (1)

31-40 (2)

41-50 (3)

51-60 (4)

61 + (6)

I prefer not to answer. (5)

Q27 To which gender identity to you most identify?

Male (1)

Female (2)

Non-binary / third gender (3)

Prefer not to say (4)

Q28 Do you plan to continue taking online courses at UNO?

Yes (1)

No (2)

Undecided (3)

Q29 Which best describes your student status?

Part time student (1)

Full time student (2)

Q30 In which department are you currently taking online courses?

Literacy (1)

Educational Leadership (2)

Special Education (3)

Elementary Education (4)

Secondary Education (5)

Other (Please Specify) (6) _____

End of Block: Demographics

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