A Case Study of Student Perceptions of Online Course Design Features and Success in a Bachelor of Health Sciences Program

Jennifer Hatfield

Submitted to the faculty of the School of Education

in partial fulfillment of the requirements

for the degree

Doctor of Education

In the Department of Instructional Systems Technology

Indiana University

October 2023

Accepted by the School of Education Faculty, Indiana University, in partial fulfillment of the requirements for the degree of Doctor of Education.

Doctoral Committee

_____

Thomas Brush, PhD

_____

Gamze Ozogul, PhD

_____

Kyungbin Kwon, PhD

Date of Defense

September 28, 2023

Acknowledgements

I would like to extend my deepest appreciation and gratitude to all who have guided me on this journey through its completion.

First and foremost, I'd like to thank my advisor, Dr. Thomas Brush, for his support, guidance, and encouragement. His constructive feedback, insight, and expertise were instrumental in the quality of my dissertation. Dr. Brush was especially helpful and supportive during the period when life had to take precedence over my dissertation timelines. His kindness will never be forgotten.

I am grateful to the members of my dissertation committee, Dr. Gamze Ozogul and Dr. Kyungbin Kwon who not only provided valuable insight and suggestions but also their time.

I extend my gratitude to the participants of my study who contributed their time to my research. Their willingness to share their experiences allowed me to gain valuable insight into online course design and will positively impact the students in the Vera Z Dwyer College of Health Sciences.

My appreciation also extends to my colleagues, past and present, who have provided invaluable support and encouragement through challenging times personally, professionally, and worldly. Their words of encouragement and check ins kept me focused and progressing to the finish line.

Finally, I am deeply thankful to my family who provided unwavering support throughout this journey. Specifically, my son, Nicholas who not only helped to keep my stress levels in check but who was also a phenomenal proofreader.

Jennifer Hatfield

A Case Study of Student Perceptions of Online Course Design Features and Success in a Bachelor of Health Sciences Program

Asynchronous online courses have often been a challenge regarding student success. This case study aims to examine student perceptions of course design features that are viewed as most or least helpful in three required asynchronous online courses in the Vera Z Dwyer College of Health Sciences at Indiana University South Bend. Thus, the research questions are (1) Which course design features do students identify as the most effective for supporting their learning in an online course? and (2) What aspects of an online course do students perceive as most and least beneficial to their success? To obtain information about course design features a survey was disseminated via Qualtrics to five asynchronous online courses in the College of Health Sciences. Results showed that students found elements of course organization to be the most helpful in their success.

_____

Thomas Brush, PhD

_____

Gamze Ozogul, PhD

_____

Kyungbin Kwon, PhD

Table of Contents

Chapter 1: Introduction

The popularity of online courses in higher education was on the rise prior to the COVID-19 pandemic and exponentially increased after universities and colleges across the country moved to emergency online course delivery during the 2020-2021 academic year. Over time students began to see the benefits of online courses, and sought them out more frequently, but they often did not perform as favorably in online courses as they did in their face-to-face courses. This higher attrition rate in online learning has historically been thought to be due to students' lack of time and motivation (Kim & Frick, 2011). Through recent research however, we know that it is also occurring because students expect the online experience to be the same as their face-to-face courses. In turn, faculty expect students to arrive in their online courses with a high degree of self-regulated learning skills and haven't felt the need to design their online courses in a way to support the development of self-directed learning necessary for online course success (Tualaulelei, Burke, Fanshawe & Cameron, 2021). Additionally, the lack of continuity present in online courses within degree programs affects the students' engagement further impacting their ability to adapt and thus succeed in the online environment (Yan, Zhang & Lam, 2022).

While best practice rubrics for online learning have shown that certain course features in the online environment are believed to enhance student engagement and success, much of this information focuses on the views of the instructor or designer and not the students themselves (Adair, 2014). The student voice is now more important than ever since the demand for quality online learning has increased in the post COVID-19 emergency online instruction world (Yan,

Zhang & Lam, 2022). This paper will focus on the student voice and how impactful it can be for instructors and designers when designing or updating online courses.

Problem Statement

The Vera Z Dwyer College of Health Sciences (VZDCHS) is housed within Indiana University South Bend (IUSB), a mid-size, public university located in north central Indiana. The College houses a growing health sciences program within the School of Applied Health Sciences and includes a Bachelor of Science in Health Sciences with concentrations in Sports and Exercise Science, Speech Language Pathology, Health Promotion and Rehabilitation Sciences. The College's student population is diverse and includes a range of cultural backgrounds as well as many first generation and non-traditional students. This diverse population has been challenged with the movement to online courses due to many factors including but not limited to: technology, logistics, lack of digital literacy and underdeveloped academic self-efficacy.

At this time, the Bachelor of Science in Health Sciences degree has three, required online asynchronous courses; HSC W314 Ethics for Health Professionals, HSC H102 Lifetime Wellness and HSC H322 Health and Epidemiology and Biostatistics. Although these courses vary in academic level and content, they are similar because they are all required courses for each student enrolled in the Bachelor of Science in Health Sciences program. Historically, students have self-reported, through their course evaluations, that they struggled with the online format. Yearly data taken by the Health Sciences department aligns with this student feedback and shows that students have a higher tendency to drop, retake or fail these courses. One of the issues that may be impacting student performance is that these courses are often taught by

adjunct faculty who may not have as much course design experience, particularly in the online environment. Another issue impacting student success in these courses may be the diversity of the student population in the College and the differing needs of these students. Thus far, it has been difficult to determine which course design features are the most or least beneficial because it may vary greatly between students. Informal feedback from students has varied widely. For example, while some students may prefer face to face office hours, others prefer not to meet with their professors in real time and prefer asking questions via email. Additionally, some students may prefer more independent work because of their stage in life while others prefer to work and interact more with their peers to help facilitate understanding of concepts.

There is a need then to determine the specific course design features that the students in the program identify as the most or least beneficial through their individualized and unique viewpoints. Particularly, a study that looks at "multiple course features in a single study" as Ndoye and Martin identified in their 2021 study in which they examined the impact of demographic and contextual characteristics on student perceptions of online course features (p.2). This study adds to the knowledge gathered by Ndoye and Martin in 2021 but through the lens of the diverse student population in the Vera Z Dwyer College of Health Sciences, specifically those in the Bachelor of Science in Health Sciences program.

Purpose

The purpose of this descriptive case study was to gain insight from the students' voice about the online course design features, in the three required online courses, that they felt were the most and least beneficial to their success in the course. Specifically, the current study aimed to answer two research questions. First, which course design features do students identify as the

most effective for supporting their learning in an online course? Second, what aspects of an online course do students perceive as most and least beneficial to their success?

The findings of this study are intended to be used by online instructors in the Vera Z. Dwyer College of Health Sciences to design their courses in a way that better supports student engagement and success. Specifically, the findings will be used to improve the design of the three required online courses in the Bachelor of Health Sciences program.

Research Questions

The research questions for this study were:

(1) Which course design features do students identify as most effective for supporting their learning in an online course?

(2) What aspects of an online course do students perceive as most and least beneficial to their success?

Chapter 2: Literature Review

Introduction

The online learning community has undergone a remarkable transformation in the past several years with the increasing comfort level of students and instructors since the COVID-19 pandemic shifted the focus of education from the traditional classroom to the online learning environment. Hence, understanding student perceptions of course design features is paramount for increasing student confidence and engagement in the online environment which, in turn, will provide them with a more effective learning environment and ultimately increase student performance, satisfaction and retention (Blakey & Major, 2019; Cavanaugh, Jacquimin, & Junker, 2022; Muthuprasad, Aiswarya, Aditya & Jha, 2021).

After the COVID-19 pandemic many discovered that online courses had much to offer in the areas of flexibility with regard to balancing school, family, and work obligations. Additionally, online courses proved to be a safe space for students with disabilities or varying learning preferences. However, the effectiveness of these courses relies heavily upon their design. Elements such as the overall course organization, course management and instructor presence heavily influence a student's learning experience and academic success. By examining the literature on online education (including best practices) and student perceptions of course design features this review will provide clarity on what the most important factors that impact students' learning outcomes, satisfaction, and comprehensive success.

The major objective of this literature review is to examine the literature on the online course design features that have been deemed "best practice" and, in turn, students' perceptions of these course design features. By analyzing and synthesizing the research findings in this area, the aim is to find the most effective course design features that support student development, engagement, and success. This review will also provide information for designers and instructors to help mitigate known barriers to successful online learning.

This literature review is focused on information largely from the past decade but also includes other valuable academic resources, for context, that are outside of that timeframe. Within the larger framework of student perceptions of online course design features, the review will focus on more detailed information such as; course organization, navigation, instructor feedback, instructor presence/communication (social presence) and student self-regulated learning.

Online Education

Students enrolled in online education are more diverse with regard to "age, life experiences, academic preparation, ethnicity, native language, learning styles, abilities, and disabilities" (Schelly, Davies & Spooner, 2011, p 18). Over time, this diverse student group has realized online courses offer greater flexibility that allows them to attend to other responsibilities more readily like work or family while also obtaining a degree (Tualaulelei et al., 2021). Online courses can also remove the logistical barriers like unreliable transportation and childcare concerns that can typically impact student attendance in face-to-face courses (Redmond, Abawi, Brown, Henderson & Heffernan, 2018). Further, online courses provide great benefit to students who are neurodivergent as the student can choose whether they disclose their disability to others

as well as allowing them to work at their own pace through features like recorded lectures (Thompson & Copeland, 2020). For students who don't feel comfortable revealing challenges of any kind, or who don't realize that they are neurodivergent, this can be a major key to their success. Furthermore, the structure that most online courses offer can help students who are non-traditional learners understand the expectations in an online classroom because more attention is often paid to reducing the ambiguity that often occurs with poorly constructed assignments, inconsistent course flow and lack of support or consistent communication which are all barriers for the neurodivergent population (Thompson & Copeland, 2020). Regardless of the type of diversity in today's student population, online learning is well suited to create the flexibility needed to allow for a more equitable learning environment.

Frequently however, the very things that draw students to online courses, including convenience and flexibility, may also be the very same issues that impede their success (Thompson & Copeland, 2020). Factors like access to and experience with technology and software are a basic consideration that is often missed when students are considering or being guided toward the online classroom. Often, the diversity of today's student population is not a match for the variety and type of technology used in the online classroom. Instructors expect the student to have a firm grasp on technology and software, and they may, but it is very individualized and not always a good match for the digital literacy skills needed for a particular course. This gap can lead to anxiety for the adult learner as they don't have the time or resources to learn a new digital skill while also keeping up with the course material (Rogers-Shaw, Carr-Chekman & Choi, 2018).

An additional draw for the online classroom is that online courses, especially asynchronous courses, are thought to be easier than traditional courses which may entice students with weaker academic skills (Platt, Raile & Yu, 2014). The reality is online courses are more time consuming and require a higher level of self-regulation and cognitive processing which many students cannot manage independently in an effective manner. This lack of experience and ability to self-regulate often ends up being the cause of the students' unsuccessful course completion (Pintrich, 2004). Therefore, online course design needs to factor in that course content cannot simply be dropped into the online course from a traditional, face to face course. Instead, there must be mindful restructuring of the material to support student learning and consistent implementation of online course improvements that reflect best practice as well as student needs (Dennen, 2013; Lewis, 2021). A restructuring that includes designing the course in a way in which the instructor serves as a "facilitator of the learning process" instead of the "sage on the stage" (Collison, Elbaum, Haavind & Tinker 2000; Heuer & King, 2004, Eom & Ashill, 2016 p.195). A design that allows the student to construct learning by gaining a sense of themselves, and their abilities, in the process and allows them to have a say in the process (Koole & Parchoma, 2013). This type of design encourages confidence building in diverse learners and when a learner gains confidence there is harmony instead of dissonance (anxiety) which further increases their self-regulatory skills (Chayko, 2008; Koole & Parchoma, 2013). In 2022, Ozogul et. al shared that intentional instructional design that focuses on features such as "instructor presences, weekly recaps and feedback" was an effective method to help students develop these ever important regulatory skills (p.51). Through these changes in online course design, institutions of higher learning will have a better chance of improving student retention and

satisfaction in online courses and programs, especially for today's diverse online students (Lewis, 2021).

Best Practices in Online Course Design

Course Design Features

In 1991, Chickering and Gamson developed a set of principles outlining best practices for undergraduate course design in the face-to-face classroom. Broadly, the areas of focus for designing appropriate undergraduate courses are alignment of instructional strategies to the space, engaging learners and efficient communication (Grant & Thornton, 2007). More specifically, Chickering and Gamson (1991) concluded that "good practices for undergraduate education (1) encourages contact between students and faculty; (2) develops reciprocity and cooperation among students; (3) encourages active learning; (4) gives prompt feedback; (5) emphasizes time on task; (6) communicates high expectations; (7) respects diverse talents and ways of learning and (8) Personal best practice" (p 349). Over time, instructors and instructional designers have come to learn that these very same principles can be applied to the online classroom with a few adjustments and more intentional focus on the outcome of an improved student experience and therefore a higher level of student success in online courses due to a more "accessible, quality education" (Campbell & Blankenship, 2020, p.2).

One of the areas of more intentional focus should be the creation of routines in the online classroom. In 2013, Koole and Parchoma, based on work by Stald (2008) shared that "rituals and norms are mechanisms for sustaining relationships" (p.22). Unfortunately, rituals and routines in

the online classroom are not inherently present like they are in the face-to -face classroom and so, the learner is faced with developing their own which is particularly difficult for the novice learner. Since the formulation of rituals and routines are a key component of how a learner performs in the online classroom, online courses need to be mindful of this feature and designed in a way that facilitates this type of systematic learning without increasing the learner's cognitive load (Conrad, Deng, Caron, Shkurska, Skerrett & Sundararajan, 2021).

One of the best ways to create systematic, routine based learning is by predictable and intuitive design (iNACOL, 2011; Maryandonline, 2018; QM & VLLA, 2019). This type of design, also known as scaffolding, provides temporary support for learners (Belland, 2014). Specifically, creating systems and routines through course design is considered procedural scaffolding and assists the learner, especially novice learners, in becoming oriented to the course (Doo, Bonk, Heo, 2020). Further, scaffolding can provide a more balanced sensory experience thus freeing up cognitive capacity for learning. (Conrad et al., 2021; Doo, Bonk & Heo, 2020; Sweller, 1994). This is an important distinction between the face to face classroom where an instructor can more readily adjust the sensory experiences of their students, thereby decreasing cognitive load for more effective learning (Conrad et al., 2021). A primary way this can be achieved is through course templates or frameworks that provide consistency across online courses so the learner knows what to expect and can focus their attention on the actual content and not learning a new system or design for each course. Additionally, the use of a more consistent course framework allows a more accessible and equitable learning experience for both typical and diverse student populations by guiding them through the course to meet the course outcomes (Collins et al., 2014; Jones & Blankenship, 2017; Martin, Budhrani, Kumar &

Ritzhaupt, 2019). Similarly, Campbell and Blankenship (2020) shared that using a structured framework "maintains the integrity of the academic outcomes across sections of the same course" which is important not only through the lens of equity but also program success (p 7). Furthering the concept of maintaining academic integrity and outcomes, Jones and Blankenship (2017) found that it can be beneficial to have instructors use the same course layout for each online course they teach across programs. An important consideration, when considering course structure, is that it is not only the actual layout of the course that facilitates learner success but also the terminology used to describe that layout. Many courses use a module layout to organize weekly content in a meaningful way but there can be confusion across courses when one course uses the term "week" and others use the term "module" when referring to the chunked, weekly content present in the course (Lewis, 2021; Martin et al., 2019). While this may not be confusing for the expert learner, the novice or diverse learner may struggle with navigation if consistency in terminology within and across courses is not maintained. The key takeaway from the research is the more organized and consistent the course content, the more engagement the learner will have with the material (Blakey & Major, 2019; Kuo & Belland, 2016) thus effectively transferring the onus of learning from the instructor to the student (Suwastini, Ersani, Padmadowi & Artini, 2021).

Another effective way to create rituals and routines in the online classroom is through clear and effective assignment design that uses a "variety of course materials" (Martin & Bollinger, 2018, p. 217). This is particularly important for diverse and novice learners who may not be as familiar with the expectations in the higher education classroom and lack important background knowledge. First and foremost, course designers should recognize that not all

content is accessible and approachable for all learners and so, when designing learning activities the needs of diverse learners needs to be considered (Jones & Blankenship, 2017; Lewis, 2021; Gay, 2000). Not only should the learning activity itself reflect a population of multicultural learners, but it should also be presented in a way that transparently shares "the purpose, task and criteria for instructions" which has been found to be what diverse learners need to successfully complete a task (Lewis, 2021 p. 66; Winkelmes, 2014). Furthering this concept, Martin & Bollinger (2018) shared that assignments with "real world application" are particularly important for students to not only learn the content but also critical thinking skills (p. 209). A particularly effective way to achieve these goals is through the consistent use of rubrics that "clearly align with the outcomes and assignment instructions… to ensure learners can measure their performance" (Blakey & Major, 2019; Jones & Blankenship, 2017; Lewis, 2021 p.67). This is only achieved by using descriptive, detailed rubrics that outline "expectations and requirements" to avoid any confusion the learners may have while completing the assignment (Lewis, 2021 p.67). By consistently using rubrics to outline expectations, learners will be able to develop a routine of reviewing the rubric prior to beginning a given assignment which will encourage them to more actively engage with the content thereby increasing their construction of knowledge. Finally, the use of rubrics allows for more interaction between the learner and instructor through the feedback instructors often provide within the rubrics themselves.

Online Course Management

Many institutions of higher education look to the Quality Matters Rubric to determine an online course's level of quality. While the QM Rubric promotes consistency in course design and quality standards, it does not assess the quality or effectiveness of how the course is executed

and managed by the instructor which is a large part of the success of an online course (Baldwin, Ching & Hsu, 2017). Pina and Bohn (2014) suggest that course design and course delivery should be equally considered when assessing the quality of a course. Online courses require a different approach to teaching and each instructor will have their own methods when executing their online course (Bates, 2000).

An area of course management that is a sign of course quality is the building of "community" within the course. Martin et al., (2019) share that early in a course, instructors can build a sense of community by being "very present" but then can fade their day-to-day presence and maintain the sense of community by providing detailed feedback and timely grading. This is known as instructor presence and plays an important role in students feeling like they are supported (Martin et al., 2019). Instructor presence can and should occur in a multitude of ways to balance informal and formal interactions. Most instructor-student interactions in higher education are formal interactions and typically occur during lectures or written exchanges. Informal interactions, however, are just as important if not more important for community building and therefore, a sign of a quality online course. Informal interactions are those that occur when the instructor shows humor or more aspects of their personality (Eom & Ashill, 2016). In the online classroom, this type of interaction can occur during synchronous office hours, weekly short videos to introduce the content for the week, other synchronous activities, giving helpful feedback, being responsive to a student concern and displaying a caring attitude (Bailey & Card, 2009; Hung & Chou, 2015). It's important to consider however, that too much communication can lead to "information overload" for the learner. This is an important distinction between online classrooms and face to face classrooms where the instructor is more

readily able to adjust their communication methods when they observer or sense their learners becoming overwhelmed with information (Conrad et al., 2022). Information overload in the online classroom can occur because of the plethora of communication tools available in this environment (Conrad et al., 2022). The bigger impacts of information overload are far reaching as it can lead to learners becoming less motivated, disengaged and ultimately ineffective learning which ultimately ends up being an issue of student retention and success (Chen, Pederson & Murphy, 2011).

While instructor-student interaction is an important part of a quality online course and has been found to be one of the most influential factors for student success, student-student interaction is equally important (Anderson, 2003). In fact, Kumi-Yeboah (2018) found that collaborative learning in the online classroom deepened the construction of knowledge more so than in a face to face course. Furthermore, tools that foster student collaboration can enhance overall learning by increasing the feeling of belonging which is particularly important for diverse students (Kumi-Yeboah, 2018). One-way instructors and course designers can achieve this is through intentional course design that "engages students, fosters connections, builds [a] positive climate, and reduces feelings of isolation" (Kaufmann & Vallade, 2022, p 1803). However, simply including these types of activities within the course is not enough, the instructor must actively manage them as well. It cannot be a matter of set it and forget it (Lenert & Janes, 2017). Instructors should act as "facilitators and mentors" in student-student collaborations, modeling the behaviors that they expect (Grant & Thornton, 2007, p.350).

The online classroom is an environment where students have been found to interact more with one another and their instructors than in the face to face environment (Grant & Thornton,

2007). Therefore, when designing an online course attention must be paid to the balance of interactions that will occur between the learners and the elements of the course itself as this is what constitutes best practice in online course design and ultimately the success of not only the course but also its learners (Blakely & Major, 2019; Conrad et al., 2022; Grant & Thornton, 2007).

Student Perceptions of Course Design Features

Historically, the quality of an online course has been assessed through the opinion of instructional designers and the faculty who actually teach the course. However, this often leads to confusion as there are differences between what each stakeholder sees as reflecting quality (Monroe, 2011). To combat this, the MarylandOnline Consortium (MOL) started the Quality Matters project which eventually led to the creation of the Quality Matters Rubric in 2003 (Adair, 2014). Through a peer review process, online courses can earn the Quality Matters Certification demonstrating that the course is deemed of high quality and an environment for "effective learning" (Adair, 2014, p.2). However, there has been opposition to the Quality Matters Rubric that aligns with what Pina and Bohn (2014) shared when they stated that too much attention to the course design while not also considering the behavior of the instructor (course management) is not best practice. In fact, Burtis and Stommel (2021) point out that there is a "lack of human presence… in the language it (QM Rubric) uses" (para. 10). They go on to share that it is vitally important for designers and instructors to "design for and with the students who show up in our…virtual classrooms" (Burtis & Stommel, 2021, para 19).

Therefore, studying which aspects of online course design students feel are the most beneficial to their success (or not) is important research regarding online pedagogy (Blakey &

Major, 2019; Fayer, 2014; Gurung & Schwartzh, 2010; LaPointe & Reisetter, 2008; UDI Project, 2010). Through this research, instructors can essentially provide a roadmap through the course by utilizing the course design features that students value the most (Fayer, 2014) thereby increasing students' self-efficacy (Subramanian & Budhrani, 2020). The following paragraphs review student perceptions of the most common areas of online course design; course organization and social presence.

Course Organization/Transparency

In 2015, Ralston-Berg et al., researched student perceptions of online course quality with a particular focus on the course design features consistent with the Quality Matters Rubric. What they found was that students value logistical clarity, "findability" of course content, "reducing unknowns" and "appropriate and relevant" tools and course content (Ralston-Berg et al., 2015, p. 50). Simunich, Robins and Kelly (2015) directly reviewed the concept of "findability" through the lens of web design and found that navigation and visual design are of the utmost importance when designing an online course. Their study found that students were more likely to abandon interaction within a course if the following course design features were lacking; chunking in logical categories, labeling (files, modules etc…), transparency and visually digestible page elements (too many words, lack of structure) (Simunich, Robins & Kelly, 2015). Placencia and Muljana (2019) shared that instructors should be as literal as possible when naming folders or creating categories as this is what will match student expectations. For example, they suggest instead of filing the course syllabus under a file that has a broad title placing this important course feature in a more functional and expected file titled syllabus (Placencia & Muljana, 2019). Practices that align with student expectations can mitigate unnecessary drain on cognitive load,

that cause learners to follow unnecessary actions and mental operations that compete with their ability to solve problems and learn new information, students lose engagement and momentum in the course (Sweller et al., 1998; Skulmowski & Xu, 2021). Muljana & Luo, (2019) confirmed this when they found that online courses that were designed via scaffolding promoted more cognitive presence. Chun-Kuo and Belland (2016) further signified that an organized course design and easy to access content facilitates engagement between the course content and the adult learner by allowing them to "explore, discover, and perfect their skills and gain knowledge" (Martin & Bollinger, 2018, p 217). More specifically, Bollinger and Martin (2018) found that student's value some type of due date checklist to help them with "organizing their time, staying on task, being aware of deadlines for major assignments and activities, and submitting their work on time" (p. 580). Additionally, students have shared that due date reminders from faculty, using various methods of communication (announcement, email, text messaging) were also very helpful as was a straightforward syllabus (Ko & Rossen, 2010; Martin & Bollinger, 2018). Perhaps, Subramanian and Budhrani (2020) stated it best when they shared that students value simplicity in design and are not interested in "bells and whistles" (p. 306). Overall, students feel that these types of course features lead to more "time on task", increased satisfaction with a course and improve their academic performance (Grant & Thornton, 2007; Keller 1983; Martin & Bollinger, 2018; Reinhart & Schneider, 2001). This increased learner satisfaction and academic performance can then lead to higher student retention rates as well as stronger commitment to a particular program (Chang & Smith 2008).

Subramanian and Budhrani (2020) found that students felt part of their success in online courses and, in turn, in online programs was linked to the transparency of instructions and

assignments. Specifically, they found that students value "detailed instructions, rubrics and work samples" (Subramanian & Budhrani, 2020, p. 306). These findings align with what previous researchers, Martin and Bollinger (2018) as well as Jones and Blankenship (2017) found which was that students, particularly diverse students, valued clear instructions and examples of above average work.

Social Presence

In 2020, Van Wart, Ni, Medina, Canelon, Kordrostain, Zhang and Liu, discovered that students are firstly focused on course foundations like findability (course design/organization) and overall, first impressions of the instructor but then turn to those course features that impact social presence and their overall feeling of comfort in the course. They went on to say that when the instructor seemed to "have command" of the course from the design (and their ability to manage that design) the course was overall rated more favorably with students (Van Wart et al., 2020). In fact, students felt that the actual day to day facilitation of the course by the instructor was least important to students if the course design created a feeling of ease, comfort and had "basic functionality" (Van Wart et al., 2020, p. 18). Similarly, Ralston-Berg et al., (2015) found that peer interaction and interaction in general, was perceived as the least important course element for their enjoyment and success. In opposition to Van Wart et al., and Ralston-Berg et al., Jaggars and Xu (2016) discovered that out of several design features students valued "interpersonal interaction" the most because having a positive relationship with the instructor "encourages students to commit" to a higher level of performance (p. 271). Diving deeper into this discovery reveals the interaction students speak of is actually a set of specific course design elements that make them feel connected to the instructor, not necessarily the interpersonal

interaction itself. Course elements specifically mentioned by Jaggars & Xu (2016) were posting frequent announcements that guide the student through the content, video narratives giving tips or feedback and various methods for responding to questions (discussion boards, office hours, online chat). These features, while not overtly interpersonal in nature, translate to teaching presence in an online course which has been linked to a higher cognitive presence by the learner thereby increasing deeper learning and enhancing critical thinking skills (Ozogul et al., 2022). These findings align with one of the best practices outlined by Chickering and Gamson (1991) "encourages contact between students and instructors" (p. 349).

An effective method to increase interaction between instructors and students is by giving feedback. In fact, many seasoned online instructors share that providing feedback opens the door for a more typical conversation between instructor and student to take place much like in the face-to-face classroom (Baldwin et al., 2017). Earlier in the research of student perceptions in online education, Wang, Hun, Gao and Liu (2001) found that students valued feedback in that it "provides motivation…for them to become more active in the learning process" (p.411). More specifically, Howland and Moore (2002) shared that while students value feedback in general, it is prompt feedback that affects not only their satisfaction with the course but also their performance in the course. Receiving feedback in a prompt manner helps students not only in the short term but also on future course activities like assignments and assessments. Additionally, instructor feedback can help students make the connection of course content to their personal learning and professional goals (King, 2014). Further, certain instructional methods, such as providing intentional and individualized feedback, facilitate a connection between the adult learner's background knowledge and the course content and this leads to a relevant learning

experience (Lewis, 2021; Lewis & Wang, 2015). While relevant learning is indeed a desired outcome, Mayne and Wu (2011) found that an actual substantial increase in cognitive learning can occur with personalized feedback. Finally, multiple studies have shown that students value instructor feedback as it increases their feelings of connectedness and community which, in turn, leads to increased satisfaction, academic performance and retention (Moore, 2002, Lewis, 2021, Lewis & Wang, 2015, LaBarbera, 2013).

Conclusion

After a thorough review of the literature in the area of student perceptions of online course design features, it is understood that while there are best practices for the design of online courses, some features are not as impactful as others for student success. As the world of online learning continues to exponentially grow and change in the post COVID-19 world, the literature shows us that keeping a pulse on student perceptions will be paramount in supporting their engagement, satisfaction and success and should be a part of the assessment process for any online courses and programs.

Important highlights from this review of literature include, but are not limited to, student engagement increases when the organization of the course uses some semblance of "chunking" for the content, clear and timely communication and feedback helps to keep students motivated and striving to perform their best, and clear expectations for assignments helps students gain confidence and develop important self-regulation skills.

Chapter III: Research Methodology and Design

Research Site

This study was conducted within the Vera Z Dwyer College of Health Sciences (VZDCHS) housed within Indiana University South Bend (IUSB), a mid-size, public university located in north central Indiana. The College houses a growing health sciences program within the School of Applied Health Sciences and includes a Bachelor of Science in Health Sciences with concentrations in Sports and Exercise Science, Speech Language Pathology, Health Promotion and Rehabilitation Sciences. The College's student population is diverse and includes a range of cultural backgrounds as well as many first generation and non-traditional students. This diverse population has been challenged with the movement to online courses.

Participants

Participants were undergraduate, health sciences students within the School of Applied Health Sciences housed in the College of Health Sciences who were enrolled in at least one of the three required online core health sciences courses in the program; HSC W314 Ethics for Health Professionals, HSC H102 Lifetime Wellness for Health and HSC H399 Epidemiology and Biostatistics. Each of these courses are asynchronous, three credit hours and typically have 30-50 students enrolled during fall and spring semesters and 15-20 in summer semesters. Most students are enrolled in both in person courses and the required online courses at the same time.

At the time of the study in the fall semester of 2022 the following number of students were enrolled in each course: HSC H102 section 1 (32), HSC H102 section 2 (31), HSC W314 section 1 (29), HSC W314 section 2 (29) and HSC H322 (28) for a total of 149 students. Of this possible sample, 24 students completed the survey in full. The majority of the survey participants identified as female (83%), and the rest identified as male (17%). The age range of the participants varied greatly from 18-60 years of age with a median age of 22.5 years of age. Of the 24 participants who completed the self-identifying ethnicity portion of the survey, 17 identified themselves as Caucasian, 2 as Black, 4 as Hispanic and 2 as other (bi-racial, Black and White). With regard to whether this was the first online course taken within the College of Health Sciences, 15 (63%) participants responded with “no" while 9 (37%) participants responded with “yes.” Therefore, the majority of the participants reported being familiar with online courses within the College of Health Sciences.

The sample was one of purpose as the courses provide a heterogeneous (diverse student population) yet homogenous (declared health sciences students) perspective. The sample was also one of convenience as one of the authors is a faculty member of the College of Health Sciences.

Course Context

The three studied courses are offered online in each semester (fall, spring and summer) and are required as part of the “core” course group that all undergraduate health sciences students, regardless of their concentration of study (speech language pathology, rehabilitation sciences, sports and exercise science or health promotion), take. Typically, HSC H102 is the first

course taken by students during their sophomore year with HSC W314 and HSC H399 being taken during the junior or senior years.

HSC H102 Lifetime Wellness for Health focuses on current health and wellness information for the enhancement of public health. In the class, students learn about S.M.A.R.T goals, stress management techniques, practical strategies for increasing physical activity and nutritional concepts. The official course description and course goal are shown in Figure 1.

Figure 1

HSC H102 Lifetime Wellness for Health course description and course goal.

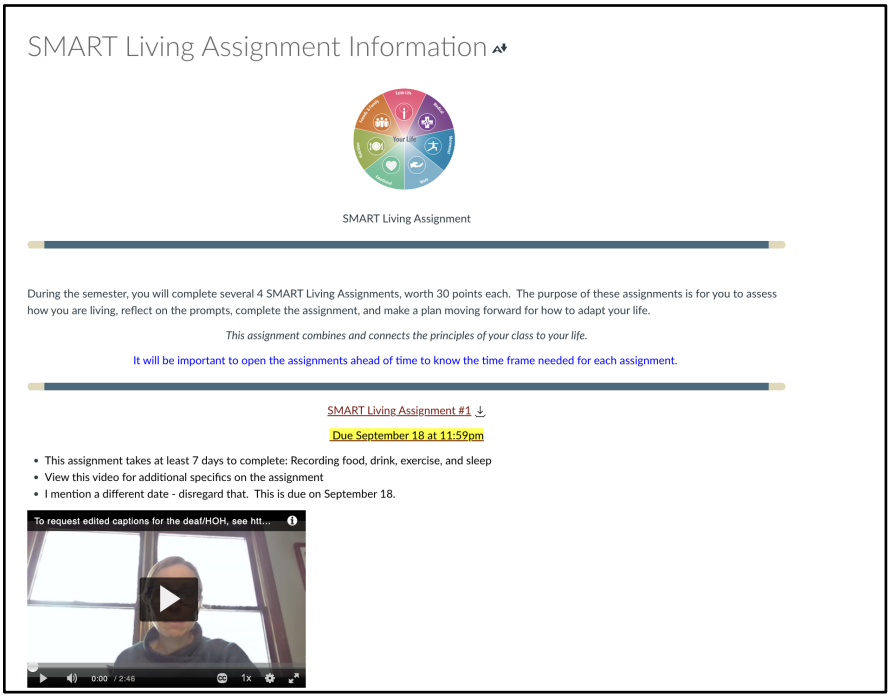
Catalog Description: This course will present current and relevant health and wellness information including practical strategies to apply positive behavior change to the areas of physical activity, nutrition, and stress management. The course will be directed toward developing a balance between the demands of school, work, and social lives and understanding the subsequent influence of these behaviors have on the short- and long-term goals for wellness, academics, and future career.

Course Goal: The goal of the course is to develop an understanding of behavior modification and how to apply these theories to fitness, nutrition, and stress management in real life. Evaluating literature and research for soundness will be discussed. The ultimate goal of the course is to inform students and allow them to be educators and models of health for friends, family, and patients.

There are four “Smart Living” assignments (Figure 2) woven throughout the semester that are designed to help students not only implement behavior change strategies into their own lives but also to learn valuable skills that they will use when working with patients on behavior change in the future.

Figure 2

HSC H102 SMART Living Assignment example.



HSC W314 Ethics for Health Professionals focuses on the application of ethical concepts to public health and healthcare settings. In the class, students interact with their peers in several discussion boards that ask them to respond through the lens of their respective health sciences concentrations. Discussions are rich, expose the students to other viewpoints through an interprofessional lens and focus on critical thinking skills. The official course description and course goal are shown in Figure 3.

Figure 3

HSC W314 course description and course goal.

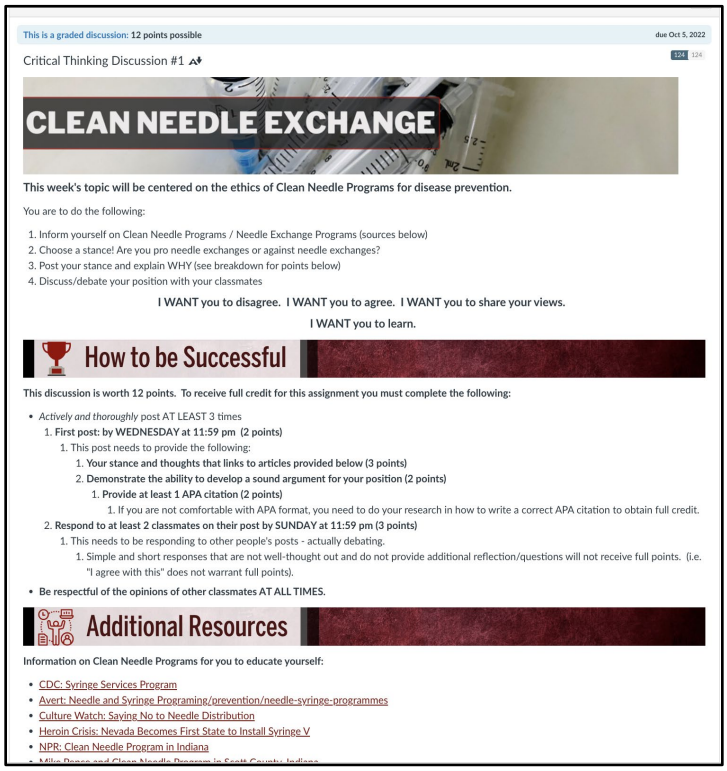
Catalog Description: Current trends in the ethical conduct and issues that concern health professionals and spheres of the contemporary health care arena are analyzed through the use of case studies, articles, and video presentations.

Course Goal: Students will learn basic concepts in health care ethics and how those apply to public health and current trends in health care. The main focus will be the application of ethics in health care and public health settings assuring the safe, ethical care of the population.

The College of Health Sciences is hoping to get the Ethics for Health Professionals course to be designated as an official general education, critical thinking course and so there are several critical thinking discussions (Figure 4) throughout the course.

Figure 4

HSC W314 Critical Thinking discussion assignment example.



This is a graded discussion: 12 points possible — due Oct 5, 2022

Critical Thinking Discussion #1

CLEAN NEEDLE EXCHANGE

This week's topic will be centered on the ethics of Clean Needle Programs for disease prevention.

You are to do the following:

1. Inform yourself on Clean Needle Programs / Needle Exchange Programs (sources below)
2. Choose a stance! Are you pro needle exchanges or against needle exchanges?
3. Post your stance and explain WHY (see breakdown for points below)
4. Discuss/debate your position with your classmates

I WANT you to disagree. I WANT you to agree. I WANT you to share your views.

I WANT you to learn.

How to be Successful

This discussion is worth 12 points. To receive full credit for this assignment you must complete the following:

- *Actively and thoroughly* post AT LEAST 3 times
  1. **First post: by WEDNESDAY at 11:59 pm (2 points)**
     1. This post needs to provide the following:
        1. **Your stance and thoughts that links to articles provided below (3 points)**
        2. **Demonstrate the ability to develop a sound argument for your position (2 points)**
           1. **Provide at least 1 APA citation (2 points)**
              1. If you are not comfortable with APA format, you need to do your research in how to write a correct APA citation to obtain full credit.
  2. **Respond to at least 2 classmates on their post by SUNDAY at 11:59 pm (3 points)**
     1. This needs to be responding to other people's posts - actually debating.
        1. Simple and short responses that are not well-thought out and do not provide additional reflection/questions will not receive full points. (i.e. "I agree with this" does not warrant full points).
- **Be respectful of the opinions of other classmates AT ALL TIMES.**

Additional Resources

Information on Clean Needle Programs for you to educate yourself:

- CDC: Syringe Services Program
- Avert: Needle and Syringe Programing/prevention/needle-syringe-programmes
- Culture Watch: Saying No to Needle Distribution
- Heroin Crisis: Nevada Becomes First State to Install Syringe V
- NPR: Clean Needle Program in Indiana

HSC H399 Epidemiology and Biostatistics focuses on using inferential and descriptive statistics to describe the health of populations. In particular, there is a focus on public health and the social determinants of health. An official course description and course goal are shown in Figure 5. One of the major assignments involves critically analyzing an evidence based research article, in the students' respective concentrations, in order to help them develop the ability to critically review research and information in their fields (Figure 6).

Figure 5

HSC H399 course description and course goal.

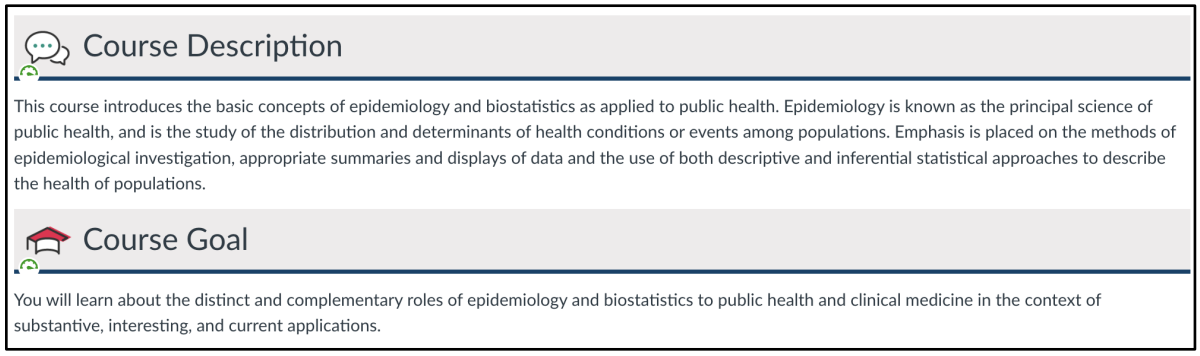
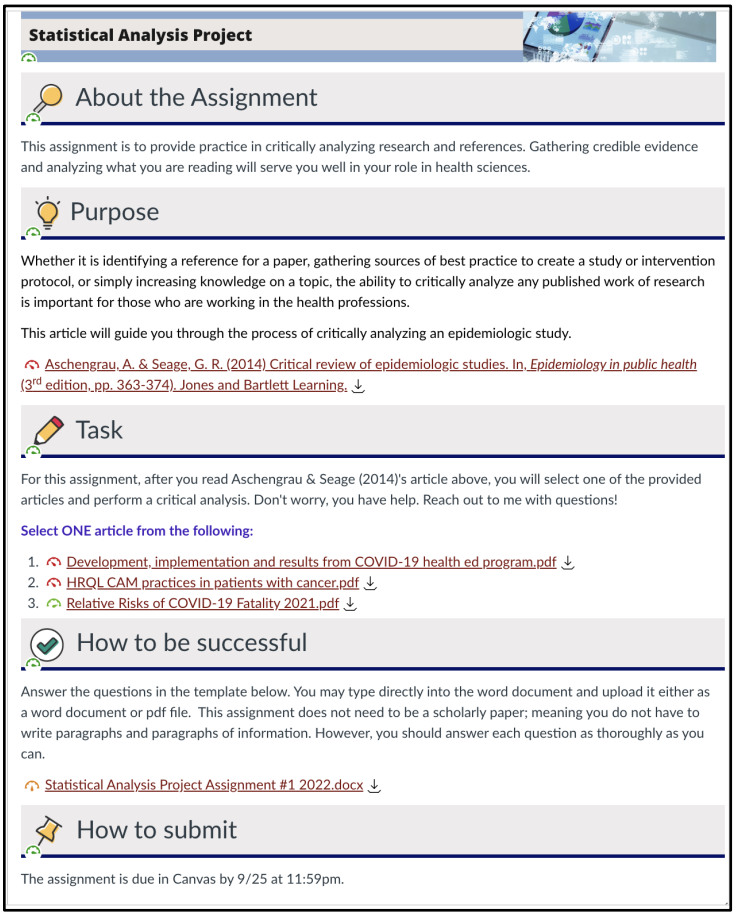


Figure 6

Course HSC H399 Statistical analysis assignment example; concentration specific.



Statistical Analysis Project

About the Assignment

This assignment is to provide practice in critically analyzing research and references. Gathering credible evidence and analyzing what you are reading will serve you well in your role in health sciences.

Purpose

Whether it is identifying a reference for a paper, gathering sources of best practice to create a study or intervention protocol, or simply increasing knowledge on a topic, the ability to critically analyze any published work of research is important for those who are working in the health professions.

This article will guide you through the process of critically analyzing an epidemiologic study.

Aschengrau, A. & Seage, G. R. (2014) Critical review of epidemiologic studies. In, *Epidemiology in public health* (3rd edition, pp. 363-374). Jones and Bartlett Learning.

Task

For this assignment, after you read Aschengrau & Seage (2014)'s article above, you will select one of the provided articles and perform a critical analysis. Don't worry, you have help. Reach out to me with questions!

Select ONE article from the following:

1. Development, implementation and results from COVID-19 health ed program.pdf
2. HRQL CAM practices in patients with cancer.pdf
3. Relative Risks of COVID-19 Fatality 2021.pdf

How to be successful

Answer the questions in the template below. You may type directly into the word document and upload it either as a word document or pdf file. This assignment does not need to be a scholarly paper; meaning you do not have to write paragraphs and paragraphs of information. However, you should answer each question as thoroughly as you can.

Statistical Analysis Project Assignment #1 2022.docx

How to submit

The assignment is due in Canvas by 9/25 at 11:59pm.

Each of the courses plays a large role in the Bachelor of Science in Health Sciences undergraduate degree program as they are taken by all students and include an intentional interprofessional aspect due to the various concentrations of study of the students in each course. Students are not only studying the individual content of each course but also experiencing important interprofessional collaboration and perspective from simply being in class together even if peer interaction within the courses is minimal. Further, each of the three courses is designed using aspects of the Higher Education Quality Matters Rubric but is not a certified Quality Matters course. The intention of using the QM Rubric as a guide when originally designing the courses was to assist adjunct and junior faculty, typically those who teach these courses, in designing their online course since many of them had not taught an online course

before and may not be as familiar with best practices for online courses. Since the courses were designed pre-COVID 19, using the QM rubric was the best choice at the time.

Research Design

The descriptive case study methodology was utilized for this study as the research was attempting to answer a question or solve a problem for a particular group of students (health sciences students) (Patton, 1990). This design allowed for the exploration, through a variety of lenses, the possible causes surrounding why students have historically had a more difficult time with the required online courses and to fully understand all aspects of the issue (Baxter & Jack, 2008; Hancock, D., Algozzine, B & Lim JH, 2021; Stake, 1995; Yin, 2003, 2016). Further, case study is appropriate for research in the health sciences because of its "flexibility and rigor" particularly when designing interventions for programs (Baxter & Jack, 2008 p. 544). The focus of the study was to discover the actual course design features that students felt were most supportive to their success versus those that they perceived to be least supportive to their success so a course design template could be created that would mitigate the issues students faced in succeeding in the course(s). Finally, a case study approach allowed for an in-depth exploration of student perceptions through various resources that consisted of; rating of online course design features (see Appendix I), open ended questionnaire responses (see Appendix I) and a course design observation. Open-ended responses were first organized and saved where the author and the second reviewer had access. Next, using a table method, the data was reviewed by words, phrases and sentences and then grouped by similarity after which themes were identified (Yin, 2011). The discovery of themes pointed more directly to the understanding of the problem being studied (Creswell, 2013).

The use of multiple means of data gathering was needed to increase the reliability, validity, and trustworthiness of the study as there were many opportunities to corroborate gathered information (Yin, 2003). In particular, the course design observation allowed the authors to view the course design features from the students' view as well as to gain important knowledge on how each instructor utilized particular course design features. Being able to view the course design features, in several different courses, allowed the researcher to see the various design expressions thereby adding a richness to the students' perspectives and provided additional information for finding a solution to the problem (students struggling in the online courses). This information will ultimately be used to create the course design template(s) as well.

Data Collection and Procedures

Data was gathered from three main sources; a quantitative rating questionnaire, open ended qualitative questions (24 participants) and a learning management system (LMS) course design review (3 courses, 7 sections) that consisted of viewing actual course design features and other relevant artifacts. A pilot questionnaire, using a small convenience sample, was completed in late October 2022. During the pilot questionnaire, one of the quantitative sections was found to have the Likert Scale improperly formatted and minor adjustments were made to wording to allow for better comprehension of questionnaire items. After the adjustments were made, the final questionnaire was administered at the end of the fall 2022 semester (December 2022).

Instructor permission was obtained for distribution of the online questionnaire link to students in their individual courses. The secure online questionnaire (via Qualtrics) link was sent to instructors on December 12, 2022, with the suggested verbiage to include when they sent it out to their respective courses (see Appendix II). The instructors were asked to send out the

questionnaire within a day of our request and then to follow up by sending out one reminder at the end of the week. All instructors sent the questionnaire via the learning management system (LMS) course announcement feature and sent the questionnaires out within one day of our request. Students were given a timeline of responding by December 31st, 2022. This gave them slightly over two weeks to respond to the questionnaire. The authors received IRB approval through the university for this study. A detailed description of the data sources follows.

Questionnaire

The questionnaire was adapted/inspired by Fayer (2014) whose post pilot questionnaire, sections II and III, examined student perceptions in an online post baccalaureate teacher certification program. While there are similarities in the populations studied, the authors found it necessary to make changes to the wording of questions in section III (section I of the authors' questionnaire) and the format of the rating scale in section II for ease of use and to better meet the needs of the current population being surveyed (undergraduate students).

In addition to general demographic data that was gathered at the outset, the questionnaire contained two sections designed to capture robust student perceptions about online course design features. Section one consisted of six perceptual open-ended questions about course design features and section two consisted of rating 11 common online course design features (see Appendix I). Within section II there were three separate sections: course organization, instructor communication and course assignment design. In each of the three sections, students were asked to rate specific course design features using a four-point Likert scale (1=least important, 2=somewhat important, 3=important, 4=most important).

After completing the demographic information, students were asked to respond to the six open ended questions. Questions such as: “What aspects of the course did you find least helpful to you in terms of your success in the course? and “What is your perception of the overall course design in this course and its contribution to your success in the course?” were included.

Following the open-ended response questions, in section II of the questionnaire, students were asked to rate common course design features. In the course organization section, students were asked to rate common online course design features such as: a structured syllabus, module overview and module overview page. Then, in the instructor communication section students were asked to rate features such as: weekly announcements, weekly office hours and other modes of instructor communication. Finally in the course assignment design section, students were asked to rate features such as: rubrics, clear instructions with purpose and alternative assignment modes.

Course Design Review

After initial review of the questionnaire data, a thorough learning management system (LMS) course review of each of the courses took place. In all 6 courses, HSC H102 (2 sections), HSC W314 (2 sections) and HSC H322 (1 section) were reviewed. An initial viewing of the overall course structure was conducted to get a general feel for the flow of the course. Next, a more detailed view of the course structure was completed. This detailed review consisted of examining the organizational structure of the modules and then the actual module content (overviews, assignments, other materials etc…). After the initial reviews took place, then specific review of items mentioned by students in the open-ended questionnaire items was completed. For example, if a student mentioned a particular novel course feature (something

unique to the course or professor), an examination of that course feature took place in order to learn the exact details of the feature and what function it served. Additionally, a review of more typical course features (announcements, assignments, overviews) was completed to note similarities and differences across courses and instructors. This also provided insight on how the students logically moved through the course and exploration of initial student visual perceptions of the course features. Since the desired outcome of our study is to assist faculty in designing online courses with the course features students perceive as most helpful, the LMS course review allowed for rich description and examples of course features that could be used in a course template to support adjunct or junior faculty teaching these courses. Finally, the LMS course review provided triangulation of the data from the quantitative and qualitative results allowing for more insight into the data, course features themselves and student perceptions.

Data Analysis

To capture students' overall thoughts on course design features, we administered the questionnaire during the final week of the fall 2022 semester. Quantitative data gathered from section II of the questionnaire was analyzed using descriptive statistics, in particular mean, to determine the most frequently mentioned course design features that students identified as being the most effective for supporting their learning in an online course. In all, 23 of the 24 questionnaire participants answered most of the six open-ended questions. However, only 22 participants answered question 10 and only 21 participants answered questions 11 and 12. In total, there were 133 open ended responses.

Qualitative survey data, gathered from section I, sharing students' perceptions of course design features, was reviewed and grouped according to themes which were then confirmed by course review of the actual course design features present in each of the courses within the learning management system. A second reviewer with a background in statistics/research was utilized to enhance trustworthiness of the interpretation.

After gathering all open-ended responses from the questionnaire, the author and the second reviewer independently coded the information using a table method. Following the initial coding, again independently, one of the authors and the second reviewer determined recurring themes found in the coded responses. Following this, a debriefing took place between the author and the second reviewer to discuss the codes and themes to ensure consistency. The use of the table method for coding, where all open-ended responses were recorded, and the debriefing ensured that the results were thorough and consistent ensuring the trustworthiness of the information. Refer to Table 1 below for an overview of the research questions, data sources and analysis procedures.

Table 1

Table showing research question, data source and type of analysis

Research Question	Data Sources	Analysis Procedures
Which course design features do students identify as the most effective for supporting their learning in an online course?	Qualtrics questionnaire with student ratings of various online course design features (section III of questionnaire - 11 items in total)	Descriptive statistics were used to identify trends in the data (mean); visual presentation of the data is included in the results section.

What aspects of an online course do students perceive as most and least beneficial to their success?	Qualtrics questionnaire with student written responses regarding various online course design features (section II of questionnaire) LMS course review	Student responses were reviewed multiple times by one of the authors and a second reviewer to identify similarities that were assigned a code and then further organized into themes. Themes were analyzed and connected, via LMS course review, to online course design features that support student success.

Chapter IV: Results

Results will be presented with each research question to illustrate clear alignment of the data.

(1) Which course design features do students identify as the most effective for supporting their learning in an online course?

Students responded to five open ended questions to identify their perceptions of the most effective design features for supporting their learning in an online course. The responses from each question were reviewed by one of the authors and a second researcher to corroborate identified themes.

For the first question regarding course organization (specifically the structured syllabus, course schedule and course structure), one major and two sub-themes emerged. The major theme of organization was mentioned by respondents a total of eight times (n=8) with the sub themes of well-structured and easy navigation were mentioned five (n=5) and four (n=4) times respectively. Specific participant responses for question number 1 are shared in Table 2.

Table 2

Respondent ID with quoted response and aligned theme for question #1.

Respondent ID	Question: What is your perception of course organization including the structured syllabus, course schedule, course structure (e.g modules) in this course and its contribution to your success in the course?	Theme
4	"It was very organized and easy to follow. I knew exactly what the expectation was for each week and every assignment."	Organization

Table 2 (continued)

6	"The course was structured well. It was very user friendly and easy to navigate."	Easy navigation Organized Well structured
9	"The course organization was done really well, easy to navigate through."	Organized Easy navigation
10	"This course was heavily organized and the modules contained what was to be expected throughout each week."	Organized
13	"Very organized and easy to navigate."	Organized Easy to navigate
19	"I thought that this course was well organized and structured. Our modules for the week were always clearly displayed, and all of the necessary materials could be found in the same spot. I also liked that the due dates were predictable."	Organized Well structured Easy to navigate

After identifying the three themes for each of the open ended questions, the author gathered documentation from the LMS course design review of each course for examples of each of the themes that emerged after the analysis of open ended responses for each question. Following each of the response tables are visual examples of the course design features aligning with the confirmed themes for questions, one through four. The responses for questions five and six were not able to be visually demonstrated.

Figure 7

Example of course design layout aligning with the theme of organization, easy navigation and well-structured for question #1.

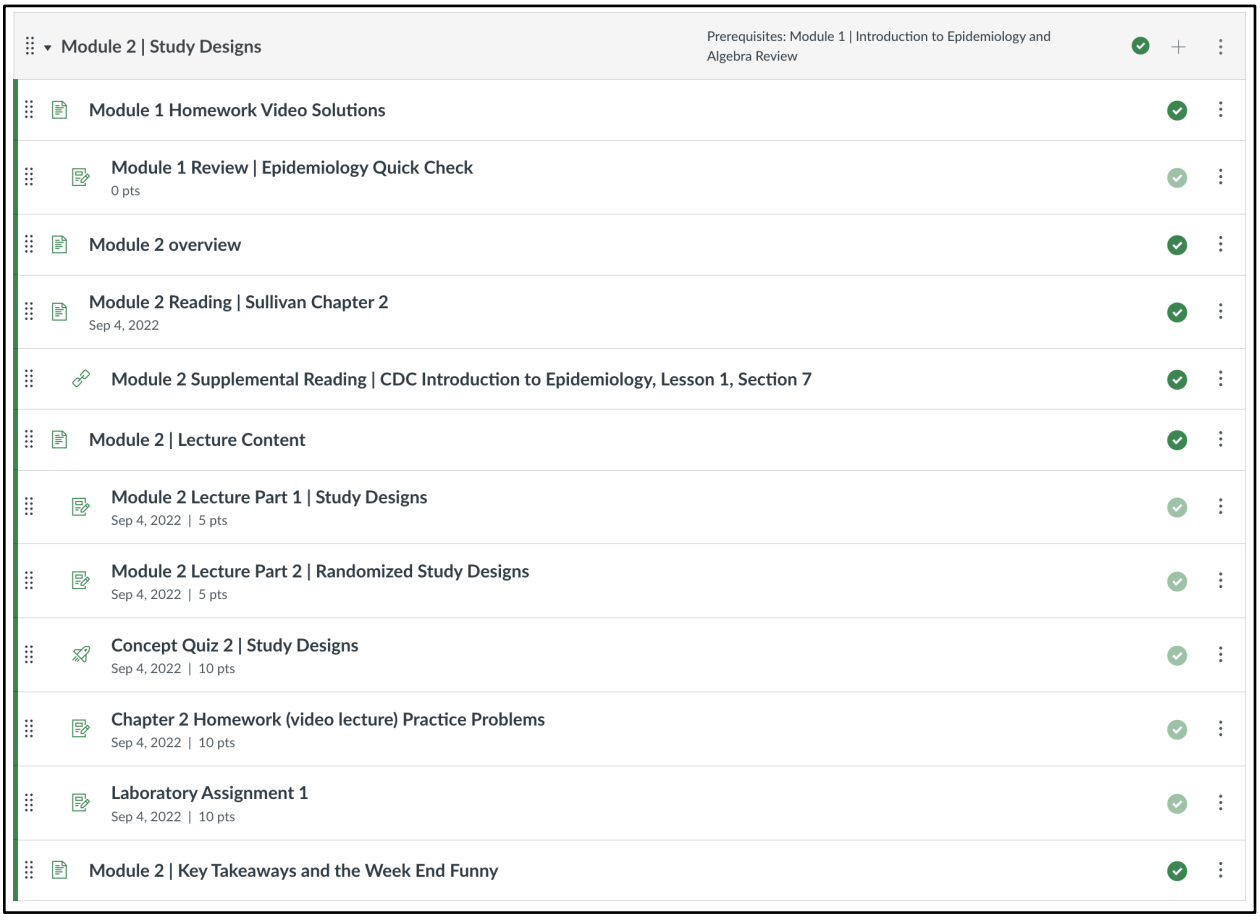


Figure 8

Example of course design layout aligning with the theme of organization, easy navigation and well-structured for question #1.

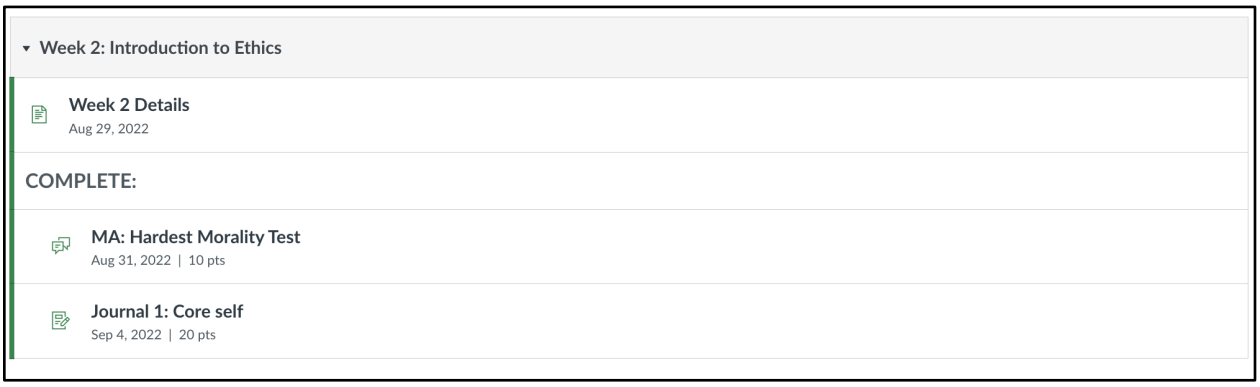


Figure 9

Example of course design layout aligning with the theme of organization, easy navigation and well-structured for question #1.

For the second question regarding communication methods (specifically teacher to student interaction, office hours etc....), two major themes, quality feedback and timeliness, and one sub theme, motivation emerged. The major themes of quality feedback and timeliness were mentioned a total of 13 times (n=13) and seven times (n=7) respectively. The sub theme of motivation/encouragement was mentioned four times (n=4). Specific participant responses are shared in Table 3

Table 3.

Respondent ID with quoted response and aligned theme for question #2.

Respondent ID	Question: What is your perception of the methods of communication and feedback from the instructor in this course and its contribution to your success in the course? (i.e., teacher-to-student interaction, office hours, FAQs etc..)	Theme
1	"I had excellent feedback and was able to adjust my approach based on what was needed for my assignments"	Quality Feedback
12	"The instructor provided every assignment with feedback which served as words of encouragement and also provided advice which helped me feel motivated."	Quality Feedback Motivation
3	"She was great at commenting back on assignments, and how we can improve for our next assignment"	Quality Feedback
14	"The positive feedback provides positive reinforcement that I'm on the right track and keeping"	Quality Feedback Motivation
11	"The teacher was able to get back to me within the hours she had told us of prior to the course beginning"	Timeliness

Table 3 (continued)

22	“The amount of office hours was the most I have seen a professor have yet. He was almost always available to work through problems.”	Timeliness

Figure 10

Example of course design feature aligning with the theme of timeliness and motivation for question #2.

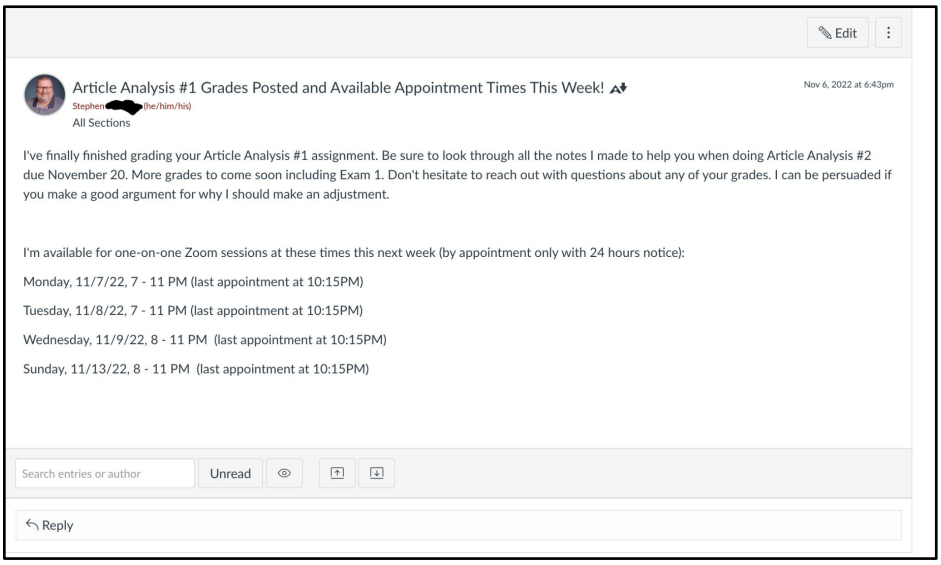
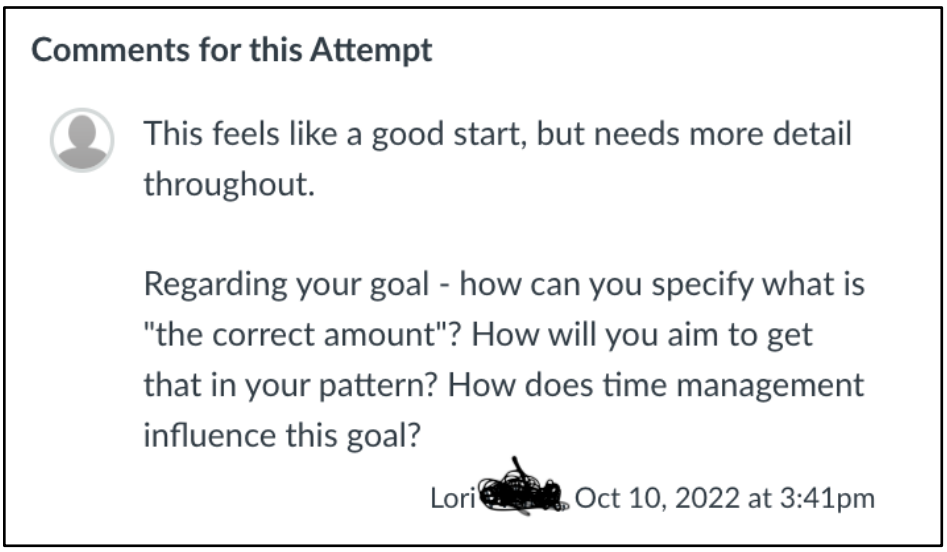


Figure 11

Example of course design feature aligning with the theme of timeliness and motivation for question #2.



For the third question regarding rubrics one major theme, expectations and two sub themes, helpful and planning emerged. The major themes of expectations and helpfulness were mentioned a total of 10 times (n=10) and nine times (n=9) respectively. Specific participant responses are shared in Table 4.

Table 4

Respondent ID with quoted response and aligned theme for question #3

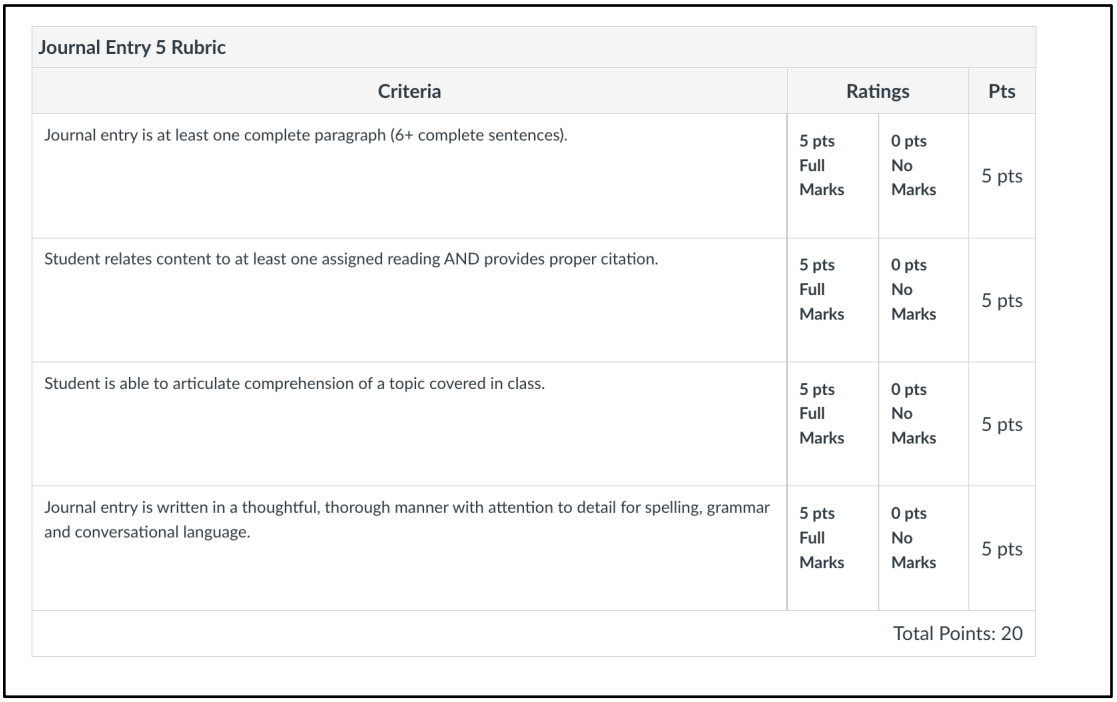
Respondent ID	Question: What is your perception of the rubrics given ahead of time prior to handing in assignments in this course and its contribution to your success in the course?	Theme
4	"I think the rubrics really helped in the organization of assignments"	Helpful

Table 4 (continued)

5	“The rubrics were an extremely helpful resource and definitely contributed to my success in the course.”	Helpful
1	“Rubrics were easy to follow and gave a clear idea of what the professor was looking for”	Expectations
8	“The rubric was clear…no gray area”	Expectations
16	“rubrics were clear and knew exactly what was expected”	Expectations
22	“I liked that we could see how the assignment would be graded prior to turning it in. This way I could focus more time on more "point-heavy" concepts”	Expectations
12	“They really helped me know what to expect and what was expected of me. It helped me have a blueprint for my work and served as a way to structure my essays primarily.”	Expectations
9	“handed out ahead of time and helped out a lot.”	Helpful

Figure 12

Example of course design feature (traditional, LMS rubric) aligning with the themes of expectations, helpful and planning for question #3.

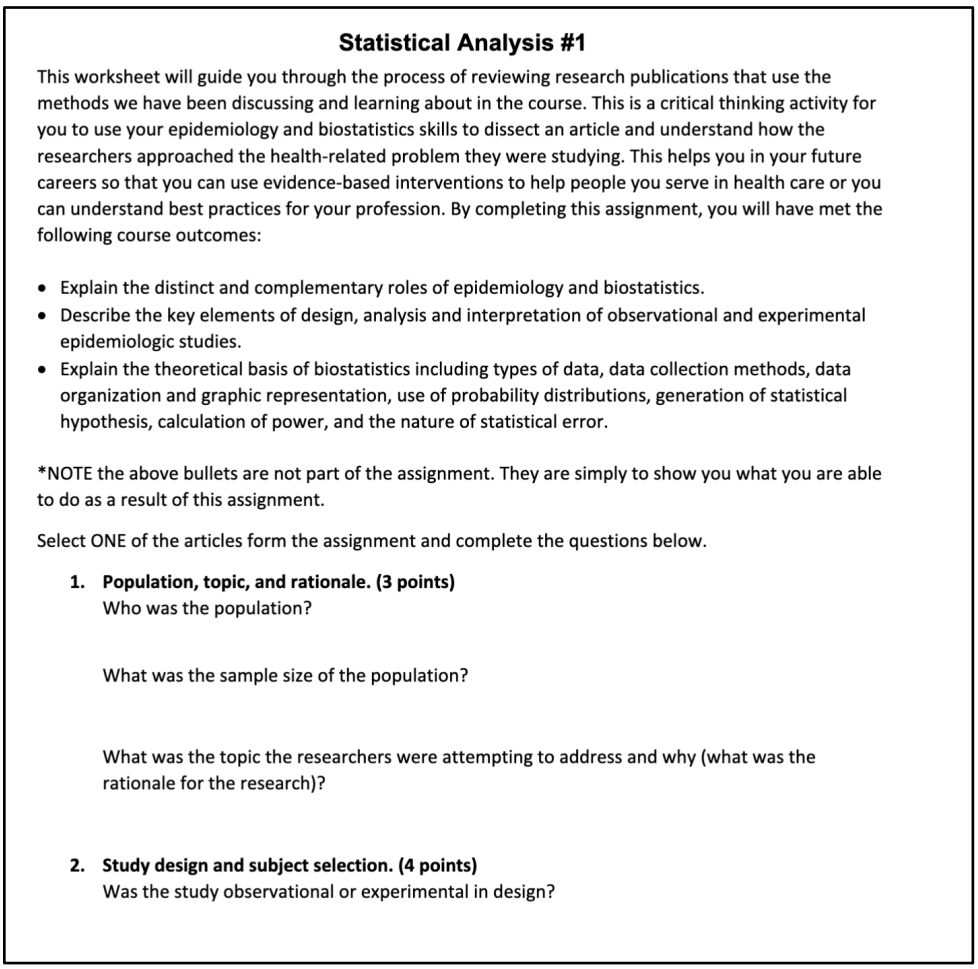


Journal Entry 5 Rubric

Criteria	Ratings		Pts
Journal entry is at least one complete paragraph (6+ complete sentences).	5 pts Full Marks	0 pts No Marks	5 pts
Student relates content to at least one assigned reading AND provides proper citation.	5 pts Full Marks	0 pts No Marks	5 pts
Student is able to articulate comprehension of a topic covered in class.	5 pts Full Marks	0 pts No Marks	5 pts
Journal entry is written in a thoughtful, thorough manner with attention to detail for spelling, grammar and conversational language.	5 pts Full Marks	0 pts No Marks	5 pts
			Total Points: 20

Figure 13

Example of course design feature (non-traditional rubric) aligning with the themes of expectations, helpful and planning for question #3.



Statistical Analysis #1

This worksheet will guide you through the process of reviewing research publications that use the methods we have been discussing and learning about in the course. This is a critical thinking activity for you to use your epidemiology and biostatistics skills to dissect an article and understand how the researchers approached the health-related problem they were studying. This helps you in your future careers so that you can use evidence-based interventions to help people you serve in health care or you can understand best practices for your profession. By completing this assignment, you will have met the following course outcomes:

- Explain the distinct and complementary roles of epidemiology and biostatistics.
- Describe the key elements of design, analysis and interpretation of observational and experimental epidemiologic studies.
- Explain the theoretical basis of biostatistics including types of data, data collection methods, data organization and graphic representation, use of probability distributions, generation of statistical hypothesis, calculation of power, and the nature of statistical error.

*NOTE the above bullets are not part of the assignment. They are simply to show you what you are able to do as a result of this assignment.

Select ONE of the articles form the assignment and complete the questions below.

1. **Population, topic, and rationale. (3 points)**
   Who was the population?

   What was the sample size of the population?

   What was the topic the researchers were attempting to address and why (what was the rationale for the research)?

2. **Study design and subject selection. (4 points)**
   Was the study observational or experimental in design?

For the fourth question regarding overall course design (specifically contribution to success and overall helpful features), two major themes emerged: instructor presence and intuitiveness of design. The major theme of instructor presence and intuitiveness of design was mentioned a total of six (n=6) and ten (n=10) times respectively. Specific participant responses are shared in Table 5.

Table 5

Respondent ID with quoted response and aligned theme for question #4.

Respondent ID	Question: What is your perception of the overall course design in this course and its contribution to your success in the course? Overall, what aspects of the course do you think were most helpful to you?	Theme
13	"I think the class was beneficial and I think the thing that most helped me was the availability of my professor if I had questions"	Instructor Presence
11	"the weekly videos from the professor were very educational and thorough"	Instructor Presence
16	"the weekly previews 'in person' were very helpful. They were recorded in real time rather than a part of the course"	Instructor Presence
21	"The videos of each subject were extremely helpful. The review of homework videos were as well. I would not of [have] succeeded if we did not have the videos."	Instructor Presence
20	"I think the way this course was set up and using the modules tab of this helped me keep up with where we were in the class and when assignments were due."	Intuitiveness
6	"I think the weekly set instructions with assignments and due dates helped me succeed. Without this feature, I wouldn't know what was due when unless I looked at the syllabus which is just extra time that i could be completing assignments"	Intuitiveness

Table 5 (continued)

9	"The fact that all the assignments were scheduled properly and on the same schedule it helped."	Intuitiveness
5	"Everything was at my fingertips and I could see each week at a glance in the Weekly Details page."	Intuitiveness

Figure 14

Example of course design feature (instructor videos) aligning with the theme of instructor presence for question #4.

Figure 15

Example of course design feature (instructor videos) aligning with the theme of instructor presence for question #4.

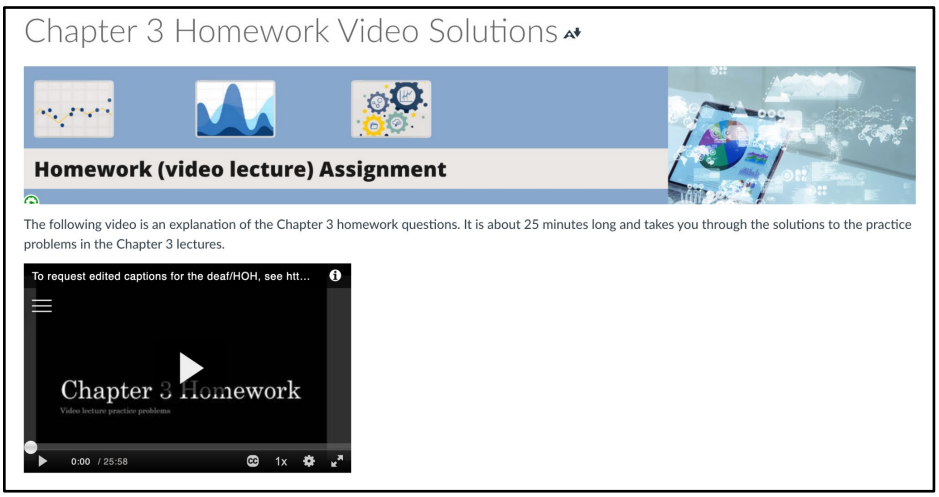
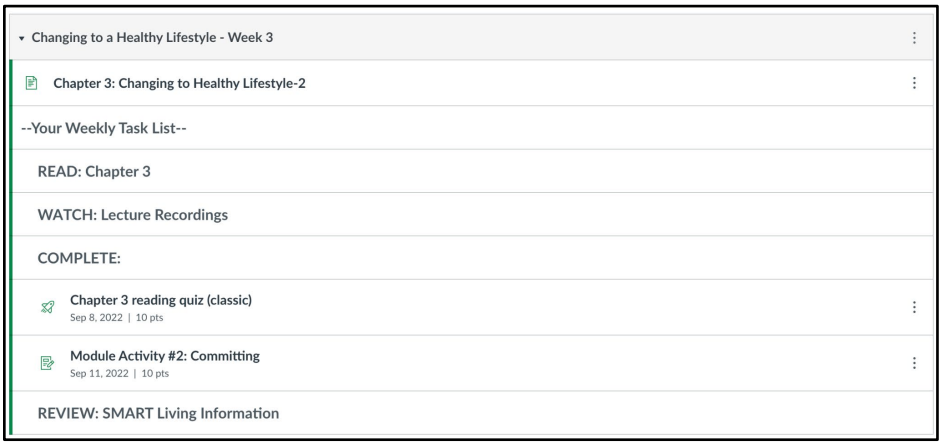


Figure 16

Example of course design feature (weekly task list/module format) aligning with the theme of intuitiveness.



For the fifth question regarding what course design feature was least helpful and why one major theme emerged: assignment alignment. The major theme of assignment alignment was mentioned five times (n=5). Of importance, is that the entry of "nothing, "meaning nothing was least helpful, was mentioned 10 times (n=10). Specific participant responses are shared in Table 6.

Table 6

Respondent ID with quoted response and aligned theme for question #5.

Respondent ID	Question: What aspects of the course did you find least helpful to you in terms of your success in the course? Why weren't these helpful to you?	Theme
3	"I didn't find anything unhelpful in this class"	
11	"Personally I believe this course was perfect. I personally did not have any issues whatsoever and this course was helpful in all aspects!"	
5	"I cannot think of anything that was not helpful."	
18	"I did not really find the essays helpful because we had already done a discussion on the topic so I didn't see the need for an essay on the same topic."	Alignment
20	"The homework was structured one way and the tests were another. The homework should be more like the tests."	Alignment
8	"The lab activities seemed time consuming with little meaning. They were a cause of stress due to time constraints."	Alignment

Finally, for the sixth question regarding what aspect(s) of the course could be improved two major themes emerged: interaction and clarity. The major themes of interaction and clarity

were mentioned four (n=4) and six times (n=6) respectively. Specific participant responses are shared in Table 7.

Table 7

Respondent ID with quoted response and aligned theme for question #6.

Respondent ID	Question: What aspects of the course could be improved?	Theme
3	"More interaction with classmates"	Interaction
6	"I think zooming in once in a while could help students get engaged or ask questions. I know zoom could be set up but maybe a mandatory check in would be helpful for students to know what they're doing good on and what could be improved by talking it out."	Interaction
15	"Zoom meeting potentially"	Interaction
21	"I think the students in the class could have interacted more."	Interaction
20	"bridge the gap between homework and exams"	Clarity

Table 7 (continued)

17	"post material all at once (beginning of semester)"	Clarity
11	"Discussion boards could have more consistent due dates"	Clarity
8	"Since the course is online, it would be much better if the course content wasn't locked from week to week. Flexibility is one of the benefits of an online class. Flexibility in time management is removed when the course content and assignments can only be accessed week to week."	Clarity

(2) What aspects of an online course do students perceive as most and least beneficial to their success?

First, under course organization (structured syllabus, module layout, module overview and other), students reported that a structured syllabus was the most important course design feature (M=3.58) and a module overview page as being the least important course design feature (M=3.33). The "other" option that included write-in responses, notes from professor, assignment weight, videos and instructor communication, had a mean of 3.45. Next, under instructor communication (weekly announcements, weekly office hours, discussion board, video messages and other), students reported video messages from the instructor as the most important course feature (M=3.42) with weekly office hours and a discussion board for questions as equally least important (M=2.22). The "other" option that included the write-in response, instructor feedback,

had a mean of 3.17. Finally, under course assignment design (rubrics, clear instructions, estimated time to complete, alternate assignment modes and other) students reported clear instructions that also report the purpose of the assignment as the most important course design feature (M=3.88) with alternative assignment mode choices as the least important course design feature (M=2.96). The "other" option that included the write in response, clear expectations, had a mean of 2.67. See Table 8 for full quantitative data.

Course Review Data

Commonalities among the courses included: a weekly overview or detail page for the week's content, various video contacts: as an introduction to the weekly content, to explain assignment instructions, to clarify information being asked behind the scenes and lectures that showed the instructor on video. Additional similarities included a structured syllabus, course module layout, weekly online office hours and frequent (if not weekly) announcements to introduce new content or communicate changes or challenges in the course. A novel course feature, in both sections of HSC W314, included "Notes from your Prof." This feature was a section located on the weekly overview page where the instructor would share motivational stories, personal stories that relate to the weekly content or simply tips for making the week a successful one. An additional novel feature, "task list", was observed in one section of HSC H102. As part of the weekly module, the instructor created a text header within the module entitled TASK LIST under which she organized all assignments that were to be completed for the week. See a visual example of the mentioned novel course design features below.

Figure 17

Example of novel course design feature entitled "Notes from your Prof"

Figure 18.

Example of novel course design feature (Your Weekly Task List)

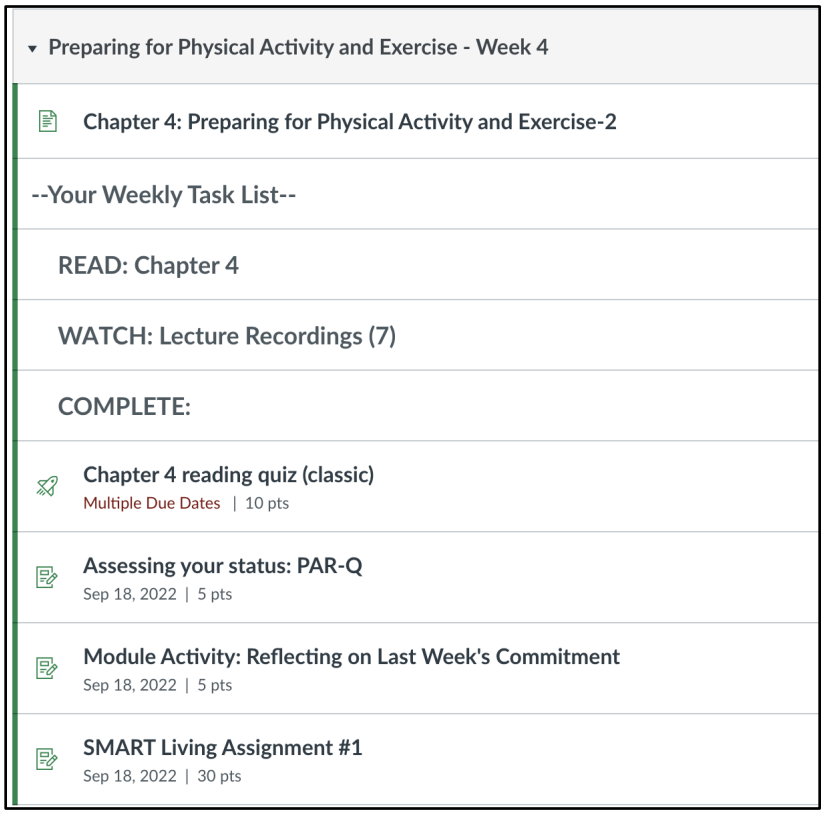


Table 8

Visualization of all quantitative data

Grouping	Measure	Mean	Standard Deviation
Course Organization	Structured Syllabus	3.58	.49
	Module Layout	3.50	.58
	Module Overview	3.33	.75
	Other	3.45	.78
Instructor Communication	Weekly Announcements	3.17	.85
	Weekly Office Hours	2.21	.96
	Discussion Board for Questions	2.21	.87
	Video Messages	3.42	.76
	Other	3.17	1.07
Course Assignment Design	Rubrics	3.46	.5
	Clear Instructions on Assignments that also Share Purpose	3.85	.44
	Estimated Time	3.25	.78
	Alternate Assignment Modes	2.96	.93
	Other	2.67	1.25

Chapter V: Discussion

The purpose of this descriptive case study was to examine student perceptions of online course design features and how they feel it impacts their engagement, learning and success. This chapter will include a discussion of the results from the distributed mixed methods questionnaire, shared in Chapter IV, and how they relate to the reviewed literature. Additionally, included are the limitations of the study as well as suggestions for future research in this area.

This chapter contains a discussion as well future research considerations for the following research questions:

(1) Which course design features do students identify as the most effective for supporting their learning in an online course?

(2) What aspects of an online course do students perceive as the most and least beneficial to their success?

This study demonstrates students feel course design features that support their learning in an online learning environment are those that lean toward organization and transparency within course materials. This aligns with previous literature that concluded online design should focus on features that encourage time on task, accessibility/equity and decreasing cognitive load (Campbell & Blankenship, 2020; Chickering & Gamson, 1991; Conrad et al., 2021). This was not surprising for this study given that many students surveyed had previously taken at least one online course in the College of Health Sciences and had foundational knowledge of what an online course entailed. This finding could also be a result of there being an increased number of courses taught by College of Health Sciences full time faculty who typically have more

experience teaching, in particular teaching and designing online courses. There were two additional sections of the required online courses, both taught by adjunct instructors, that were not available for the study due to nonresponse to the invitation to participate. Perhaps if these two sections were also included in the study, the results would have differed significantly as most of the courses would have then been taught by adjunct faculty which may have produced different data particularly when asked what aspects of the course students felt could be improved upon. It is typical for the courses included in the study to be taught largely by adjunct faculty and not full-time faculty.

Course Organization

Specific instructional strategies that students shared as helpful point toward the design feature of instructional scaffolding (IS). All features listed under course organization, with the standard deviation considered, as most important however the two features students rated the highest were a structured syllabus and module layout. While not rated as high as the structured syllabus and module layout, students also felt that a weekly module overview and "other" organizational tools were beneficial to their success. This is not surprising given that strong IS allows students to focus on the actual content of the course (assignments/tasks) because the predictability and intuitiveness of the course layout allows them to focus on creating "their own answers and conclusions", otherwise known as learning (Al, Mamun, Lawrie & Wright, 2019; iNACOL, 2011; Maryandonline, 2018; Rhodes & Bellamy, 1999 p. 15; QM & VLLA, 2019). This information aligned with qualitative survey data as well that mentioned the ease of navigation and having things "at the fingertips." Examples of these features were observed during each of the course reviews which illustrated the specific organizational methods

mentioned by students. When entering many of the courses for the first time during the course review, the layout was immediately felt to be intuitive with numbered modules containing the same, predictable layout. Further, each module had clearly titled sections (overview, readings, complete, tasks etc....) supporting the learner's navigation through the course. The scaffolded course design clearly would reduce cognitive load thereby freeing up the learners' working memory allowing for the processing of actual course content (Skulmowski & Xu, 2021). Further, this type of course design allows for efficiency thereby allowing the learner to solve problems and learn new information instead of searching for information in the course (Skulmowski & Xu, 2021; Sweller et al., 1998). This was reflected several times in the qualitative data that mentioned ease of navigation and knowing what to do each week of the course.

Assignment Design

When it came to assignment design, students rated clear instructions and transparency in purpose of the assignment as most important to their success with rubrics as a second most helpful feature. While this finding runs parallel to the research on decreasing cognitive load, it may simply be that providing clear instructions and stating the purpose transparently can make the assignment appear "easier" and therefore the more robust the outcomes and student satisfaction (Conrad et al., 2022). If we can decrease the perceived difficulty of a task through explicitness in design, we can decrease stress and anxiety which helps the student engage and commit to the course experience (Arantes et al., 2007; Conrad et al., 2022, Jaggars & Xu, 2016). In line with the idea of decreasing anxiety and increasing commitment to the course, students felt that rubrics were also nearly as helpful for them as clear instruction and transparency. This is not surprising as it agrees with the study on students' perceptions by Blakey and Major (2019) that

found students appreciate a rubric, because the expectations are clearly outlined. This is important for the adult learner, especially those who are diverse or non-traditional learners, because their ability to commit at the same and consistently high level throughout the course may not be possible. Knowing the expectations for each level of assessment allows the learner to commit at the level they are able or as Blakey and Major (2019) found creates opportunities for engagement, thus encouraging better outcomes than if this information was not shared so readily. Therefore, this was an important finding from the study since the Vera Z Dwyer College of Health Sciences has such a large population of diverse learners.

Surprisingly, even though past research in the area of Universal Design for Learning (UDL) and differentiated instruction told us that good course design features alternative assignment methods/modes, students in this study rated the option of alternate assignment modes as least important to their success. This could point however to the perceived difficulty of having to decide about which assignment mode to choose instead of simply being offered one assignment mode. This level of decision making can be particularly difficult for students who may enter college without a firm higher education skill set (Fajarsari, 2016) as they are uncomfortable with and lack the skills for even the most basic self-directed learning. This finding could also be related to the fact that 37% of the respondents shared that they were taking an online course for the first time, and they may not have felt comfortable with the format yet and thus wanted assignments to be as straightforward as possible since they were exerting more effort into learning the flow of an online course. Furthermore, neurodivergent learners may have increased anxiety from having to make a choice about assignment format and whether they have chosen the right one (Hamilton & Petty, 2023). To lessen this type of ambiguity and anxiety,

instructors and designers should engage in more compassionate design which could mean, less choice and more straightforward assignment design (Hamilton & Petty, 2023)

Instructor Presence/Communication

Another design feature that students reported as most beneficial was video messaging and weekly announcements, found under the title of instructor communication on the questionnaire. This finding aligned with information from a previous study by Jaggars and Xu (2016) in which students shared that they valued "interpersonal interaction" the most because having a positive relationship with the instructor "encourages students to commit" to a higher level of performance (p. 271). Qualitative data confirms this previous finding in the literature as students mentioned the availability of the instructor and in real time videos (recorded weekly) as elements that helped them succeed. Some students specifically mentioned that having the weekly videos for check-ins and homework review were the primary reasons they successfully completed the course. It is interesting to note that even though most of the interaction that took place in the courses being studied was not interpersonal, it still led to a feeling of instructor presence for the students. In 2022 Ozogul et al., found that this type of instructor presence has been linked to a higher cognitive presence by the learner which increases deeper learning and enhances critical thinking skills. In fact, students specifically shared an example of this type of instructor presence by calling out the "Notes from Your Professor" design feature that two of the instructors used in their courses. The students contributed that the instructor sharing personal stories to help illustrate the real-world application of the week's content or share motivational snippets, via video, helped the students maintain momentum in the course. This aligns with the information shared by Budhrani & Ritzhaupt (2019) in their study on best practices in online course design

which stated that the instructor should be “actively visible, present and engaged” and they should “use audio or video to communicate with students” (p. 200).

While instructor presence was shown to be an important feature, surprisingly students rated office hours as one of the least important features, showing that it is not a critical component of their success in the course. Office hours are typically felt to be a large part of instructor presence in a course; however, the results of this study suggest that students prefer to receive guidance and support through other means such as video messaging, weekly announcements or emails. Additionally, students rated discussion boards for questions for the instructor or about the course as one of the least important course design features. This may suggest a few things; students may not fully understand what “office hours” are for, students may prefer to email the instructor at their leisure when a problem arises and/or students may want the instructor to offer some amount of synchronous instruction at which time they can ask a question for clarification. An additional consideration is that the participants were in somewhat of a hybrid program wherein most of their courses were in person with only one or two being online. This may have impacted their view of office hours if instructors had only in person or online availability during designated time. Students The latter aligns with qualitative feedback shared earlier in this section which stated students appreciated the frequency with which an instructor provided live homework review sessions.

Regarding peer interaction facilitated by instructor presence students in the current study reported that discussion boards as assignments were one of the least helpful course features to support their success. However, this may not mean that students do not find peer interaction helpful as qualitative data shows that students would like more interaction with peers through

other means like synchronous meetings or mandatory check-ins. Furthermore, qualitative data suggests that the issues with discussion boards could be related more to the design, specifically due dates, and the lack of follow up with peers after responses are made and points are earned. The LMS course review clarified the reported issues with discussion board due dates wherein the learning management system (LMS) does not allow for more than one due date for a single discussion board. For example, discussion boards were observed to state in the directions "first post due on _____, respond to two peers by _____" with the final due date being the only one listed in the LMS that the students see in their to do list. This led to confusion with students because they were not able to adequately plan based upon the due dates that appeared on their LMS assignment tracker, they would instead have to look ahead in the instructions of the assignment or syllabus to find the multiple due dates for one discussion board assignment. This finding is not surprising given that students overwhelmingly reported that they appreciate and want transparency and clarity in their online courses. Further, this aligns with Thompson and Copeland's findings in their 2020 study that found students thrive when there is less ambiguity in assignments with directions.

Limitations and Future Research

While the current study produced valuable results and information, there were some limitations that could have affected the study. One limitation was participant numbers. The survey was distributed to students during their final exam week of the fall semester. This could have impacted not only the number of participants who completed the survey but also explain the high number of survey abandonment that may have occurred due to student burnout or time constraints.

An additional limitation was that the known problem for the poor performance in these required asynchronous courses was thought to be related to the high number of adjunct instructors teaching these courses. While an invitation to an additional two course sections, taught by adjunct instructors, was made, the classes were not surveyed secondary to lack of participation (no response to the author's requests). This study only included two courses taught by adjunct instructors therefore, the qualitative results may be skewed in that students may have shared more information about what was least helpful in the course in those being taught by less experienced instructors. Further, the current study had a high number of students who stated, "nothing was least helpful" when asked on the questionnaire what was least helpful in supporting their success. While it is important to know what students find most helpful to their success, it is equally important to know what is perceived as least helpful to their success so instructors can better support students in asynchronous courses. This will allow instructors to spend more time on the things that students need rather than what the instructor thinks that they need.

A final limitation of the study lies within the questionnaire design. There was an option of "other" given in each portion of section two of the questionnaire which consisted of course organization, instructor communication and course assignment design. Some students across all rating portions, rated "other" as important however may not have understood the instructions and therefore did not write in what was meant by "other." While students did not write in what was meant by "other" this could still be perceived as valuable information because they may have other ideas of what could be helpful to them but did not understand that they needed to write it in. In the future, if the study is replicated these limitations should be considered in the study design. Additionally, a future study looking at age and/or first generation and non-traditional

students in comparison to traditional college students could also provide valuable information for online course design.

Conclusion

These findings suggest that faculty and instructional designers should place course organization at the forefront when designing an online course as this will support the student in their understanding of course content, development of executive functioning skills like time management and decrease anxiety and overwhelm.

Instructors of online asynchronous courses need to consider that course organization is felt to be the most important course design feature for student success. Specifically, an intuitive course layout (modules) with consistently structured content that allows students to move easily and quickly through the course without increasing cognitive load. Furthermore, when designing assignments in online asynchronous courses, instructors need to provide clear rubrics, instructions, and expectations on how to complete assignments as this allows students to focus on the critical content of their assignment without focusing on unimportant details. Finally, instructors need to consider the importance of instructor presence which may not involve weekly face-to-face office hours or discussion boards for questions. Rather, students prefer the perception of instructor presence through weekly announcements, recorded video messages and some synchronous instructor contact.

This information will be helpful for Vera Z. Dwyer College of Health Sciences as they continue to find ways to mitigate the poor performance of some students in the required online courses in the Bachelor of Health Sciences Program. As these courses are typically taught by

both adjunct instructors and full-time faculty, and varies in the ratio semester to semester, using this information to create a design template for the online courses could mitigate issues pertaining to poor performance or withdrawal from these courses. At the very least, this information could be helpful to administration and faculty as they work to strengthen student performance and retention in these courses and possibly add to the offering of online courses in the College.

References

Adair, D. (2014). A process to improve course design: A key variable in course quality. *Assuring quality in online education: Practices and processes at the teaching, resource, and program levels*, 81-90.

Al Mamun, M. A., Lawrie, G., & Wright, T. (2020). Instructional design of scaffolded online learning modules for self-directed and inquiry-based learning environments. *Computers & Education*, *144*, 103695.

Amineh, R.J., & Asl, H.D. (2015). Review of Constructivism and Social Constructivism.

Anderson, T. (2003). Modes of interaction in distance education: Recent developments and research questions. *Handbook of distance education*, 129-144.

Bailey, C. J., & Card, K. A. (2009). Effective pedagogical practices for online teaching: Perception of experienced instructors. *The Internet and Higher Education*, *12*(3-4), 152-155.

Baldwin, S., Ching, Y.-H., & Hsu, Y.-C. (2017). Online course design in higher education: A review of national and Statewide Evaluation Instruments. *TechTrends*, *62*(1), 46–57. https://doi.org/10.1007/s11528-017-0215-z

Bates, T. (2000). *Managing technological change: Strategies for college and university leaders*. Jossey-Bass: San Francisco.

Baxter, P., & Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, *13*(4), 544-559.

Belland, B. R. (2014). Scaffolding: Definition, current debates, and future directions. *Handbook of research on educational communications and technology*, 505-518.

Blakey, C. H., & Major, C. H. (2019). Student perceptions of engagement in online courses: An exploratory study. *Online Journal of Distance Learning Administration*, *22*(4), 1-11.

Burtiss, M., & Stommel, J. (2022, September 8). *Quality theater*. Hybrid Pedagogy. https://hybridpedagogy.org/quality-theater/

Campbell, R., & Blankenship, B. B. (2020). Leveraging the power of course redesign for student success. *To Improve the Academy: A Journal of Educational Development*, *39*(2).https://doi.org/10.46743/2160-3715/2008.1573

Cavanaugh, J., Jacquemin, S. J., & Junker, C. R. (2022). Variation in student perceptions of higher education course quality and difficulty as a result of widespread implementation of online education during the COVID-19 pandemic. *Technology, Knowledge and Learning*, 1-16.

Chen, C. Y., Pedersen, S., & Murphy, K. L. (2011). Learners' perceived information overload in online learning via computer-mediated communication. *Research in Learning Technology*, *19*(2).

Chang, S. H. H., & Smith, R. A. (2008). Effectiveness of personal interaction in a learner-centered paradigm distance education class based on student satisfaction. *Journal of research on technology in education*, *40*(4), 407-426.

Chayko, M. (2008). *Portable communities: The social dynamics of online and mobile connectedness*. Suny Press.

Chen, Y., Fay, S., & Wang, Q. (2011). The role of marketing in social media: How online consumer reviews evolve. *Journal of interactive marketing*, *25*(2), 85-94.

Chickering, A. W., & Gamson, Z. F. (1991). Appendix A: Seven principles for good practice in undergraduate education. *New directions for teaching and learning*, *1991*(47), 63-69.

Collison, G., Elbaum, B., Haavind, S., & Tinker, R. (2000). *Facilitating online learning: Effective strategies for moderators*. Atwood Publishing, 2710 Atwood Ave., Madison, WI 53704.

Conrad, C., Deng, Q., Caron, I., Shkurska, O., Skerrett, P., & Sundararajan, B. (2022). How student perceptions about online learning difficulty influenced their satisfaction during Canada's Covid-19 response. *British Journal of Educational Technology*, *53*(3), 534-557.

Creswell, J. (2002). Educational research: Planning, conducting, and evaluating Quantitative and Qualitative research. Upper Saddle River, NJ: Merrill Prentice Hall.

Dennen, V. P. (2013). Activity design and instruction in online learning. *Handbook of distance education*, 282-298.

Doo, M. Y., Bonk, C., & Heo, H. (2020). A meta-analysis of scaffolding effects in online learning in higher education. *International Review of Research in Open and Distributed Learning*, *21*(3), 60-80.

Eom, S. B., & Ashill, N. (2016). The determinants of students' perceived learning outcomes and satisfaction in university online education: An update. *Decision Sciences Journal of Innovative Education*, *14*(2), 185-215.

Fayer, Liz Dr. (2014). "A Multi-Case Study of Student Perceptions of Online Course Design Elements and Success," *International Journal for the Scholarship of Teaching and Learning:* Vol. 8: No. 1, Article 13. http://digitalcommons.georgiasouthern.edu/ij-sotl/vol8/iss1/13

Fajarsari, L. A. (2016). *Students' Perceptions to Alternative Assessment in English Learning at SMA Kristen Satya Wacana Salatiga* (Doctoral dissertation, Program Studi Pendidikan Bahasa Inggris FBS-UKSW).

Gay, G. (2000). Culturally responsive teaching: Theory, practice and research.

Grant, M. R., & Thornton, H. R. (2007). Best practices in undergraduate adult-centered online learning: Mechanisms for course design and delivery. *Journal of online Learning and Teaching*, *3*(4), 346-356.

Gurung, R.A.R., & Schwartz, B.M.(2010). *Riding the third wave of SoTL.* International Journal for the Scholarship of Teaching and Learning, 4 (2).

Hancock, D. R., Algozzine, B., & Lim, J. H. (2021). Doing case study research: A practical guide for beginning researchers.

Hamilton LG and Petty S (2023) Compassionate pedagogy for neurodiversity in higher education: A conceptual analysis. *Front. Psychol*. 14:1093290. doi: 10.3389/fpsyg.2023.1093290

Heuer, B. P., & King, K. P. (2004). Leading the band: The role of the instructor in online learning for educators. *The Journal of Interactive Online Learning*, *3*(1), 1-11.

Howland, J. L., & Moore, J. L. (2002). Student perceptions as distance learners in Internet-based courses. *Distance education*, *23*(2), 183-195.

Hung, M. L., & Chou, C. (2015). Students' perceptions of instructors' roles in blended and online learning environments: A comparative study. *Computers & Education*, *81*, 315-325.

Jaggars, S. S., & Xu, D. (2016). How do online course design features influence student performance?. *Computers & Education*, *95*, 270-284.

Jones, I. S., & Blankenship, D. (2017). Student perceptions of online courses. *Research in Higher Education Journal*.

Kaufmann, R., & Vallade, J. I. (2022). Exploring connections in the online learning environment: student perceptions of rapport, climate, and loneliness. *Interactive Learning Environments*, *30*(10), 1794-1808.

Kim, K.-J., & Frick, T. W. (2011). Changes in Student Motivation During Online Learning. *Journal of Educational Computing Research*, *44*(1), 1–23. https://doi.org/10.2190/ec.44.1.a

King, S. B. (2014). Graduate student perceptions of the use of online course tools to support engagement. *International Journal for the Scholarship of Teaching and Learning*, *8*(1), 5.

Ko, S., & Rossen, S. (2010). *Teaching online: A practical guide* (3rd ed.). New York: Routledge.

Koole, M. L., & Parchoma, G. (2013). The web of identity: A model of digital identity formation in networked learning environments. In *Digital identity and social media* (pp. 1-15). IGI Global.

Kumi-Yeboah, A. (2018). Designing a cross-cultural collaborative online learning framework for online instructors. *Online Learning*, *22*(4), 181-201.

Kuo, Y. C., & Belland, B. R. (2016). An exploratory study of adult learners' perceptions of online learning: Minority students in continuing education. *Educational Technology Research and Development*, *64*, 661-680.

LaBarbera, R. (2013). THE RELATIONSHIP BETWEEN STUDENTS'PERCEIVED SENSE OF CONNECTEDNESS TO THE INSTRUCTOR AND SATISFACTION IN ONLINE COURSES. *Quarterly Review of Distance Education*, *14*(4), 209.

LaPointe, L., & Riesetter, M. (2008). *Belonging online: Students' perceptions of the value and efficacy of an online learning community.* http://editlib.org/p/24419/

Lenert, K. A., & Janes, D. P. (2017). The incorporation of quality attributes into online course design in Higher Education. *International Journal of E-Learning & Distance Education*, *33*(1), n1.

Lewis, E. (2021). Best practices for improving the quality of the online course design and learners experience. *The Journal of Continuing Higher Education*, *69*(1), 61–70. https://doi.org/10.1080/07377363.2020.1776558

Lewis, E., & Wang, C. (2015). Using an online curriculum design and a cooperative instructional approach to orientate adjunct faculty to the online learning environment. *The Journal of Continuing Higher Education*, *63*(2), 109-118.

Martin, F., Budhrani, K., Kumar, S., & Ritzhaupt, A. (2019). Award-winning faculty online teaching practices: Roles and competencies. *Online Learning*, *23*(1). https://doi.org/10.24059/olj.v23i1.1329

Martin, F., & Bolliger, D. U. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the Online Learning Environment. *Online Learning*, *22*(1). https://doi.org/10.24059/olj.v22i1.1092

Mayne, L. A., & Wu, Q. (2011). Creating and measuring social presence in online graduate nursing courses. *Nursing Education Perspectives (National League for Nursing)*, *32*(2).

Muljana, P. S., & Luo, T. (2019). Factors contributing to student retention in online learning and recommended strategies for improvement: A systematic literature review. *Journal of Information Technology Education: Research*, *18*.

Muthuprasad, T., Aiswarya, S., Aditya, K. S., & Jha, G. K. (2021). Students' perception and preference for online education in India during COVID-19 pandemic. *Social sciences & humanities open*, *3*(1), 100101.

Ndoye, A., & Martin, F. (2021). Examining Student Perceptions of Important Features in Online Courses: A Study Based on Demographic and Contextual Characteristics. *Journal of Educators Online*, *18*(2).

Ozogul, G., Zhu, M., Phillips, T. M. (2022). Perceived and actual cognitive presence: A case study of an intentionally-designed asynchronous online course. Online Learning, 26(1), 38-57. DOI: 10.24059/olj.v26i1.3051

Patton, M. Q. (1990). *Qualitative evaluation and research methods*. SAGE Publications, inc.

Piña, A. A., & Bohn, L. (2014). Assessing online faculty: More than student surveys and design rubrics. *Quarterly Review of Distance Education*, *15*(3), 25.

Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational psychology review*, *16*(4), 385-407.

Placencia, G., & Muljana, P. S. (2019, April). The effects of online course design on student course satisfaction. In *2019 Pacific Southwest Section Meeting*.

Platt, C. A., Amber, N. W., & Yu, N. (2014). Virtually the same?: Student perceptions of the equivalence of online classes to face-to-face classes. *Journal of Online Learning and Teaching*, *10*(3), 489.

Ralston-Berg, P., Buckenmeyer, J., Barczyk, C., & Hixon, E. (2015). Students' perceptions of online course quality: How do they measure up to the research? Internet Learning. https://doi.org/10.18278/il.4.1.2

Redmond, P., Abawi, L. A., Brown, A., Henderson, R., & Heffernan, A. (2018). An online engagement framework for higher education. *Online learning*, *22*(1), 183-204.

Reinhart, J., & Schneider, P. (2001). Student satisfaction, self-efficacy, and the perception of the two-way audio/video distance learning environment: A preliminary examination. *Quarterly Review of Distance Education*, *2*(4), 357-65.

Rogers-Shaw, C., Carr-Chellman, D. J., & Choi, J. (2017). Universal Design for Learning: Guidelines for Accessible Online Instruction. *Adult Learning*, *29*(1), 20–31. https://doi.org/10.1177/1045159517735530

Rhodes, L. K., & Bellamy, G. T. (1999). Choices and consequences in the renewal of teacher education. *Journal of teacher education*, *50*(1), 17-26.

Stake, R. E. (1995). *The art of case study research*. Sage.

Stald, G. (2008). *A Model of Digital Identity and Mobile Communication Media*. https://doi.org/10.1162/dmal.9780262524834.143

Schelly, C. L., Davies, P. L., & Spooner, C. L. (2011). Student perceptions of faculty implementation of Universal Design for Learning. *Journal of postsecondary education and disability*, *24*(1), 17-30.

Simunich, B., Robins, D. B., & Kelly, V. (2015). The impact of findability on student motivation, self-efficacy, and perceptions of online course quality. *American Journal of Distance Education*, *29*(3), 174-185.

Skulmowski, A., & Xu, K. M. (2021). Understanding cognitive load in digital and online learning: A new perspective on extraneous cognitive load. *Educational Psychology Review*, 1-26

Subramanian, K., & Budhrani, K. (2020, February). Influence of course design on student engagement and motivation in an online course. In *Proceedings of the 51st ACM Technical Symposium on Computer Science Education* (pp. 303-308).

Suwastini, N. K. A., Ersani, N. P. D., Padmadewi, N. N., & Artini, L. P. (2021). Schemes of Scaffolding in Online Education. *RETORIKA: Jurnal Ilmu Bahasa*, *7*(1), 10-18. https://doi.org/10.22225/jr.7.1.2941.10-18

Sweller, J., Van Merrienboer, J. J., & Paas, F. G. (1998). Cognitive architecture and instructional design. *Educational psychology review*, *10*(3), 251-296.

Thompson, K. M., & Copeland, C. (2020). Inclusive considerations for optimal online learning in times of disasters and crises. *Information and Learning Sciences*.

Tualaulelei, E., Burke, K., Fanshawe, M., & Cameron, C. (2021). Mapping pedagogical touchpoints: Exploring online student engagement and course design. *Active Learning in Higher Education*, 1469787421990847.

UDI Online Project. (2010). *Student perceptions of online/blended learning* (Technical Brief# 03). Storrs: University of Connecticut, Center on Postsecondary Education and Disability. http://www.udi.uconn.edu

Van Wart, M., Ni, A., Medina, P., Canelon, J., Kordrostami, M., Zhang, J., & Liu, Y. (2020). Integrating students' perspectives about online learning: a hierarchy of factors. *International Journal of Educational Technology in Higher Education*, *17*(1), 1-22.

Wang, R., Han, J., Gao, C., & Liu, C. (2021). Chinese University Students' Perceptions of Facilitation Strategies, Learning Motivation, and Satisfaction in Cloud-Based Virtual Classrooms. *Frontiers in Psychology*, *12*, 801191.

Winkelmes, M. A. (2014). Transparent assignment design enhances students' success.

Yan, H., Zhang, H., & Lam, J. F. (2022). A Qualitative Study on the Model of Factors Influencing Online Interactivity and Student Learning Engagement in the Post-Pandemic Era. *Journal of Higher Education Theory and Practice*, *22*(17), 45-62.

Yin, R. K. (2003). Designing case studies. *Qualitative research methods*, *5*(14), 359-386.

Yin, R. K. (2016). *Qualitative research from start to finish*. Guilford Press.

Appendix I

Dissertation Questionnaire

Start of Block: Demographic Information

Q1 Age

_____

Q2 Gender

- ○ Male (1)
- ○ Female (2)
- ○ Non-binary / third gender (3)
- ○ Prefer not to say (4)

Q4 Ethnicity

- [ ] Caucasian (1)
- [ ] Black (2)
- [ ] Hispanic (3)
- [ ] Native American (4)
- [ ] Pacific Islander (5)
- [ ] Asian (6)
- [ ] other (7) _____

Q5 Year in school

- ○ Freshman (1)
- ○ Sophomore (2)
- ○ Junior (3)
- ○ Senior (4)

Q6 Are you a first generation student?

- ○ Yes (1)
- ○ No (2)

Q7 Is this the first online course in the College of Health Sciences that you've taken?

- ○ Yes (1)
- ○ No (2)

End of Block: Demographic Information

Start of Block: Block 3

Instructions You are only answering the items below as they pertain to the course in which you received this questionnaire (Course number: H102, H322 or W314).

End of Block: Block 3

Start of Block: Questions about course features

Q7 What is your perception of course organization including the structured syllabus, course schedule, course structure (eg. modules), in this course and its contribution to your success in the course?

_____

Q8 What is your perception of the methods of communication and feedback from the instructor in this course and its contribution to your success in the course? (i.e., teacher-to-student interaction, office hours, FAQs etc..)

_____

Q9 What is your perception of the rubrics given ahead of time prior to handing in assignments in this course and its contribution to your success in the course?

_____

Q10 What is your perception of the overall course design in this course and its contribution to your success in the course? Overall, what aspects of the course do you think were most helpful to you?

_____

Q11 What aspects of the course did you find least helpful to you in terms of your success in the course? Why weren't these helpful to you?

_____

Q12 What aspects of the course could be improved?

_____

End of Block: Questions about course features

Start of Block: Instructions

Instructions Rate, using a 4 point scale, your perceptions about what most contributed to your success to what least contributed to your success (or would/would not contribute if the feature was not present). (1=least important, 2= somewhat important, 3=important, 4=most important) You are only rating the items below as they pertain to the current course in which you are enrolled

End of Block: Instructions

Start of Block: Rating of specific course features

Q13 Course Organization

	Least Important (1) (1)	Somewhat Important (2) (2)	Important (3) (3)	Most Important (4) (4)
Structured Syllabus (1)	○	○	○	○
Module Layout (2)	○	○	○	○
Module Overview Page (3)	○	○	○	○
Other (write in, then rate) (4)	○	○	○	○

End of Block: Rating of specific course features

Start of Block: Block 5

Q19 Instructor Communication

	Least Important (1) (1)	Somewhat Important (2) (2)	Important (3) (3)	Most Important (4) (4)
Weekly Announcements (1)	○	○	○	○
Weekly Office Hours (2)	○	○	○	○
Discussion Board for Questions (3)	○	○	○	○
Video Messages from Instructor (4)	○	○	○	○
Other (write in, then rate) (5)	○	○	○	○

End of Block: Block 5

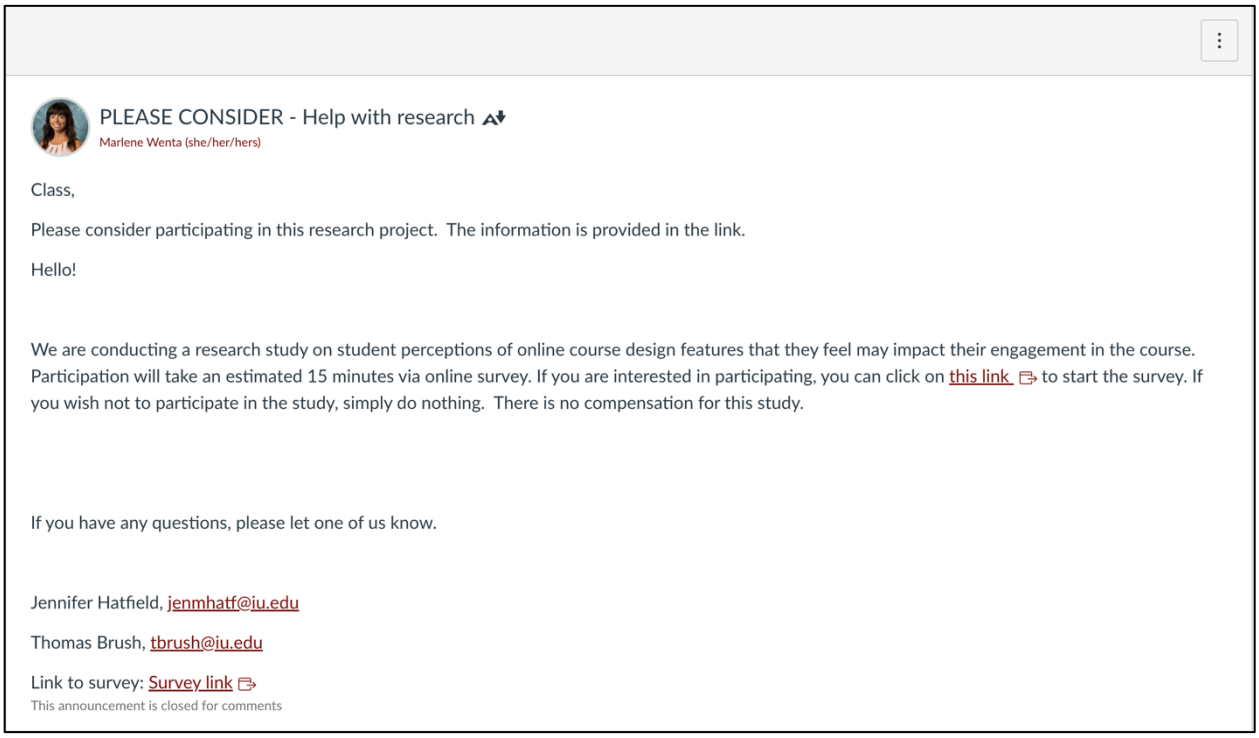
Start of Block: Block 6

Q20 Course Assignment Design

	Least Important (1) (1)	Somewhat Important (2) (2)	Important (3) (3)	Most Important (4) (4)
Rubrics for Grading (1)	○	○	○	○
Clear Instructions that also State the Purpose of the Assignment (2)	○	○	○	○
Estimated Times to Complete Readings, Viewings and Assignments (3)	○	○	○	○
Alternate Assignment Mode Choices (e.g paper or presentation) (4)	○	○	○	○
Other (write in, then rate) (5)	○	○	○	○

End of Block: Block 6

Appendix II



PLEASE CONSIDER - Help with research

Marlene Wenta (she/her/hers)

Class,

Please consider participating in this research project. The information is provided in the link.

Hello!

We are conducting a research study on student perceptions of online course design features that they feel may impact their engagement in the course. Participation will take an estimated 15 minutes via online survey. If you are interested in participating, you can click on this link to start the survey. If you wish not to participate in the study, simply do nothing. There is no compensation for this study.

If you have any questions, please let one of us know.

Jennifer Hatfield, jenmhatf@iu.edu

Thomas Brush, tbrush@iu.edu

Link to survey: Survey link

This announcement is closed for comments

Jennifer Hatfield Ed.D (c), CCC/SLP-L

Curriculum Vitae

Credentials

2023 **Doctor of Education in Instructional Systems Technology**
Indiana University, Bloomington Indiana
Doctoral Research Topic: A Case Study of Student Perceptions of Online Course Design Features in a Bachelor of Health Sciences Program

1997 **Master of Health Sciences in Communication Sciences and Disorders**
Governor's State University, University Park, Illinois

1992 **Bachelor of Arts in Communication Sciences and Disorders**
Valparaiso University, Valparaiso, Indiana

Appointment Information

Faculty Appointments

2023-Present **Clinical Associate Professor of Speech Language Pathology**
Division of Health Sciences
Vera Z. Dwyer College of Health Sciences Indiana University South Bend, South Bend, IN

2017 - Present **Clinical Assistant Professor of Speech Language Pathology**
Division of Health Sciences
Vera Z. Dwyer College of Health Sciences – Indiana University South Bend, South Bend, IN

Professional Experience

2017 & 2016 **Community Based Graduate Clinical Supervisor**
St. Mary's College
South Bend, IN

1999 – Present **Speech Language Pathology License #22003342A**
Speech Language Pathology & Audiology Board, Indianapolis, IN

1999 – present **Owner, Speech Language Pathologist**
Therapy and Learning Services, Inc
New Carlisle, IN

1999-present **Clinical Competence Certificate**
American Speech Language Hearing Association, Rockville, MD

1999-Present **Indiana Educators License #1497519**
Office of Educator & Licensing, Indianapolis, IN

Teaching and Course Development

Traditional Courses

Fall

- 2022 HSC H101 Introduction to Health Sciences
- 2022 HSC P323 Articulation and Phonological Disorders
- 2022 HSC P111 Phonetics for Speech and Hearing Science
- 2022 HSC H101 Introduction Health Sciences
- 2021 HSC H101 Introduction to Health Sciences
- 2021 HSC P323 Speech Disorders & Their Management
- 2021 HSC P111 Phonetics for Speech and Hearing Science
- 2019 HSC H101 Introduction to Health Sciences
- 2019 HSC H499 Senior Seminar (covered maternity leave-taught in overload)
- 2019 HSC P323 Speech Disorders & Their Management
- 2018 HSC H101 Introduction to Health Sciences
- 2018 HSC P110 Survey of Communication Disorders
- 2018 HSC P323 Speech Disorders & Their Management
- 2018 HSC P324 Language Disorders & Their Management
- 2017 HSC P111 Phonetics for Speech and Hearing Science
- 2017 HSC P110 Survey of Communication Disorders
- 2017 HSC H101 Introduction to Health Sciences

Spring

- 2020 HSC H101 Introduction to Health Sciences (COVID conversion)
- 2020 HSC H102 Lifetime Wellness for Health (COVID conversion)
- 2020 HSC P324 Language Disorders & Their Management (COVID conversion)
- 2020 HSC P233 Speech and Language Development (COVID conversion)
- 2019 HSC H101 Introduction to Health Sciences
- 2019 HSC P110 Survey of Communication Disorders
- 2019 HSC P233 Speech and Language Development
- 2018 HSC P110 Survey of Communication Disorders
- 2018 HSC P233 Speech and Language Development
- 2018 HSC P275 Human Hearing & Communication

Clinical Courses

Fall

- 2021 SLHS G570 Diagnostic Practicum (MS-SLP graduate program)
- 2021 SLHS G575 Clinical Practicum I (MS-SLP graduate program)

Spring

- 2022 SLHS G502 Research Methods (MS-SLP graduate program)
- 2022 SLHS G580 Diagnostic Practicum (MS-SLP graduate program)

Co-Taught Traditional, Online

Fall

- 2020 HSC H101 Introduction to Health Sciences (online-2 sections)
- 2020 HSC P323 Speech Disorders and Their Management (online)
- 2019 HSC W314 Ethics for Health Professionals (online)

Spring
- 2023 HSC W314 Ethics for Health Professionals (online)
- 2023 HSC P275 Introduction to Audiology & Aural Rehabilitation (online)
- 2021 HSC P233 Speech & Language Development (online)
- 2021 HSC P324 Language Disorders & Their Management (online)
- 2021 HSC H101 Introduction to Health Sciences (online)
- 2019 HSC W314 Ethics for Health Professionals (online)

Summer
- 2018 DHYG H211 Head and Neck Anatomy (co-taught)

- 2023 HSC P210 Anatomy & Physiology of the Speech Mechanism (online)
- 2023 HSC H101 Introduction to Health Sciences (online)
- 2022 HSC W314 Ethics for Health Professionals (online)
- 2022 HSC H101 Introduction to Health Sciences (online)
- 2021 HSC H101 Introduction to Health Sciences (online)
- 2020 HSC H101 Introduction to Health Sciences (online)
- 2020 HSC H102 Lifetime Wellness for Health (online)
- 2019 HSC W314 Ethics for Health Professionals (online)

Curriculum Development

2019-2020 **New Program Curriculum Development,** Indiana University South Bend
Master of Science in Speech Language Pathology
Assisted with development of program and accreditation process.

2017 **New Program Curriculum Development,** Indiana University South Bend
Bachelor of Science in Health Sciences SLP Concentration
Created curriculum for SLP concentration

Course Development

Fall 2022 **New Course Development,** Indiana University South Bend
HSC P210 Anatomy & Physiology of the Speech Mechanism (online)

Spring 2020 **New Course Format Development,** Indiana University South Bend
HSC H102 Lifetime Wellness for Health (traditional to online format)

Fall 2017 **New Course Development,** Indiana University South Bend
HSC P110 Survey of Communication Disorders

Fall 2017 **New Course Development,** Indiana University South Bend
HSC P111 Phonetics for Speech Science

Fall 2017 **New Course Development,** Indiana University South Bend
HSC P323 Speech Disorders and Their Management

Fall 2017 **New Course Development**, Indiana University South Bend
HSC P324 Language Disorders and Their Management

Fall 2017 **New Course Development**, Indiana University South Bend
HSC P275 Human Hearing and Communication

Peer Review of Teaching

Spring 2022 **Peer Review of Teaching: HSC-P233 Language Development**
Completed by Clinical Associate Professor, Radiography Program

Mentoring of Peers

Fall 2023 **Quality Matters Peer Reviewer/Subject Matter Expert (External Review)**
SPA5012C Introduction to Communication Sciences and Disorders, Florida International University

Fall 2023 **Nexus Summit Peer Reviewer**
Nexus Summit 2023

Spring 2023 **Quality Matters Peer Reviewer/Subject Matter Expert (External Review)**
MHSC 5100 Innovations in Patient Safety & Quality Improvement, AT Stills University

Spring 2023 **Quality Matters Peer Reviewer/Subject Matter Expert (External Review)**
MATH M384 Logic, Indiana University South Bend

Summer 2022 **Nexus Summit Peer Reviewer**
Nexus Summit 2022

Fall 2021 **Faculty Mentoring**
New Faculty Member fall 2021 HSC H101 Introduction to Health Sciences

Fall 2021 **Quality Matters Peer Reviewer/Chair (Internal Review)**
HSC H322 Epidemiology and Biostatistics

Fall 2021 **Quality Matters Peer Reviewer (Internal Review)**
POLS Y675 Political Philosophy

Fall 2021 **Quality Matters Peer Reviewer/Subject Matter Expert (External Review)**
CSDO 3335 Language and Literacy Disorders in Children, Texas A&M University

Student Mentoring and Advising

Fall 2021-Present **Speech Language Pathology Concentration Lead**
Mentor students in the speech language pathology concentration of the Bachelor in Health Sciences program.

Fall 2017-present **Faculty Advisor National Student Speech Language Hearing Association**
Provide guidance to the student members of the Executive Board of NSSLHA. Mentor students on leadership, service and advocacy in the field of speech language pathology

Invited Presentations

Teaching Methodology

Spring 2021 **IU Online Conference: Continuing the Conversation**
Topic: Tools for Interprofessional Education in the Online Health Sciences Classroom
Indiana University, Bloomington, IN

March 2021 **Presenter**
Vera Z. Dwyer College of Health Sciences Lunch and Learn

Topic: Online Tools for Increasing Engagement
Indiana University South Bend, South Bend, IN

July 2020 **Contributor**
Teaching for Success: An Evidence Based Approach
Topic: BUILD: Teaching for Student Success
Indiana University, Bloomington, IN

March 2020 **Indiana University Instructional Systems Technology Conference**
Topic: Needs Analysis in a Challenging Environment
Indiana University, Bloomington, IN

Fall 2018 **Faculty Panel**
New Faculty Orientation
Topic: What I Wish I Had Known My First Year
IU South Bend, South Bend, IN

Area of Expertise

October 2021 **Guest Lecture N190-Physics of Sound**
Topic: Auditory Tools for the Speech Language Pathologist
IU South Bend, South Bend, IN

November 2020 **Guest Lecture N190-Physics of Sound**
Topic: Auditory Tools for the Speech Language Pathologist
IU South Bend, South Bend, IN

October 2019 **Guest Lecture N190-Physics of Sound**
Topic: Auditory Tools for the Speech Language Pathologist
IU South Bend, South Bend, IN

September 2018 **Hoosier Hygienist**
Topic: Dental Hygienists: An Essential Partner in Dysphagia Management
IU South Bend, South Bend, IN

October 2017 **Presenter**
Vera Z. Dwyer College of Health Sciences Lunch and Learn
Topic: What is an SLP?
Indiana University South Bend, South Bend, IN

October 2016 **Healthcare Business Women's Association Chapter Meeting**
Topic: Developing Your Full Potential by Discovering Your Strengths
Indianapolis, IN

November 2013 **Rotary Club of Michigan City**
Topic: Customer Service Strategies for Your Business
Michigan City, IN

January 2012 **Businesswomen United Network Winter Retreat**
Topic: Vocal Hygiene for the Professional's Voice
Sawyer, MI

Fall 2011- **Wells Fargo Bank/Prudential One Realty Company**
Topic: Business Communication Strategies

Spring 2012 *Mishawaka, IN*

Invited Reviews and Authorship

April 2023 **Co-Author with Alisha Springle, SLP**
Comparing Prospective Student and Faculty Perceptions of Collaborative Game-Based Admission Interviews

October 2019 **The Blossom Method: Clinical Applications (Chapter)**
In process
delayed due to COVID-19

September 2019 **Book Review**
What Your Child on the Spectrum Child Really Needs
AAPC Publishing

Summer 2019 **Book Review**
My Toddler's First Words
CreateSpace Independent Publishing Platform

May 2019 **Book Review**
Stanfield's Introduction to Health Professions Seventh Edition
Jones & Bartlett

Summer 2018 **Book Review**
Introduction to Communication Disorders
Plural Publishing

December 2017 **Training Review (DVD)**
Pamela Marshalla, SLP: Stubborn and Uncooperative: How to Achieve Sound & Word Production in Young Children Who Refuse Participation
Marshalla Speech and Language

Fall 2011 **Foreword**
The Blossom Method: The Revolutionary Way to Communicate with Your Baby from Birth
Vermillion

Teaching Awards, Grants, and Honors

2022 **Digital Gardener Faculty Fellow**
Indiana University
Indiana University, Bloomington, IN

2022 **Certified Voice Thread Educator Course Co-Hort 65**
Voice Thread, LLC
Boca Raton, FL

2022 **Gold Chapter Honors**
National Student Speech Language Hearing Association
National Student Speech Language Hearing Association, Rockville, MD

2021 **Gold Chapter Honors**
National Student Speech Language Hearing Association

National Student Speech Language Hearing Association, Rockville, MD

2020 **Teaching with Technology Grant**
University Center for Excellence in Teaching
IU South Bend, South Bend, IN

2020 **Course Development Grant**
University Center for Excellence in Teaching
IU South Bend, South Bend, IN

2020 **Gold Chapter Honors**
National Student Speech Language Hearing Association
National Student Speech Language Hearing Association, Rockville, MD

2019 **Work Study Engagement Grant**
Office of Research Administration
IU South Bend, South Bend, IN

2019 **Materials for Active Learning Grant**
University Center for Excellence in Teaching
IU South Bend, South Bend, IN

2019 **Gold Chapter Honors**
National Student Speech Language Hearing Association
National Student Speech Language Hearing Association, Rockville, MD

2019 **Certified Peer Reviewer Course**
Quality Matters
Annapolis, MD

2019 **Independent Applying the Quality Matters Rubric**
Quality Matters
Annapolis, MD

2018 **EDGE Stipend/EDGE Fellow**
Indiana University
IU South Bend, South Bend, IN

2018 **Software and Equipment for Engagement and Discovery**
University Center for Excellence in Teaching
IU South Bend, South Bend, IN

2018 **Gold Chapter Honors**
National Student Speech Language Hearing Association
National Student Speech Language Hearing Association, Rockville, MD

2018 **Summer Teaching Fellowship**
University Center for Excellent in Teaching
IU South Bend, South Bend, IN

Professional Memberships

2021-Present **Member-Phi Delta Kappa International**
Arlington, VA

2019–Present **Member- American Interprofessional Health Collaborative (AIHC)**
National

1999 – Present **Member – American Speech Language Hearing Association (ASHA)**
National Organization
Rockville, MD

1989 – Present **Member- Indiana Speech Language Hearing Association (ISHA)**
Indianapolis, IN

Participation in Professional Development

Teaching Methodology/Inform Teaching

October 2021 **IU Online Conference**
Virtual

June 2021 **American Speech Language Hearing Association: CSD Science of Teaching Symposium**
Virtual

May 2021 **Ungrading (Book Club)**
University Center for Excellence in Teaching
Virtual

April 2021 **Midwest Conference on the Scholarship of Teaching & Learning**
University Center for Excellence in Teaching
Indiana University South Bend, South Bend, IN

September 2020 **Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses (Book Club)**
University Center for Excellence in Teaching
Indiana University South Bend, South Bend, IN

June 2020 **Thrive Online: A New Approach to Building Expertise and Confidence as an Online Educator (Book Club)**
University Center for Excellence in Teaching
Indiana University South Bend, South Bend, IN

June 2020 **Teach, Play, Learn-An Academic Conference on Game Based Teaching and Learning Virtual Conference**
Indiana University

June 2020 **OLC Innovate Virtual Conference**
Online

November 2019 **Creating and Sustaining Growth Mindsets**
David Yeager Ph.D. University of Texas Austin
South Bend, IN

October 2019 **Collaborating Across Borders (CAB VII)**
Interprofessional Practice Conference
Indianapolis, IN

April 2019 **20th Annual Midwest Conference on the Scholarship of Teaching and Learning**
University Center for Excellence in Teaching
Indiana University South Bend, South Bend, IN
American Speech Language Hearing Association National Convention

2013, 2018-2021 Chicago, Boston, Orlando, Washington D.C

Midwest Conference on the Scholarship of Teaching & Learning

April 2018 University Center for Excellence in Teaching
Indiana University South Bend, South Bend, IN

New Faculty Orientation

August 2017 University Center for Excellence in Teaching
Indiana University South Bend, South Bend, IN

Indiana Speech Language Hearing Association State Convention

1993-2004, 2006-2010, 2018 *Indianapolis, IN*

Service to the University

Campus Level

2021-Present **Member- University Center for Excellence in Teaching Advisory Board**
Indiana University South Bend, South Bend, IN

2021-Present **Member- University Center for Excellence in Teaching FACET Grant Committee**
Indiana University South Bend, South Bend, IN

February 2020 **Trends in Assessment: Enduring Principles, Emerging Opportunities**
Indiana University South Bend, South Bend, IN

July, 2020 **New Student Orientation**
Faculty Leader
Indiana University South Bend, South Bend, IN

October 2017-present **National Student Speech Language Hearing Association, IU South Bend Chapter**
Faculty Advisor
Indiana University South Bend, South Bend, IN

August 2019-present **Member–Senate Curriculum Committee**
Indiana University South Bend, South Bend, IN

College Level

February 2022 **Graduate Admission Interview Day**
Faculty Facilitator In person and Digital Escape Room
Indiana University South Bend, South Bend, IN

2021-present **Member –MS SLP Graduate Admissions Committee**
Indiana University South Bend, South Bend, IN

	MS SLP American Speech Language Hearing Association Accreditation Site Visit
January, 2021	*Indiana University South Bend, South Bend, IN*
May,2020-Present	**Chair-Vera Z. Dwyer College of Health Science Curriculum Committee**
	Indiana University South Bend, South Bend, IN
2020-21	**MS SLP Accreditation Preparation**
	Indiana University South Bend, South Bend, IN
2018	**Member- Vera Z. Dwyer College of Health Science Search Committee**
	Speech Language Pathology Program Director/Faculty Search
	Indiana University South Bend, South Bend, IN
2018-2021	**Member – Vera Z. Dwyer College of Health Science Strategic Plan Taskforce**
	Simulation Lab
	Indiana University South Bend, South Bend, IN
2017-May,2020	**Member – Vera Z. Dwyer College of Health Science Curriculum Committee**
	Indiana University South Bend, South Bend, IN

Department Level

April 2022	**Health Sciences Student Group Meeting**
	SLP Concentration Faculty Lead
	Indiana University South Bend, South Bend, IN
February 2022	**I Heart Health Sciences Event**
	SLP Table
	Indiana University South Bend, South Bend, IN
November 2021	**Health Sciences Student Group Meeting**
	SLP Concentration Faculty Lead
	Indiana University South Bend, South Bend, IN
August 2021	**Health Sciences Welcome Home Event**
	SLP Table
	Indiana University South Bend, South Bend, IN
May 2020	**Facebook LIVE: SLP Concentration**
	Online recruitment and information event for students
	Indiana University South Bend, South Bend, IN
2017 – Present	**Social Media Coordinator**
	National Student Speech Language Hearing Association IU South Bend Chapter
	Vera Z. Dwyer College of Health Sciences, Indiana University South Bend, South Bend, IN

Service to the Profession

February 2022	**Student Advocacy Day: Indiana Speech Language Hearing Association**
	Indiana Capital
	Indianapolis, IN
2019-2020	**American Speech Language Hearing Association ESTA/SLPA Initiatives**
	The American Speech Language Hearing Association
	Rockville, MD

October 2018, 2019, 2020,2021
Virtual Advocacy Day: National Student Speech Language Hearing Association
Indiana Dental Hygienists' Association
Indianapolis, IN

Service to the Community

October 2021
Hearing Screenings Baugo School District
MS SLP Program
Indiana University South Bend, South Bend, IN

September 2021
Coordinator: Hearing Screenings IU South Bend
MS SLP Program
Indiana University South Bend, South Bend, IN

2020 & 2021
National Student Speech Language Hearing Association IU South Bend Chapter Virtual 5K
Coordinator
South Bend, IN