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FACULTY PERCEPTIONS ON REGULAR AND SUBSTANTIVE INTERACTION IN  
ASYNCHRONOUS ONLINE COURSES

by

Britney D. Reulet

A Doctoral Project Submitted to,  
the College of Education and Human Sciences  
and the School of Education  
at The University of Southern Mississippi  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Education

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This Doctoral Project was approved by:

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## **ABSTRACT**

The need for quality interaction between faculty and students in distance education courses has been widely studied in the field of higher education. However, less research exists on how faculty can incorporate regular and substantive interaction (RSI) in their online asynchronous courses to differentiate distance education courses from correspondence courses. Using a quantitative research design, this study investigated the attitudes and opinions of the strategies used by faculty in online degree programs to achieve RSI in the delivery of asynchronous courses as well as opinions on faculty training to achieve RSI. The results of this study indicate that while faculty are aware of the need for, and the benefits of creating opportunities for timely and quality interaction, additional training and education may be warranted for faculty to feel confident in their efforts to achieve RSI in their distance education courses. This study adds to the knowledge on the importance of designing the delivery of distance education courses with the student experience in mind to create a learning environment that incorporates quality student-to-faculty and student-to-student interaction.

*Keywords:* regular and substantive interaction, distance education, asynchronous courses

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## **DEDICATION**

This project is dedicated to my husband, Justin, and our sons, Connor, and Kaleb.

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## LIST OF ACRONYMS

<i>CCEC</i>	Canvas Course Evaluation Checklist
<i>HEA</i>	Higher Education Act of 1965
<i>IRB</i>	Institutional Review Board
<i>LMS</i>	Learning Management System
<i>RSI</i>	Regular and Substantive Interaction
<i>SHRP</i>	School of Health-Related Professions
<i>SON</i>	School of Nursing
<i>UMMC</i>	University of Mississippi Medical Center
<i>USM</i>	The University of Southern Mississippi

## **CHAPTER I – INTRODUCTION**

Distance education courses and online programs have grown increasingly popular and widely available with advances in technology and provide more learning opportunities to students (Kentnor, 2015). With the growth of online learning, quality assurance issues may arise. Among the factors involved in quality assurance, course design can be the most crucial because it can impact student learning the most (Gregory et al., 2020). Online instruction is designed and delivered differently than traditional face-to-face instruction. Therefore, faculty members should possess skills that enable them to design and deliver online courses that provide a quality, interactive learning experience for students (Gregory et al., 2020).

### **Background**

Distance education can be delivered through the offering of online courses and online programs. In the late 1990s, the United States experienced a large growth in the offering of distance education in university and college settings with advances in technology (Kentnor, 2015). In the state of Mississippi, distance education opportunities are offered through online programs and courses at most public and private colleges and universities. According to the National Council for State Authorization Reciprocity Agreement (Straut & Boeke, 2020), there were 23,220 distance education students enrolled in the participating Mississippi colleges and universities in the fall of 2020.

Distance education can be defined in various ways. Generally speaking, distance education can be defined as education that takes place when the student and the teacher are not physically together (Kentnor, 2015). According to Caruth and Caruth (2013), correspondence education is considered a self-paced educational approach with very minimal, if any, interaction between the student and the teacher. Though they sound similar, distance education and

correspondence courses have notably different definitions according to the Higher Education Act of 1965 (HEA), as amended, which officially defines the two as the following:

Correspondence course: A course provided by an institution under which the institution provides instructional materials, by mail or electronic transmission, including examinations on the materials, to students who are separated from the instructor.

Interaction between the instructor and student is limited, is not regular and substantive, and is primarily initiated by the student. Correspondence courses are typically self-paced.

Distance education means education that uses one or more of the technologies... to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor, either synchronously or asynchronously. (Online Learning Consortium [OLC] et al., 2019, p. 1-2).

Online education can take place in three forms – synchronously, asynchronously, or a combination of the two. Synchronous online learning occurs in real time where the students and faculty are interacting at the same time with the use of technological resources such as web conferencing software (King et al., 2001). Asynchronous online learning does not require real time interaction between the student and the faculty in the online course. Although real time interaction does not occur, there are a variety of technological resources available for faculty to utilize in their asynchronous courses to facilitate interaction and engagement (King et al., 2001).

To assist students and families with paying for postsecondary education, the Higher Education Act (HEA) of 1965 was established. Collectively, qualifying institutions received a total of 2.7 billion in federal aid under the HEA in the fiscal year 2020 (Congressional Research Service, 2021). The HEA has been amended many times over the years to facilitate the growing

changes in education. In 1992, the HEA was amended to include regulations that prevented students from being eligible for Title IV financial aid if their institution had more than half of their students enrolled in correspondence and distance education courses (OLC et al., 2019). This regulation limited the number of online courses institutions could offer. In the 2006 amendments to the HEA, this regulation was removed (Xu & Xu, 2019). Since colleges and universities were no longer required to limit their distance education offerings to ensure Title IV funding, a growth in online education courses and programs ensued.

With the growth of distance education, and to ensure credibility and quality of the delivery of online education, the HEA now contains a provision requiring colleges and institutions to provide regular and substantive interaction in the delivery of their distance education courses and programs (Delisle & Malkus, 2018). The language found in the HEA regarding *regular* and *substantive* interaction for distance education does not provide any guidance on how asynchronous or synchronous courses should achieve this interaction. Faculty in asynchronously designed online courses must still strive to meet regular and substantive interaction in their courses even though the course design does not call for real-time interaction (Delisle & Malkus, 2018). The level to which faculty interact and engage with students and are present in their asynchronous online courses will depend on their level of training on the strategies available within their Learning Management System (LMS) to achieve regular and substantive interaction.

With the growth of online learning, LMS platforms have been designed to assist faculty with creating online courses to effectively deliver course content to students (Baldwin & Ching, 2019). One of the fastest growing LMS platforms is Canvas. Canvas offers teacher users the Canvas Course Evaluation Checklist (CCEC) to assist them in creating opportunities for quality

interaction. To utilize the features available in Canvas and be able to provide a quality, interactive learning experience, faculty should be aware of the need for regular and substantive interaction and how the features in Canvas can assist them in meeting this standard related to distance education.

### **Problem Statement**

Issues can arise when faculty attempt to meet federal regulations related to regular and substantive interaction because the definition of *regular* and *substantive* is not clearly defined by the HEA, the Department of Education, or by institutions that attempt to implement this standard. This potentially leaves faculty struggling to be certain they are delivering their online courses in a way that provides *regular* and *substantive* interaction. Faculty teaching in asynchronous online courses are of more concern as they do not meet with their students in real time and may have a harder time creating opportunities for such interaction if they are unfamiliar with the methods available in their learning management system. Since there is a level of ambiguity as to what constitutes *regular* and *substantive*, there is cause for concern regarding the quality of the education experience that faculty are delivering to their students in online asynchronously delivered courses as well as whether institutions are in compliance with the HEA regulations.

### **Purpose Statement**

The purpose of this project was to investigate the attitudes and opinions of the strategies used by faculty in The University of Mississippi Medical Center's (UMMC) School of Health-Related Professions (SHRP) and the School of Nursing (SON) online degree programs to achieve regular and substantive interaction (RSI) in the delivery of asynchronous courses.

Opinions regarding available resources and training as well as the effectiveness of the methods available to achieve this interaction were also investigated.

### **Research Questions**

The following research questions guided this study:

**RQ1.** What are the attitudes of faculty regarding achieving regular and substantive interaction in online asynchronous courses?

**RQ2.** What are the opinions of faculty regarding the resources and training available to enable them to achieve regular and substantive interaction in online asynchronous courses?

**RQ3.** What are the opinions of the effectiveness of the methods available to achieve regular and substantive interaction in online asynchronous courses?

## CHAPTER II – LITERATURE REVIEW

This chapter presents contemporary literature that was identified as the most relevant to this study. The literature presented provides an overview of the importance of engagement, presence, and interaction in online education and supports the need for this research study. To locate relevant research articles, a search of EBSCOhost databases was completed. Search terms included “regular and substantive interaction”, “higher education”, “teacher presence in online education”, “faculty interaction in online education”, and “delivery methods in distance education”. The databases searched comprised Academic Search Premier, Education Source, Educational Administration Abstracts, ERIC, and Teacher Reference Center. The date range was limited to the last 20 years and only full text articles, published in English, were included in the results. Additionally, Google Scholar was used with the same search parameters.

The search for “regular and substantive interaction” yielded five results. Searching for “teaching presence in online education” provided 16 results and “faculty interaction in online education” added an additional 173 results. A search for “delivery methods in distance education” yielded an additional 41 results. To narrow the search to articles that were most relevant to the topic, results were scanned to ensure that they referred to post-secondary education and not primary, or K-12 learning. Articles that pertained to correspondence style courses were excluded and articles that appeared to be duplicates or overlapping in content were also excluded. Of the results provided, eight articles were found that were most relevant and have been used for this study. These articles were published between 2001 and 2020. This literature review presents the synthesis of research related to the following themes: (a) engagement, (b), presence, and (c) interaction.

## Engagement

Engaging with online students can help facilitate a quality education experience. Martin and Bolliger (2018) studied the importance of engagement strategies for online learners. The authors collected data from online students at eight universities within the United States of America. Students indicated that icebreaker discussions were the most important engagement strategy faculty could implement in an online course. Results further showed that structured discussion boards, which included the instructor posing guided questions, were an important engagement strategy as well. Additionally, students revealed that email communication, detailed assignment feedback, assignment rubrics, and announcements were strategies they found engaging in their online courses (Martin & Bolliger, 2018).

Active learning has historically been used in face-to-face instruction to engage students, but scholarship suggests this strategy can also be effectively implemented in a distance education format to encourage engagement. Riggs and Linder (2016) provided an approach that can be used to include active learning in the online asynchronous classroom. Their “three-pronged approach includes creating an architecture of engagement, the use of web-based tools in addition to the use of the learning management system, and a re-imagining of discussion boards as interactive space” (p. 1). The authors suggested that faculty include an engagement policy in their syllabus which would set the expectations for communication and online engagement. Other methods included structuring the online course with modular, or weekly organization. This approach can reinforce the engagement process by ensuring students move together through assignments and learning material as a cohort.

Together, these studies indicated that, in an online asynchronous space, providing opportunities for engagement can enhance students’ learning experience. There can be a greater

need for these opportunities if nontraditional adult learners are present in the online environment. The illustrated evidence concluded that while creating opportunities for engagement in the online environment can be time consuming and challenging, it is worthwhile for the student.

### **Presence**

Instructor presence in a distance learning course can be felt in a variety of ways. Ladyshevsky (2013) noted that the design and organization of a course and the amount of direct instruction utilized by the instructor can lead to an increased sense of presence of faculty in online courses. Additionally, when students felt that their faculty were present in the course, their performance and satisfaction increased (Ice et al., 2007). Faculty presence in an online course can be looked at separately from interaction because interaction can take place in ways such as email, for instance. Presence, from the student's perspective, was found to be felt with personalized lectures, personalized feedback, and other techniques that allowed the student to feel that the faculty were speaking directly to them (Ice et al., 2007; Ladyshevsky, 2013; Skramstad et al., 2012). Students have noted that their level of satisfaction in an online course can be directly tied to the presence, or personal contact, felt between the faculty and the student (Ladyshevsky, 2013).

To investigate faculty presence, Skramstad et al. (2012) utilized a mixed method approach by administering an online survey over a semester and collecting data from the course management system. Their aim was to study faculty presence and timeliness of communication in online courses. Based on survey responses, the participants indicated that they believed teaching presence to be neutral or slightly positive in the seven online courses included in the study. The results of the study showed a significant relationship between teaching presence and communication timeliness. As illustrated, providing the online student with timely

communication can increase the feeling of faculty presence and could promote students' level of satisfaction in an asynchronous learning environment.

In addition to communication timeliness, other features in an online course can be used to facilitate faculty presence. Ladyshewsky (2013) employed a mixed method study focused on instructor presence and how it affected the overall satisfaction of the online student.

Approximately 35 students were included in the study which compared two instructors (identified as *instructor 1* and *instructor 2*) in two online courses regarding their presence and student satisfaction scores. Students reported feeling more “presence” and a higher level of satisfaction from *instructor 2* due to their detailed feedback, discussion board activity, and social presence. Students also reported that *instructor 1* lacked presence on a weekly basis by not participating in weekly discussions and by providing general feedback to the students rather than individualized feedback on assignments.

Scholarship further documents that faculty may consider using unique methods of providing assignment feedback for their students to increase the feeling of their presence in the online asynchronous environment. For instance, Ice et al. (2007) studied the use of audio feedback in asynchronous online courses to increase teaching presence among master and doctoral students. Overwhelmingly, students reported that they felt more involved, retained greater amounts of information, and felt a higher degree of care from their faculty when audio feedback was used in their courses. Student responses to semi-structured interviews indicated that the social presence felt in the online, asynchronous environment, was increased with the use of audio feedback (Ice et al., 2007).

The online learning environment can feel underwhelming for students if their faculty are not committed to utilizing engagement strategies. The strategies noted in these studies, which

included personalized feedback, weekly announcements, audio feedback, and personalized lectures, led to higher levels of engagement between the faculty and the students. Although students do not have many opportunities to be in synchronous settings with their faculty, the use of engagement techniques was demonstrated to have created a feeling of togetherness in the online learning environment.

### **Interaction**

The major finding in the reviewed literature is the importance of interaction between faculty and students in online courses. The synthesis of available scholarship also revealed the value interaction adds to the learning experience for students in online courses. This type of interaction was studied and explained from a few different perspectives. Nandi et al. (2012) revealed that students who interacted with faculty and other peers in their online courses reported a more positive experience overall regarding online education. The authors investigated the quality of online interaction between students and the importance of faculty interaction in fully online courses. By analyzing weekly discussion forums and assignment discussion forums from two courses, the authors aimed to provide instructors with criteria that can be used to gain quality interactive learning in online courses. The findings suggested instructors designed their courses with student-centered and instructor-centered discussion boards with interaction consisting of asking and answering questions, providing opinions, suggesting solutions, providing experiences, and asking for feedback. Overall, the research supported the hypothesis that, by providing students with valuable interaction, faculty can facilitate a more substantive learning experience with discussion board assignments.

While faculty and student interaction is important, it is also important for the student to read and navigate through course content to improve their overall learning experience. In that

regard, Zimmerman (2012) found that students who spent more time interacting with content found in an online course, performed statistically higher than those who spent little time. By examining three sections of the same online course and exploring learner-to-content interaction, the author suggested a correlation to the student's course grade and the quality of the work completed. Results indicated that students who spent more time navigating course material, and less time on course quizzes, had a higher frequency of obtaining a passing grade. Additionally, students who spent more time on quizzes generally received a lower grade which was contributed to the fact that they spent less time navigating and reviewing the course content.

In the online learning environment, providing opportunities for student-to-student interaction can also be valuable to the learning experience. Reviewing graded assignments that required student-to-student interaction, Oyarzun et al. (2018) explored the experiences of faculty from fully online asynchronous courses over a three-semester period. Once the assignment was complete, faculty emailed the participating students to complete a survey which asked them to score the social presence, interaction quality, and satisfaction of the assignment. The results revealed that an increase in achievement and learner satisfaction was associated with a high level of interaction in assignments.

In view of all the evidence presented, it can be concluded that interaction in the online asynchronous environment can be achieved in a variety of ways. The strategies discussed in these studies provide faculty with valuable guidance regarding the methods that can be implemented within their learning management system platforms. Though faculty may find these approaches time consuming and challenging, it is evident that the results of implementing opportunities for teacher-to-student interaction and student-to-student interaction have been shown to be beneficial to the student and provide a more substantive learning environment.

## Summary

The literature reviewed in this section illustrates the important role that engagement, presence, and interaction play in how students perceive the quality of their online learning experience. This scholarship also provides educators with methods that can be used in their learning management systems to increase the level of engagement, faculty presence, and student-to-student and student-to-faculty interaction. Ultimately, the methods discussed are aimed to help aid in the achievement of regular and substantive interaction in asynchronous online courses.

Overall, it can be concluded that ample empirical evidence exists regarding faculty perceptions of student interaction, student perceptions of faculty interaction, and the quality of online education based on interaction and presence, as well as the level of satisfaction students have in online courses. However, there is a scarcity of research that focuses on the term *regular* and *substantive* interaction. Although various terms may be used to refer to this construct, the vague standards that the Higher Education Act imposes on institutions that offer online degree programs leave a gap in the research on RSI in online, asynchronous courses.

The literature reviewed provided substantial information related to the overall need for interaction between the faculty and the student in the distance education environment. However, the studies discussed do not answer the questions posed in this study. While research exists on the topic of faculty perceptions related to interaction with students in online courses, the purpose of this study is to explore how faculty feel they are achieving interaction with the strategies and resources available to them, as opposed to their overall perceptions of interaction in online learning. Additionally, the literature substantiated the importance of proper course design and delivery to aid in the achievement of interaction in asynchronous distance education courses.

The presented findings reveal an evident need for interaction and faculty presence to lend to the quality of the online learning experience. Moreover, the presented scholarship supports the need for further investigation into faculty attitudes and opinions for achieving regular and substantive interaction (RSI) in online asynchronous courses as well as the training faculty received regarding methods to use to achieve RSI in their online courses.

## **CHAPTER III – METHODS**

The methodology for this project involved collecting quantitative data from a convenience sample of post-secondary faculty. Quantitative research allows to investigate a research problem by analyzing the tendency of responses with the use of a specified instrument (Creswell, 2012). The purpose of this study was to investigate the attitudes and opinions of the strategies used by faculty in online degree programs to achieve regular and substantive interaction (RSI) in the delivery of asynchronous courses as well as opinions regarding the training they may have received concerning the methods available to achieve RSI. The decision to pursue a quantitative approach for this research study was based on the most effective method to gather data related to attitudes and opinions.

The literature review conducted for this study revealed far more instances of quantitative approaches to collecting data when looking at faculty perceptions related to interaction in online courses, the presence of faculty in the online learning experience, and engagement practices of faculty in online learning. Creswell (2012) explained that quantitative research is best used to gather numerical data from a large pool of participants to obtain responses to pre-designed questions. Therefore, a quantitative approach seemed necessary to gather the most useful data related to the research questions this study aimed to address.

### **Instrument**

Quantitative data were gathered using a questionnaire designed in Qualtrics (Appendix A). Qualtrics is a web-based survey platform that is offered free to students at the University of Southern Mississippi (USM). The questionnaire was delivered to the participants' university assigned email address. The instrument included demographic items related to teaching experience, Likert-scale items to assess the level of agreement to statements regarding methods

used to achieve RSI, and items related to training and the effectiveness of various methods used to achieve RSI. The survey method, particularly the online, web-based survey, was the most appropriate method for collecting data related to attitudes and opinions. With the use of questionnaire items, this method provided the researcher with data that specifically addressed each research question identified for this study.

The instrument included five items related to respondents' demographics, which determined the faculty's primary field of study, the length of time they have taught in higher education, their primary role at their respective school, and their status related to their teaching role (full time, part time, or adjunct). The instrument included one matrix Likert-scale item to gather information related to faculty attitudes regarding achieving RSI in online asynchronous courses as well as one item related to the frequency of interaction. The instrument included five items related to training that the faculty may have received regarding resources and methods used to achieve RSI, and two matrix-style items related to the effectiveness of the methods used to achieve RSI in online asynchronous courses.

### **Participants**

Participants included in this project consisted of faculty from the University of Mississippi Medical Center's (UMMC) School of Health-Related Professions (SHRP) and the School of Nursing (SON). The participants representing SHRP consisted of faculty with teaching responsibilities in the Bachelor of Science and Master of Health Systems Administration programs, the Bachelor of Science in Health Informatics and Information Management program, the Master of Health Informatics program, the Master of Health Information Management program, the Bachelor of Science in Radiologic Sciences program, and the Bachelor of Science in Medical Laboratory Sciences program. Faculty from the SON included those with teaching

responsibilities in the Bachelor of Science in Nursing and Master of Science in Nursing online programs.

Participants were chosen based on the designated program delivery method. The programs chosen included those that are bachelor or master level programs and are fully online, distance education programs. Any program that had transitioned temporarily to an online format due to COVID-19 was not included. With the assistance of the deans from the SON and SHRP, faculty meeting the criteria of teaching fully online courses were identified. Following approval from the dean of SHRP, the researcher was provided the email addresses for the faculty identified as meeting the criteria for this study and the survey instrument was administered through the faculty's university issued email address. The dean of the SON identified the appropriate faculty and administered the Qualtrics survey via email to the faculty on behalf of the researcher. To eliminate participants that did not meet the requirements of this study, the initial questionnaire item included skip logic to end the survey for individuals that had not taught at least one online, asynchronous course. The participants invited to complete the survey included 29 faculty from SHRP and 108 faculty from SON.

### **Data Collection**

Following approval from the USM's Institutional Review Board [IRB] (Appendices B and C), prospective participants received an email invitation which included an anonymous link to the Qualtrics survey. An initial email invitation was sent to prospective participants on September 1, 2021. The email invitation described the research study, provided an estimated completion time, included a confidentiality and anonymity statement, and contact information for the researcher. An informed consent statement was provided prior to the start of the survey and informed participants that by completing the survey, they were agreeing to take part in the

research study. A reminder email was sent to the participants on September 21, 2021, and the survey was closed on September 28, 2021.

Invitations to participate in this study were sent to 137 faculty within the chosen UMMC schools. Of these participants, 29 included faculty from SHRP and 108 faculty from the SON. At the close of the survey, 35 responses were received which constitutes a 25% response rate. Of the 35 respondents, 28 completed the full survey which resulted in a 20% completion rate. In order to properly analyze the data, only the fully completed survey responses were included in the data analysis process.

### **Data Analysis**

After the data collection period ended, data were analyzed. To analyze the survey responses, statistical information from Qualtrics was used, as well as Microsoft Excel. Quantitative results were converted to numerical data and percentages of responses were calculated to determine response level to survey items.

## CHAPTER IV – RESULTS

The following chapter provides a summary and analysis of the data collected from the Qualtrics survey items that provide answers to the research questions. This study aimed to answer the following research questions:

**RQ1.** What are the attitudes of faculty regarding achieving regular and substantive interaction in online asynchronous courses?

**RQ2.** What are the opinions of faculty regarding the resources and training available to enable them to achieve regular and substantive interaction in online asynchronous courses?

**RQ3.** What are the opinions of the effectiveness of the methods available to achieve regular and substantive interaction in online asynchronous courses?

### Participant Demographics

Based on survey responses, 32% (n=9) of respondents identified as teaching in Health Systems Administration programs, 25% (n=7) as teaching in Nursing programs, 17.86% (n=5) as teaching in Radiologic Sciences programs, 17.86% (n=5) as teaching in Health Informatics and Information Management programs, and 7.14% (n=2) as teaching in Medical Laboratory Sciences programs.

Faculty participating in the survey varied in their years of teaching experience within higher education. When asked to identify their years of experience, 32% (n=9) of the respondents indicated they have been teaching in higher education for more than 15 years and an additional 32% (n=9) indicating they have taught in higher education between six and ten years.

Additionally, 14.29% (n=4) indicated they have taught in higher education for 11-15 and the remaining 21.43% (n=6) indicated they have taught in higher education for five years or less.

Respondents were asked to identify their primary role in higher education as either faculty, administration with instructor responsibilities, or staff with instructor responsibilities. Over 70% (n= 20) indicated they were considered faculty, 25% (n=7) held roles in administration with instructor responsibilities, and 3.57% (n=2) held a staff position with instructor responsibilities. Participants were also asked to identify whether they were considered adjunct faculty, full time faculty or part time faculty. Over 65% (n=19) of respondents indicated that they held a full-time position in higher education, 17.86% (n=5) were part time, and 14.29% (n=4) were adjunct faculty.

### **Attitude Regarding Achieving Regular and Substantive Interaction**

This section provides an analysis of the attitudes of faculty regarding achieving regular and substantive interaction (RSI) in online asynchronous courses. When asked whether they believed that regular and substantive interaction was necessary between faculty and students in asynchronous online education, 89.29% (n=25) of respondents agreed or strongly agreed that this type of interaction was necessary in online education. Over 96% (n=27) of respondents agreed or strongly agreed that students benefit from RSI with their faculty and that when faculty participate in RSI with their students, they add value to the learning experience. When asked if creating opportunities for RSI in online asynchronous courses were difficult for faculty, 82% (n=23) of respondents agreed or strongly agreed.

Respondents were also asked their opinions on the frequency of interactions between faculty and students in online asynchronous courses. The mean response for this survey item was 3.61 (SD=1.11). Over 50% (n=15) indicated that interacting with students once a week would be sufficient, while 25% (n=7) believed twice a week was more appropriate. Seven percent (n=2) of respondents indicated that interacting with students should take place every other week and

14.29% (n=4) that interaction would be as needed and can depend on the students' progress in the course which may fluctuate when progress declines or increases.

### **Opinions on Training for Regular and Substantive Interaction**

This section provides an analysis of faculty opinions related to the training they may have been provided to enable them to achieve regular and substantive interaction in online asynchronous courses. When asked if their institution offered some form of training to guide them in providing regular and substantive interaction, 52.38% (n=13) indicated that their institutions provided group or one-on-one training. Most of these respondents, 84.62% (n=11), indicated that they have attended at least one training session on how to achieve RSI in online asynchronous courses and 15.38% (n=2) that they had attended three to four training sessions at their institution.

When asked whether the training sessions had provided a definition for regular and substantive interaction, 69.23% (n=9) agreed and 30.77% (n=4) neither agreed nor disagreed. Over 90% (n= 12) of respondents indicated that during the training sessions they attended, details on the various methods that they could use to achieve RSI were provided. Over 84.62% (n=11) of the 13 respondents indicated that in the training sessions attended, they were provided instructions on how to implement the methods that were available to achieve RSI and following completion of institutional training session, while 76.92% (n=10) of the 13 respondents felt confident in their abilities to implement various methods to achieve RSI in their online asynchronous courses. Table 1 displays the levels of agreement for outcomes of the training sessions respondents attended.

**Table 1***Training Outcomes*

Outcome	Neither agree nor disagree		Agree		Strongly agree	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Training sessions defined regular and substantive interaction	4	30.77	9	69.23	0	0
Training sessions explained the importance of regular and substantive interaction	4	30.77	7	53.85	2	15.38
Training sessions provided details on methods available for faculty to use to achieve regular and substantive interaction.	1	7.69	12	92.31	0	0
Training sessions provided instruction on how to implement methods available for faculty to achieve regular and substantive interaction	2	15.38	11	84.62	0	0
Following completion of training sessions, I felt confident in implementing methods to achieve regular and substantive direct interaction.	3	23.08	10	76.92	0	0

*Note.* Participants indicated their level of agreement related to outcomes of training sessions they had attended on a

Likert scale with the options being strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree.

No respondents indicated strongly disagree or disagree as their level of agreement.

### **Effectiveness of Methods Used to Achieve Regular and Substantive Interaction**

This section provides an analysis of the opinions of the effectiveness of the methods available to achieve regular and substantive interaction in online asynchronous courses.

Respondents were asked their level of agreement on whether students were interactive in their attempts to achieve regular and substantive interaction with various methods. Over 70% (n=20) of the respondents indicated that they felt students were interactive with faculty in discussion

board forums; 64.28% (n=18) felt students utilized the content created by faculty such as PowerPoints and video lectures; 60.71% (n=17) believed that students respond to individual assignment feedback that is provided by faculty; 50% (n=14) reported that students respond to weekly announcements posted by faculty; and 46.43% (n=13) indicated that students post comments or questions to the narrated content that faculty have created. Table 2 displays the levels of agreement regarding student interactivity for each of the methods assessed.

**Table 2**

*Student interactivity*

Student Interactivity	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly Agree	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
	Students post comments/questions to the narrated content created by faculty	3	10.7	6	21.4	6	21.43	13	46.4	0
Students respond to individual assignment feedback	1	3.57	7	25	3	10.71	15	53.6	2	7.14
Students view/listen to the content created by faculty	0	0	2	7.14	8	28.57	16	57.1	2	7.14
Students are interactive with faculty in discussion board forums	1	3.57	2	7.14	5	17.86	15	53.6	5	17.86
Students respond to weekly announcements posted by faculty	3	10.7	6	21.4	5	17.86	12	42.9	2	7.14

Respondents were asked to provide their level of agreement on the overall effectiveness of the methods available for them to achieve regular and substantive interaction in online asynchronous courses. Over 96.42% (n=27) agreed or strongly agreed that individual assignment feedback was an effective method to achieve RSI, 85.72% (n=24) agreed or strongly agreed that

email interaction was an effective method to achieve RSI, 82.14% (n=23) agreed or strongly agreed that weekly announcements were an effective method to achieve RSI, 64.28% (n=18) indicated that discussion board forums are an effective method to achieve RSI, and 57.15% (n=16) responded that narrated PowerPoints and video lectures were an effective method to achieve RSI. Table 3 displays the levels of agreement for each of the methods assessed.

**Table 3**

*Effectiveness of Methods Used to Achieve Regular and Substantive Interaction*

Method	Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Weekly announcements	2	7.14	0	0	3	10.71	16	57.1	7	25
Email interaction	0	0	1	3.57	3	10.71	18	64.3	6	21.43
Discussion board forums	0	0	3	10.71	7	25	9	32.1	9	32.14
Narrated PowerPoints, video lectures, etc.	0	0	5	17.86	7	25	11	39.3	5	17.86
Individual assignment feedback	0	0	0	0	1	3.57	17	60.7	10	35.71

**Summary**

This chapter provided the results and analysis of the data collected from the Qualtrics survey items that provided answers to the research questions posed. Demographic information related to the participants included program of study they primarily taught, years of teaching in higher education, and primary role in higher education. This chapter also provided information concerning faculty attitudes related to achieving regular and substantive interaction in their

online courses, faculty experiences and opinions with training related to regular and substantive interaction and faculty opinions related to the effectiveness of specific methods that can be utilized to achieve regular and substantive interaction.

## CHAPTER V – DISCUSSION

The purpose of this study was to investigate the attitudes and opinion of the strategies used by faculty in The University of Mississippi Medical Center's School of Health-Related Professions and the School of Nursing online degree programs to achieve regular and substantive interaction in the delivery of asynchronous courses. This study also investigated the opinions regarding available resources and training as well as the effectiveness of the methods available to achieve the interaction.

The first research question aimed to determine faculty attitudes regarding achieving regular and substantive interaction in online asynchronous courses. The results of this study indicated that faculty generally agree that students benefit from having regular and substantive interaction in their online courses which further substantiates previous findings. As mentioned in Chapter II of this study, Nandi et al. (2012) found that students who interacted with faculty in online courses reported to have had a more positive experience. These results also agree with the findings of Oyarzun et al (2018) which showed that providing a high level of interaction in assignments can add value to students' learning experience. Faculty involved in the current study overwhelmingly agreed that interaction that is regular and of quality is necessary in online asynchronous courses.

In response to opinions on the frequency of interaction between faculty and students, respondents in this study indicated that interactions between faculty and students should take place one to two times per week, but that faculty and student interaction may fluctuate depending on the performance of the student. Prior research has indicated that frequency and timeliness of interaction can aid in determining whether students feel that their faculty are present in their online courses. In that regard, Skramstad et al. (2012) found that when faculty were timely and

frequent in their communication, students felt an increase in overall satisfaction with their learning experience as well as an overall feeling of faculty presence. Additionally, Nandi et al. (2012) documented that valuable interaction could aid in providing students with a more substantive learning experience. The results of this survey provided important data related to frequency of interaction, but more research may be needed to fully understand this construct.

The second research question aimed to determine faculty opinions related to training for regular and substantive interaction. When asked about training opportunities related to providing RSI in their courses, a surprising number of respondents (52.38%, n= 13) indicated that training had been available to them. This result is surprising as both schools represented in this study, the School of Health Related Professions and the School of Nursing, have a dedicated instructional design team. These teams typically offer training on various aspects of Canvas and other instructional platforms that may be used in conjunction with or independent from Canvas to aid in quality course design. This result may indicate that the instructional design teams are not utilizing the term “regular and substantive interaction” when they are offering training sessions on instructional strategies and therefore faculty may not see value in attending training sessions. It was also surprising to find that only nine of those who indicated that they had attended training indicated that the concept of “regular and substantive interaction” was defined.

The final research question aimed to determine faculty opinions of how effective various methods available to them may be in allowing them to provide opportunities for regular and substantive interaction. This study first examined various engagement methods that can be used in a Learning Management System (LMS) and gauged the respondent’s level of agreement on how interactive students may be with each method. Overwhelmingly, the respondents felt that students tended to be interactive with faculty in discussion board forums. This finding

corroborates the ideas of Martin and Bolliger (2018) who discussed the importance of structured assignment in online education to allow for engagement which ultimately leads to interaction. The findings of the current study indicate that if faculty structure discussion boards effectively, they may be able to provide opportunities for engagement with their students, resulting in quality interaction.

The final survey item analyzed asked the respondents to indicate their level of agreement on the effectiveness of the use of weekly announcements, discussion boards, personalized content created by faculty, and individual assignment feedback as methods to achieve regular and substantive interaction. Although most criteria received a degree of positive responses related to individual effectiveness, there were also numerous indications of respondents neither agreeing nor disagreeing with the effectiveness of the previous mentioned methods. Respondents were offered an opportunity to provide the researcher with additional data related to methods they have found may allow for regular and substantive interaction. Additional methods that were suggested included virtual meetings and conference calls, wellness check-ins throughout the semester, and gamification using third party products.

### **Implications**

Some of the issues emerging from the findings indicate that there may be a need for additional training for faculty who are teaching in online asynchronous courses. Regular and substantive interaction is a crucial element in determining whether a course is deemed correspondence or distance education. Faculty who are responsible for delivering distance education should be made aware of the importance of this element in their course design. Additionally, instructional design teams who often train faculty on instructional design methods should include the phrase “regular and substantive interaction” in their language and training

methodologies to ensure that faculty can connect the importance of this concept to their course design strategy to ensure their course does not appear to be designed or delivered as a correspondence course.

A recommendation from this study could include audits of current online, asynchronous courses that are delivered from accredited institutions and are designated as distance education courses. An audit process could uncover opportunities for instructional design teams to educate current faculty on methods to strengthen the design and delivery of their online courses to ensure that accrediting bodies and other regulatory agencies are able to recognize the use of regular and substantive interaction in their courses.

Results of this study suggested that faculty may not have a clear understanding of the meaning or importance of the terms *regular* and *substantive*. This finding has important implications for institutions to develop a standard definition to be used by faculty and instructional design teams. As mentioned previously, the Higher Education Act does not provide guidance on how online courses should achieve RSI. It is possible, therefore, that a need may exist for institutions to create policies or review current policies regarding how often faculty should engage in their online courses or how often they should provide opportunities for student-to-student and faculty-to-student interaction. With the growth of online learning, it is imperative to ensure that the quality of the online learning experience is not overlooked. With the availability of the Canvas Course Evaluation Checklist (CCEC), institutions could utilize the checklist as a method to ensure that faculty are creating regular opportunities for quality interaction with their online students.

## **Limitations and Recommendations**

While this study focused at two schools in one institution, further research should be conducted on a larger scale to develop a deeper understanding of faculty perceptions on regular and substantive interaction in online asynchronous courses. Future research could also include a qualitative approach to study higher education administrators and what evidence they may provide to show accrediting and regulatory agencies that their online courses are designed to provide for student-to-student and faculty-to-student interaction as well as faculty presence. This potential research could provide institutions with resources to ensure that their distance education courses are not in line with correspondence courses. Additional data related to the frequency of interactions needed in online asynchronous courses would also be beneficial. The current study gathered data related to how frequently faculty should interact with students. However, there seems to be many variables that can dictate how often a faculty member should correspond with a student outside of general instruction. Further studies, which take these variables into account, will need to be undertaken.

## **Summary**

Overall, this study provided recommendations for higher education faculty and administrators to review current practices related to online asynchronous course delivery and course design. It is my hope that faculty who are responsible for delivering online asynchronous distance education courses will be equipped with the training and resources needed to develop and deliver a high-quality learning experience. Although more research is needed in this domain, current data and previous scholarship have been provided to show that students benefit from structured course design, frequency of faculty presence, and opportunities to be engaged in the learning process through student-to-student and faculty-to-student interaction.

## REFERENCES

- Baldwin, S. & Ching, Y. H. (2019). Online course design: A review of the Canvas course evaluation checklist. *International Review of Research in Open and Distributed Learning*, 20(3), 268-282. [https://scholarworks.boisestate.edu/edtech\\_facpubs/222/](https://scholarworks.boisestate.edu/edtech_facpubs/222/)
- Caruth, G. D., & Caruth, D. L. (2013). Distance education in the United States: From correspondence courses to the internet. *Turkish Online Journal of Distance Education*, 14(2), 141-149. <https://dergipark.org.tr/en/pub/tojde/issue/16896/176051>
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4<sup>th</sup> ed.). Pearson.
- Congressional Research Service. (2021). *The Higher Education Act (HEA): A primer*. <https://sgp.fas.org/crs/misc/R43351.pdf>
- Delisle, J. D., & Malkus, N. (2018). Inspecting the inspector general. *Education Next: A Journal of Opinion and Research*, 18(4), 26-32. <https://www.educationnext.org/inspecting-inspector-general-should-auditors-set-terms-debate-federal-education-policy/>
- Gregory, R. L., Rockinson-Szapkiw, A. J., & Cook, V. S. (2020). Community college faculty perceptions of the Quality Matters Rubric. *Online Learning Journal*, 24(2), 128-141. <http://dx.doi.org/10.24059/olj.v24i2.2052>
- Ice, P., Curtis, R., Phillips, P., & Wells, J. (2007). Using asynchronous audio feedback to enhance teaching presence and students' sense of community. *Journal of Asynchronous Learning Networks*, 11(2), 3-25. <https://files.eric.ed.gov/fulltext/EJ842694.pdf>
- Kentnor, H. E. (2015). Distance education and the evolution of online learning in the United States. *Curriculum and Teaching Dialogue*, 17(1-2), 21-34. [https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=1026&context=law\\_facpub](https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=1026&context=law_facpub)

- King, F. B., Young, M. F., Drivere-Richmond, K., Schrader, P. G. (2001). Defining distance learning and distance education. *AACE Journal*, 9(1), 1-14.  
<https://www.learntechlib.org/primary/p/17786/>
- Ladyshefsky, R. K. (2013). Instructor presence in online courses and student satisfaction. *International Journal for the Scholarship of Teaching and Learning*, 7(1).  
<https://doi.org/10.20429/ijstl.2013.070113>
- Martin, F., & Bolliger, D. U. (2018) Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. *Online Learning Journal*, 22(1), 205-222. <https://doi.org/10.24059/olj.v22i1.1092>
- Nandi, D., Hamilton, M., & Harland, J. (2012) Evaluating the quality of interaction in asynchronous discussion forums in fully online courses. *Distance Education*, 33(1), 5-30.  
<https://doi.org/10.1080/01587919.2012.667957>
- Online Learning Consortium, WICHE Cooperative for Educational Technologies, & University Professional and Continuing Education Association. (2019). Regular and substantive interaction: Background, concerns, and guiding principle. *Online Learning Consortium*.  
<https://files.eric.ed.gov/fulltext/ED593878.pdf>
- Oyarzun, B., Stefaniak, J., Bol, L., & Morrison, G. R. (2018). Effects of learner-to-learner interactions on social presence, achievement, and satisfaction. *Journal of Computing in Higher Education*, 30, 154-175. <http://dx.doi.org/10.1007/s12528-017-9157-x>
- Riggs, S. A., Linder, K. E. (2016). Actively engaging students in asynchronous online classes. Oregon State University Ecampus. <https://files.eric.ed.gov/fulltext/ED573672.pdf>

- Skramstad, E., Schlosser, C., & Orellana, A. (2012). Teaching presence and communication timeliness in asynchronous online courses. *Quarterly Review of Distance Education*, 13(3), 183-188. <https://eric.ed.gov/?id=EJ1005848>
- Straut, T. T. & Boeke, M. (2020). *NC-SARA 2019 data report: Enrollment & out-of-state learning placements*. National Council for State Authorization Reciprocity Agreements. [https://nc-sara.org/sites/default/files/files/2020-02/2019\\_NC-SARA\\_Data\\_Report.pdf](https://nc-sara.org/sites/default/files/files/2020-02/2019_NC-SARA_Data_Report.pdf)
- Xu, D., & Xu, Y. (2019). The promises and limits of online higher education: Understanding how distance education affects access, cost, and quality. *American Enterprise Institute* (AEI). <https://www.aei.org/wp-content/uploads/2019/03/The-Promises-and-Limits-of-Online-Higher-Education.pdf?x91208>
- Zimmerman, T. D. (2012). Exploring learner to content interaction as a success factor in online courses. *International Review of Research in Open and Distance Learning*, 13(4), 152-165. <https://doi.org/10.19173/irrodl.v13i4.1302>

## APPENDIX A

### Survey Instrument

#### *Faculty Perceptions on Regular and Substantive Interaction in Asynchronous Online Courses*

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##### Start of Block: Informed Consent

I understand that participation in this project is completely voluntary, and that I may withdraw at any time without penalty or prejudice. By participating in this study, you are agreeing to provide the most honest answers you can. Any responses you provide will be anonymous. There are no incentives for your participation, and you will not be compensated for completing this survey.

By proceeding to the questionnaire, you are consenting to participate in this study. If you do not wish to consent to this study, please close your browser at this time.

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Page Break

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##### End of Block: Informed Consent

---

##### Start of Block: Introduction

Q1

Thank you for taking the time to complete this questionnaire. This questionnaire will explore the attitudes and opinions of faculty regarding regular and substantive interaction (RSI) in online asynchronous courses as well as information related to training you may have received regarding methods to create opportunities for RSI in your online courses.

*- Asynchronous courses are defined as occurring when students and instructors are not in the same place and when instruction does not occur at the same time.*

*- Regular and substantive interaction refers to interaction that takes place between faculty and students and is considered timely and quality interaction. Regular and Substantive interaction is a core component distinguishing distance education from correspondence education.*

##### End of Block: Introduction

**Start of Block: Demographics**

Q2 Do you teach, or have you taught, at least one fully online course in a distance education, asynchronous bachelors or master's degree program?

- Yes
  - No
- 

Q3 What program do you primarily teach in?

- Health Systems Administration
  - Health Informatics and Information Management
  - Medical Laboratory Sciences
  - Radiologic Sciences
  - Nursing
  - Other \_\_\_\_\_
- 

Q4 How many years have you worked in higher education?

- < 1 year
  - 1-5 years
  - 6-10 years
  - 11-15 years
  - over 15 years
-

Q5 What is your primary role in education?

- Faculty
  - Staff with instructor responsibilities
  - Administration with instructor responsibilities
  - Other \_\_\_\_\_
- 

Q6 Which of the following best describes your current status in your teaching role?

- Full time
- Part time
- Adjunct

**End of Block: Demographics**

---

Start of Block: Attitudes of faculty regarding achieving RSI

Q7 Please indicate your level of agreement with the following statements

	Strongly Disagree	Disagree	Neither agree nor Disagree	Agree	Strongly Agree
Regular and substantive interaction between faculty and students is necessary for online asynchronous courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students benefit from regular and substantive interaction with faculty in online asynchronous courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participating in regular and substantive interaction with students adds value to their learning experience in online asynchronous courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students appreciate their instructor's effort to provide regular and substantive interaction in online asynchronous courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating opportunities for regular and substantive interaction in online asynchronous courses can be difficult for faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 In your opinion, how often should faculty interact with their students in online asynchronous courses?

- Monthly
- Every other week
- Once a week
- Twice a week
- Daily
- Other \_\_\_\_\_

End of Block: Attitudes of faculty regarding achieving RSI

Start of Block: Training

Q9 My institution offers **group** training for providing regular and substantive direct interaction.

- Yes
  - No
- 

Q10 My institution offers **one-on-one** training for providing regular and substantive interaction

- Yes
  - No
- 

Q11 Indicate the number of training sessions your institution has offered on how to provide regular and substantive interaction.

- 1-2 training sessions
  - 3-4 training session
  - 5-6 training sessions
  - More than 6 training sessions
- 

Q12 Indicate the number of training sessions have you attended regarding regular and substantive interaction?

- I have not attended any training sessions
  - 1-2 training sessions
  - 3-4 training sessions
  - 5-6 training sessions
  - More than 6 training sessions
-

Q13 Regarding training sessions you have attended, to what extent do you agree with the following statements:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Training sessions defined regular and substantive interaction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training sessions explained the importance of regular and substantive interaction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training sessions provided details on methods available for faculty to use to achieve regular and substantive interaction.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training sessions provided instruction on how to implement methods available for faculty to achieve regular and substantive interaction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Following completion of training sessions, I felt confident in implementing methods to achieve regular and substantive direct interaction.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Training

---

Start of Block: Opinions of the effectiveness of methods used to achieve RSI

Q14 To what extent do you agree with the following statements regarding asynchronous courses:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
Students respond to weekly announcements posted by faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students are interactive with faculty in discussion board forums	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students view/listen to the content created by faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students respond to individual assignment feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students post comments/questions to the narrated content created by faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15 In your opinion, how effective is each of the following methods in achieving regular and substantive interaction?

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Weekly announcements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email interaction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussion board forums	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Narrated PowerPoints, video lectures, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individual assignment feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Q16 Please describe any additional methods you utilize to achieve regular and substantive interaction in your online asynchronous course(s).

---

End of Block: Opinions of the effectiveness of methods used to achieve RSI

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## APPENDIX B

### IRB Approval Letter

Office of  
Research Integrity



118 COLLEGE DRIVE #5125 • HATTIESBURG, MS | 601.266.6576 | USM.EDU/ORI

#### NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident template on Cayuse IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: IRB-21-173

PROJECT TITLE: Faculty Perceptions of Regular and Substantive Interaction in Online Asynchronous Courses

SCHOOL/PROGRAM: Educational Research and Admin

RESEARCHER(S): Britney Reulet, Emily Johnson

IRB COMMITTEE ACTION: Approved

CATEGORY: Expedited

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

PERIOD OF APPROVAL: June 25, 2021

A handwritten signature in cursive script that reads "Donald Sacco".

**Donald Sacco, Ph.D.**

**Institutional Review Board Chairperson**

## APPENDIX C

### IRB Modification Letter

Office of  
Research Integrity



118 COLLEGE DRIVE #5125 • HATTIESBURG, MS | 601.266.6576 | USM.EDU/ORI

#### Modification Institutional Review Board Approval

The University of Southern Mississippi's Office of Research Integrity has received the notice of your modification for your submission Faculty Perceptions of Regular and Substantive Interaction in Online Asynchronous Courses (IRB #: IRB-21-173).

Your modification has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident template on Cayuse IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: IRB-21-173

PROJECT TITLE: Faculty Perceptions of Regular and Substantive Interaction in Online Asynchronous Courses

SCHOOL/PROGRAM: Educational Research and Admin

RESEARCHER(S): Britney Reulet, Masha Krsmanovic

IRB COMMITTEE ACTION: Approved

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

PERIOD OF APPROVAL: September 7, 2021

A handwritten signature in cursive script that reads "Donald Sacco".

Donald Sacco, Ph.D.

Institutional Review Board Chairperson