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## College Students' Perceptions of the Importance of Student Engagement in Online Courses

Alicia Beasley  
*Walden University*

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# Walden University

College of Education

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Alicia Deanna Beasley

has been found to be complete and satisfactory in all respects,  
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Walden University  
2022

Abstract

College Students' Perceptions of the Importance of Student Engagement in Online

Courses

by

Alicia Deanna Beasley

EdS, Walden University, 2018

MS, Belhaven University, 2016

BS, Mississippi State University, 1999

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

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## Abstract

Researchers have identified high dropout rates in online courses for the past several years with few strategies for improvement. The problem addressed in this basic qualitative study was that peer socialization and engagement are challenges in online courses. The purpose of this study was to understand how far utilizing social media improved student socialization and engagement in online courses thus resulting in increased student success. This study used the conceptual framework of engagement theory, which states that students must be meaningfully engaged in learning activities through interaction with others and worthwhile tasks. The research questions addressed student perceptions about the importance of peer socialization, how students use social media, and how social media activities improve online learning. Data collection included two interviews and 92 online questionnaires from freshmen and sophomores who had previously taken or were currently taking an online course at one community college. Data analysis was achieved through two-step thematic coding. The first theme indicated that students value interaction to build relationships, prevent isolation, and form study groups. The second theme indicated that students use social media to communicate and submit assignments. The third and final theme indicated that student engagement is improved by the development of a sense of community and an increase in retention. The resulting project was a web-based professional development plan that is comprised of four modules where online instructors incorporate innovative technology into their courses. Instructors will have a curriculum that will provide research-based tools which will impact the college culture as instructors implement the tools learned into online courses and as students achieve success and satisfaction due to increased socialization and engagement.

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## Section 1: The Problem

Online learning is an integral part of higher education that provides accessibility and additional flexibility for students to complete their degrees. According to the most recent Babson Research Survey Group report, there were 6.4 million students taking online courses during the fall of 2016, which represents 31.6% of the total enrollment. This report also documents that distance education enrollment has increased for the 14th straight year (Seaman et al., 2018). Also, according to the Education Department's National Center for Education Statistics, the proportion of all students who were enrolled exclusively online grew to 15.4%, which is up from 14.7% in 2016. This means that about one in six students are studying online. The share of all students who mixed online and in-person courses grew slightly faster from 16.4% in 2016 to 17.6% in 2017. The proportion of all students who took at least one course online grew to 33.1%, which is up from 31.1% in 2016 (Grinder et al., 2019).

Despite the rapid development of online education, educators and students encounter certain barriers that affect the overall quality of distance learning, most of which is largely connected to student engagement (Markova et al., 2017). Engagement is crucial to student learning and satisfaction in online courses because online learners seem to have fewer opportunities to be engaged with the instruction, the instructor, and their peers. It is therefore essential to create multiple opportunities for students to engage in the online environment. Fostering a strong sense of community among students in online courses is the goal of many instructors because it is seen as being essential in providing a quality learning experience; however, high dropout rates in online learning suggest that students feel disconnected and isolated from their courses, feelings which have been

attributed to the physical separation of students from each other and the instructor (Phirangee & Malec, 2017). Banna et al. (2015) stress that engagement is the key solution to the issue of learner isolation, dropout, retention, and graduation rate in online learning. Meyer (2014), Banna et al. (2015), and Britt (2015) assert the importance of student engagement to online learning because they believe student engagement can be shown as evidence of students' considerable effort required for their cognitive development and their given ability to create their own knowledge, leading to a high level of student success.

The need for engagement has even resulted in the development of guidelines for designing effective online courses (Fiock, 2020). Engagement strategies are aimed at providing positive learner experiences including active learning opportunities, such as participating in collaborative group work, having students facilitate presentations and discussions, sharing resources synchronously or asynchronously, creating course assignments with hands-on components, and collaborating on case studies and reflections. Interactions with content, peers, and instructors help online learners become active and more engaged in their courses. Interactivity and a sense of community result in high-quality instruction and more effective learning outcomes (Martin & Bolliger, 2018).

### **The Local Problem**

The problem was that peer socialization and engagement were challenges in online courses at Focus Community College (name changed) in a southeastern state. According to Lewis (2016), when students lack socialization with the instructor and other classmates, it can lead to isolation, which can contribute to low course engagement. Online course socialization can be determined by the time spent in the

course. It can also be recognized in a student's involvement in an online discussion by going beyond the minimum requirements of discussion replies. Socialization can also be found in class chat rooms, through group projects, team games, instructor-led webinars, and by joining other peers in online student forums. Social media conversations (e.g. Facebook, Twitter, FlipGrid, GroupMe) was one example of a peer socialization activity that had been implemented into some of the online courses despite not having determined students' perceptions of its usefulness. Focus Community College also piloted Harmonize in Spring 2021 to determine if it helped improve engagement and retention in online courses. Harmonize is an online collaborative platform with the feel of a social media platform that helps elevate the online learning experience by getting students to think creatively and analytically (42 Lines, 2021).

According to Focus Community College's online course evaluation rubric, available from the college's office of e-learning, courses should have some form of weekly peer socialization activity; however, results of the Fall 2019 online course evaluations indicated that only 46.3% of the courses met this criterion, which had a direct connection on the pass/fail and withdrawal percentages in the online courses. Courses that included some form of weekly peer socialization activity (such as an online discussion, group assignment, or a peer review) resulted in an 84.5% pass rate as compared to 71.6% for courses without the activity. Also, the number of students that dropped out of the courses with weekly peer socialization activities were lower at 4.6% compared to the 9.4% of students that dropped out of online courses without any peer socialization activities. Finally, college-level data showed that students who were removed from courses with some form of weekly peer socialization activity due to lack of

participation (i.e. not submitting assignments) were lower at 9.9% compared to the 15.7% who were removed from courses with no weekly peer socialization activity.

The results of the 2018-19 Annual Data Compilation from Focus Community College also indicated student engagement in online courses needed improvement. Course evaluations indicated that only 37.7% of online students thought instructors provided the interaction they needed to thrive in a course as compared to 73.6% of students in traditional face-to-face courses. Another area of concern from the course evaluations was that only 19.5% of students felt that instructors provided support for students to be successful in an online course as compared to 78.2% of students in traditional face-to-face courses. According to personal communication in 2019 with the Dean of eLearning at the college, videos and PowerPoints are the primary forms of instruction in many of the online courses, so students are not receiving the socialization with the instructor or other classmates to be successfully engaged. With no formal plan in place to increase student engagement, it was essential that Focus Community College investigate further student perceptions about engagement in the online courses. By doing this, the college can use the data obtained in this study to create a plan and identified strategies to improve student engagement in online classes, which supports academic achievement.

Other colleges and universities were also facing the same gap in practice of engaging students in the online classroom. According to Dimeo (2017), federal auditors asserted that instructors at an online university did not interact sufficiently with their distance learners. Faculty members at the university had to develop strategies to improve contact with their students (Dimeo, 2017). Building meaningful relationships with online

students will continue to be a challenge for most instructors; still, these relationships have been shown to increase engagement levels, and thus improve the overall satisfaction of the student. Using simple tools, such as video conferencing to make the courses more personal or using student-made videos during an online discussion, can make online education more engaging and meaningful to students (Martin, 2019).

### **Rationale**

The purpose of this basic qualitative study was to understand the perceptions of students who utilized social media to discover if engagement through social media improved student socialization and engagement in online courses at Focus Community College in a southeastern state. This study utilized a purposeful sample of students who had taken or were currently taking online courses, asked a variety of students about the engagement activities provided, and helped fill the gap in practice by offering possible strategies that could improve student engagement in online courses. The project that was created from the data of this study will be used to create a professional development plan for online instructors at the college.

### **Definition of Terms**

*Online education:* Education delivered in an online environment using the internet for teaching and learning. This includes online learning on the part of the students that are not dependent on their physical or virtual co-location. The teaching content is delivered online, and the instructors develop teaching modules that enhance learning and interactivity in the synchronous or asynchronous environment (Singh & Thurman, 2019).

*Student Engagement:* The energy and effort that students employ within their learning community, observable via any number of behavioral, cognitive, or affective



indicators across a continuum. It is shaped by a range of structural and internal influences, including the complex interplay of relationships, learning activities, and the learning environment (Bond & Bedenlier, 2019).

*Interaction:* Communication among instructor, students, and content for the purpose of collaboration and learning (Benzigar, 2014).

*Social Presence:* Social presence is the ability of a student to identify with a group within a course of study and to develop personal and affective relationships within that group (Deibert, 2015).

*Retention:* Retention is the number of enrolled students who complete a course and receive course credit (Marshall, 2017).

*Collaboration:* Collaboration refers to students working together toward a common goal in online post-secondary courses (Barham, 2016).

*Social Media:* Online tools that allow for social interaction, such as sharing and discussing ideas, while on the Internet. Websites and other online means of communication are used by large groups of people to share information and to develop social and professional contacts (Hollis & Houser, 2015).

*Motivation:* Motivation is the process through which learners become invigorated to meet the goals and objectives of a course (Mercer, 2018).

*Retention:* Retention is sustaining or keeping students in a course or program of study through completion (Barham, 2016).

### **Significance of the Study**

This basic qualitative study addressed a gap in practice of successfully engaging online students at Focus Community College in a southern state by contributing social

strategies that online students have reported to be beneficial to their success as a student. These strategies could also be shared with other online instructors to implement into their courses. The results of this research provided much-needed insight into improving the teaching methods that increase engagement and student success in online college courses. With continual annual data from the college indicating low student engagement in online courses, there was a need for improving online education at this institution, which resulted in positive social change. Since online education is accessible to many who attend college, supporting successful engagement was beneficial to both the students and the institution.

### **Research Questions**

Research Question 1: What were students' perceptions about the importance of peer socialization in an online course?

Research Question 2: How were students using social media in online courses?

Research Question 3: What were students' perceptions about how social media improves online learning?

### **Review of the Literature**

I conducted a review of the literature to analyze current research on peer socialization and engagement. The review of literature is organized into five different focuses: the conceptual framework, online learning and retention, online teaching and learning, online student engagement, and online learning and socialization. I searched for empirical research studies in peer-reviewed journal articles in Education Source, Academic Search Complete, Thoreau, ERIC, and Taylor and Francis Online. The following search terms were used: *engagement theory*, *online learning/distance*

*learning/elearning, engagement, retention, course design, course delivery, and socialization.* In addition to empirical research, I also reviewed practitioner journals to get a more comprehensive understanding of the subject. The literature I compiled provided the research referenced in the conceptual framework and the review of the broader problem.

### **Conceptual Framework: Engagement Theory**

The conceptual framework for this project study was based on Kearsley and Shneiderman's (1998) engagement theory. Engagement theory is a framework commonly used for technology-based teaching and learning research. Its fundamental underlying idea is that students must be meaningfully engaged in learning activities through interaction with others and worthwhile tasks, and it entails the three basic principles of relate, create, and donate that can promote student engagement (Kearsley & Shneiderman, 1998). Engagement theory's premise is that the learner will not be effective unless they apply themselves and interact with others. The basic idea of engagement theory is to establish successful cooperation groups in the nontraditional teaching environment (hybrid and online courses) and enable tasks to be carried on meaningfully (Huang, 2010).

#### ***History of conceptual framework.***

Engagement theory emerged from Kearsley and Shneiderman's (1998) experiences in electronic and distance education environments. The fundamental idea underlying engagement theory is that students must be meaningfully engaged in learning activities through interaction with others and worthwhile tasks. In principle, this could be achieved without the use of technology; however, it is believed that technology can

facilitate engagement in ways that are difficult to achieve otherwise (Kearsley & Shneiderman, 1998). While the beneficial role of educational technology is profound, simply introducing technology in the curriculum will not automatically engage students. It is the careful selection of technology-mediated learning tasks and appropriate assessment strategies that greatly impact student engagement (Piki et al., 2016).

Kearsley and Shneiderman indicate that engagement theory shares many of the features of other theoretical frameworks for learning. In particular, it shares constructivist and problem-based learning approaches. However, engagement theory incorporates technology that facilitates engagement in ways that are difficult to achieve otherwise (Kearsley & Shneiderman, 1998). It promotes student activities that involve cognitive processes such as creating, problem-solving, reasoning, decision-making, and evaluating in which students are motivated to learn due to the meaningful nature of the learning environment and activities (Marshall, 2007). With its emphasis on meaningful learning, it is very consistent with other constructivist approaches. Because it emphasizes collaboration among peers and a community of learners, it can be aligned with situational learning theories, such as online collaborative learning and connectivism. Finally, because it focuses on experiential and self-directed learning, it is similar in nature to theories of adult learning, such as andragogy (Kearsley & Shneiderman, 1998).

### ***Concepts of conceptual framework.***

The basic premises of engagement theory are reflected in its three components – relate, create, and donate. These three components imply that learning activities occur in a group context (e.g., collaborative groups), are project-based, and have an authentic focus. This means that all student activities involve active cognitive processes such as

creating, problem-solving, reasoning, decision-making, and evaluating. In addition, students are intrinsically motivated to learn due to the meaningful nature of the learning environment and activities (Kearsley & Shneiderman, 1998).

The first principle of the engagement theory is *relate*. It emphasizes team efforts that involve communication, planning, management, and social skills (Kearsley & Shneiderman, 1998). In the relate principle, students contact other students and learn to trust each other. Drawing support from others, they communicate with other students, obtain help and finish the tasks they wanted to accomplish themselves while collaborating synchronously or asynchronously (Huang, 2010). Collaboration also increases the motivation of students to learn, a significant consideration in settings with high dropout rates (e.g., online learners). Furthermore, when students work in teams, they often have the opportunity to work with others from quite different backgrounds and this facilitates an understanding of diversity from multiple perspectives (Kearsley & Shneiderman, 1998). Because of learners' differences, such as IQ, background knowledge, learning preferences, and mode of thinking, students can learn from others' strong points to help offset their own weaknesses, which helps increase knowledge (Huang, 2010).

The second principle of the engagement theory is *create*. It makes learning a creative, purposeful activity (Kearsley & Shneiderman, 1998). The objective is to increase the student's level of interest in the activity (Clarke et al., 2017). Students must define the project and focus their efforts on the application of ideas to a specific context. Conducting their own projects is much more interesting to students than answering sterile textbook problems (Kearsley & Shneiderman, 1998). This principle is often expressed

through problem-based learning (PBL). By studying together, students learn to solve problems by researching various study means, which not only teaches students to solve problems but also trains students to obtain knowledge and meaning while building the ability to construct knowledge (Huang, 2010).

The third principle of the engagement theory is *donate*. It stresses the value of making a useful contribution while learning (Kearsley & Shneiderman, 1998). It makes the student's study not only meet a personal society need but also contributes to others and the world (Huang, 2010). Students are motivated because they are engaged with technology and an activity that they value (Marshall, 2007). The authentic learning context of the project also increases student motivation and satisfaction (Kearsley & Shneiderman, 1998).

### ***Rationale for Conceptual Framework***

Engagement theory was a good choice as the conceptual framework for this study for several reasons. First, it is justified because it aligned with the purpose of the study. The purpose of this basic qualitative study is to understand the perceptions of students who utilize social media to discover if it improves student socialization and engagement in online courses. Engagement theory provides a framework for technology-based teaching and learning, and its fundamental underlying idea is that students must be meaningfully engaged in learning activities through interaction with others and worthwhile tasks. The framework provides descriptions of what engagement looks like in an online classroom and, therefore, allowed me to identify any inconsistencies in what an engaged student should look like in the online environment.

Additionally, engagement theory was an ideal choice for a conceptual framework because it has been used to frame similar studies for over a decade. Payne (2016) used engagement theory to ground his research to establish a musical collaboration in a current school-university partnership. In another study, engagement theory was used to ground research from a cross-university online public relations team-based project (Smallwood & Brunner, 2017). Choi (2018) also used engagement theory to present how online lecture videos can be improved by incorporating entertainment-education such as YouTube.

Lastly, I used engagement theory as a lens to study the problem and to organize and analyze the data that will be collected for this study. The three principles of engagement theory provided the basis for the research questions about students' perceptions concerning the importance of peer socialization in an online course and how are students using social media in online courses to promote peer socialization and engagement. Additionally, engagement theory will be used to develop the qualitative questionnaire questions I will ask the students. These questions have been developed to focus on students' perceptions about the importance of peer socialization and how they are using social media in online courses as it relates to promoting their socialization and engagement. Finally, the data will be coded using the constant comparative method by identifying keywords, assigning them codes, and then organizing them into major themes.

### **Online Learning and Retention**

Supporters of online learning highlight the many advantages as compared to face-to-face education, such as greater openness, diversity of teaching materials, adjustment to learning styles, the speed of learning, and more (Arslan, 2018; Dhawan, 2020; Radovan,

2019). Despite the advantages, online learning institutions are faced with the problem of retaining students in courses. Studies have shown that the dropout rate in online learning is higher than in traditional courses (Aydin et al., 2019; Bawa, 2016; Oregon et al., 2018). Understanding the reasons and determinants behind dropping out of an educational program is a challenge for educators, researchers, as well as policymakers and should be considered in the planning and implementation of online courses (Radovan, 2019).

Theories surrounding attrition and retention span decades and help administrators understand some of the reasons why students do not succeed, as well as provide guidance when looking for ways to help. More than three decades ago, researchers such as Tinto (1975) as well as Bean and Metzner (1985) attempted to identify the characteristics between successful and unsuccessful distance learning students. Tinto focused on two factors: social and academic integration. He theorized that successful persistence involved individual characteristics and experiences after admission and that a student is more likely to persist when they are more integrated. He calculated integration by grade point average and the frequency of positive interactions with peers and faculty (Tinto, 1975). Bean and Metzner's model added features that described the persistence of nontraditional students. The model helps explain the characteristics of students older than 24, who do not live on campus, attend part-time, and gain support mostly outside the institution. Their theory incorporated more of the environmental influences affecting nontraditional distance students such as employment and family responsibilities. Their model was divided into variables called academic outcomes and psychological outcomes (Bean & Metzner, 1985).



Rovai (2003) combined the models of Tinto (1975) along with Bean and Metzner (1985) to create his model of student persistence. This new model explained student persistence in online distance education programs, which combined student characteristics and skills prior to admissions with external factors affecting students after admission. Rovai created a category in his model called “factors prior to admission” (2003, p. 8) which combined student characteristics (age, ethnicity and gender, intellectual development, academic performance, and academic preparation) with student skills (computer literacy, information literacy, time management, reading and writing, and computer-based interaction). For this new model, he merged external factors (finances, hours of employment, family responsibilities, outside encouragement, opportunity to transfer, and life crises) and internal factors (academic integration, social integration, goal commitment, institutional commitment, and learning community) along with students’ needs and pedagogy to create a classification called “factors after admission” (Rovai, 2003, p. 10). All the above factors affect a student’s decision to persist in a course (Rovai, 2003).

Since there are so many factors that account for students dropping online courses, additional studies about student retention have shown that students drop out for reasons that can be divided into three categories: factors related to students, factors related to courses or programs, and environmental factors (Essex & Haxton, 2018; Peck et al., 2018; Robichaud, 2016). Factors related to students include academic background and grade point average, relevant academic experiences, skills, and study habits. Factors related to courses or programs include the design of the course, institutional supports, and

interactions in the course with faculty and peers. Environmental factors include family commitments, work commitments, and the presence of external support.

There have also been many suggestions made to help overcome attrition and increase retention in online learning (de Paepe et al., 2018; Muljana & Luo, 2019; Watts, 2019). One suggestion was to expand the types of support systems offered to students. This could include interventions, advising, and communicating high expectations. Likewise, giving students a way to acclimate to school and community has also been given as suggestions to encourage success. Another suggestion to raise retention rates included bolstering the quality of interactions between faculty and students, gaining faculty acceptance of online learning, and testing student's autonomy, which the researcher stated needed more research (Robichaud, 2016). These suggestions could help online students since there is a greater feeling of detachment.

In a quantitative study by Peck et al. (2018), Pearson's  $r$  correlation was calculated to assess the motivation variables that correlate with retention. The analysis indicated that there was a significant positive correlation between self-efficacy for learning and performance and retention, such that as the self-efficacy scores increased, the retention in online courses also increased. The correlation analysis also indicated that there was a significant positive correlation between regulation and retention and between peer learning and retention. The results suggested that as effort regulation (the students' ability to control their effort and attention when faced with distractions and uninteresting tasks) and peer learning increases, students' retention in the online courses also increases. The stated reasons for dropping or not dropping also gave an interesting insight into the motivations of the students (Peck et al., 2018).

Of the 97 surveyed participants in the study who provided information about their motivations for not dropping the program, 67% stated that extrinsic goal orientation was the reason for not dropping (Peck et al., 2018). Of the 15 participants who provided information about their motivation for dropping the program, low task value (student's perceptions of the program in terms of interest, importance, and utility) was given as the reason for dropping. The results from this study showed that self-efficacy was found to be a good indicator of student retention; whereas, task value and extrinsic goal orientation were found to be the reason for student retention and attrition in the program (Peck et al., 2018).

St. Rose and Moore (2019) conducted a qualitative study about student retention in the fall of 2018 with junior and senior undergraduate students enrolled in 16-week online Health Services Management courses at a university. In this study, an open-ended question guided the phenomenological inquiry – What can the university do to help you remain enrolled in online courses? The themes from the responses were categorized into meta themes and ranked by prevalence. The study identified 24 themes. From these themes, six meta themes emerged about various issues and concerns that impacted students' retention in online courses. The meta themes were cost (23%), resources (19%), more online courses and degrees (18%), support (16%), faculty accountability (14%), and policies (10%). *Cost* was the most important factor that could affect their retention in online courses. It was described in the context of reducing the cost for online courses, reducing cost for online students, and providing scholarships for online students. *Resources* ranked as the second most important factor affecting student retention in online courses. The students described resources in terms of providing e-textbooks, faster

internet, more supplemental resources, more virtual lectures, and increasing library hours. Students identified *availability* and described it in the context of offering and promoting more online courses and degrees to meet students' needs and expectations. The students ranked *support* as the fourth most important factor affecting student retention in online courses. The students' viewpoints about support were in terms of providing better technical support services, along with enough staff to provide the service; online readiness services (e.g. online orientation video, tips to be successful in online classes); tutoring; and adding instructor assistants to online courses. The fifth most important factor affecting student retention in online courses was *faculty accountability*, which students described as paying more attention to online students, being more "tech-savvy," and utilizing course evaluations for improvements. Finally, *policy* was attributed to the final meta-theme. The students described policies in the context of developing standardized grading time frames, syllabi, and course quality. Based on the results of this study, retention in online learning can be achieved through various strategies with the focus being on the student (St. Rose & Moore, 2019).

### **Online Teaching and Learning (Design & Delivery)**

Instructional design focuses on improving the process of instruction by prescribing optimal methods of instruction to bring about desired changes in student knowledge and skills. The instructional design of a course creates learning environments and experiences that favorably impact conditions for learning. In online courses, there is a strong link between the tasks of designing and teaching (Baldwin et al., 2018). A national survey of 10,700 college and university faculty found that over 80% of faculty involved in online teaching and/or development are involved in both the development and

the teaching aspects for a given course. However, research shows that creating an online course involves a different set of skills than delivering content in a traditional course setting (Baldwin et al., 2018; Fiock, 2020; Ornelles et al., 2019). When creating online courses, designers must consider factors such as cognitive presence, social presence, teaching presence, accessibility, motivation, engagement, and collaboration.

When designing online courses, there are many factors that must be considered. Some of those factors include using a Community of Inquiry framework (cognitive presence, social presence, and teaching presence), motivation, engagement, and collaboration (Vaughan & Wah, 2020). Community of Inquiry (CoI) is used to create a meaningful educational experience among all of those who are involved in the course. The CoI framework assumes that effective online learning, particularly higher-order learning, is dependent on the development of a community (Fiock, 2020). Cognitive presence highlights students' critical thinking to construct meaning through interactive learning activities. Social presence emphasizes the development of group cohesion and the participants' ability to openly communicate their thoughts and emotions. Finally, teaching presence enhances cognitive and social presence. Indicators of teaching presence include instructional management (keeping grades current, posting announcements), building understanding (assignment feedback, discussion boards), and direct instruction through synchronous and asynchronous lessons (Ornelles et al., 2019).

Collaborative learning is another factor that must be considered (Margaliot, 2018). It enables both the instructor and the students to engage in other innovative ways of participation, content knowledge sharing, and communication. As part of group learning, students are producers of knowledge, ideas, and outcomes. They must undertake

a responsible and prolonged part in the activity of the group engaging in knowledge building because they are the managers of the knowledge produced by the group, take part in decision-making, and make innovative and creative contributions for the benefit of the entire group. Furthermore, collaboration in learning signifies a collection of actions worked on together to create a final product. Online collaboration represents a collection of online activities jointly performed during all the stages of practice until the achievement of a common outcome (Margaliot, 2018).

Motivation is another factor that must be considered when designing online courses. Poor motivation has been identified as a decisive factor in contributing to the high dropout rates from online courses (Hartnett et al., 2011; Hobson & Puruhito, 2018). Research has demonstrated that self-determination theory provides a useful analytic tool for exploring the complexity of motivation in online contexts (Chen & Jang, 2010; Hartnett, 2010). Additional research has also suggested that online learners tend to be intrinsically motivated; however, studies have now proven that online learners need intrinsic as well as extrinsic motivation (Hartnett et al., 2011; Atherton et al., 2017; Hutton & Robson, 2019). Motivation can be a complex and multifaceted phenomenon that cannot be fully explained from the perspective of motivation as either a learner characteristic or an effect of the design of the online course. This has important implications for online instructors. While intrinsic motivation constituted an important part of students' motivation to learn in the contexts described here, identified regulation (i.e., recognizing the value and importance of the activity) was also important (Hartnett et al., 2011).

Finally, the importance of student engagement in online learning has been identified as much as two decades ago as a factor to consider when designing online courses (Fiock, 2020). Learner engagement is derived from three factors – social interaction, personal factors, and problem-based learning contexts. To maximize meaningful social interactions, the instructor needs to structure experiences to support social exchange between the instructor and the learner, as well as between learners. Personal factors should incorporate the student’s personal frame of reference and choice related to the student's personal interests. Problem-based learning contexts should incorporate real-world problems that relate to the immediate need of learners, specify a rationale for learning, and be aligned with the course (Ornelles et al., 2019).

Faculty play crucial roles in the planning, designing, and delivering of online courses. However, evidence indicates that higher education institutions often require faculty to offer online courses without providing them with the skills (e.g., professional development, training courses, understanding cognitive presence is, the importance of social presence, what is teaching presence, ways to motivate and engagement, and collaboration strategies) and knowledge necessary to be successful online instructors (Gurley, 2018; Kebritchi et al., 2017). Many online instructors teach as they were taught in traditional classrooms with instructor-centered strategies dominated by lecture and discussion; however, online learning must be student-centered, meaning that they need to be engaged and included during online instruction to replace the engagement usually found in the traditional classroom (McQuiggan, 2012). The inability to incorporate effective online teaching skills poses a challenge for online course quality (Kibaru, 2018).

Higher education leaders need to build and foster a common vision around the role of online teaching within an institution so that it can be integrated into the faculty and campus culture. Unfortunately, most faculty professional development has been ineffective and wasteful more times than not because it has been ad hoc, discontinuous, had low faculty attendance, and was unconnected to any plan for change (Coswatte-Mohr & Shelton, 2017). In addition, many optional professional development opportunities for online faculty focus on technological training, but online instructors also need the opportunity to learn about effective online pedagogical practices. Institutions need to create professional development opportunities that support faculty transitioning into online teaching to help ensure quality. These opportunities need to include training about online faculty responsibilities including visibility, intentionality, and active engagement (Coswatte-Mohr & Shelton, 2017).

Two common frameworks, Quality Matters (QM) and Analyze, Design, Develop, Implement, and Evaluate (ADDIE) have been used in the development and implementation of online learning courses. QM provides a standard-based, collaborative peer review process to assure the quality of online courses (Martin et al., 2016), whereas ADDIE is a generic and simplified instructional designs systems model (Shiang & Hui, 2009). Both frameworks have evaluation components; however, each framework has distinct variations in the design and development phase.

QM is an international organization representing broad inter-institutional collaboration and a shared understanding of online course quality. According to Shattuck et al. (2014):

QM is a faculty-centered, peer-reviewed process that is designed to certify the



quality of online and blended courses and is a leader in quality assurance for online education that has received national recognition for its scalable, peer-based approach and continuous improvement in online education and student learning. (p.25)

QM has been the national standard for the design, implementation, and improvement of online courses. It is used for the certification of the design of online courses for many institutions. More than 23,000 faculty and instructional design staff have been trained on the QM process (Robinson & Wizer, 2016).

QM is supported by research and best practices (Alizadeh et al., 2019; Sadaf et al., 2019). The QM rubric undergoes a continuous improvement process to assure processes are current, practical, and applicable across academic disciplines and academic levels, and it is used in courses that have significant online components and contains the following eight standards: Course Overview and Introduction, Learning Objectives, Assessment and Measurement, Instructional Materials, Course Activities, and Learner Interaction, Course Technology, Learner Support, and Accessibility (Robinson & Wizer, 2016). Five of the competencies – Learning Objectives, Assessment and Measurement, Instructional Materials, Course Activities, and Learner Interaction, and Course Technology – are considered critical course components. These five components work together to make certain that students achieve the desired learning outcomes. Proper alignment ensures that course components are directly related to and supporting the learning objectives (Robinson & Wizer, 2016).

In a recent study by Sun and de la Rosa (2015), the relationship between faculty training using QM standards and the online course quality as perceived by students was

examined. The independent variable was whether the faculty member had participated in QM training before teaching an online course. The dependent variables included students' perceptions of online course quality from different aspects of the QM standards including learning objectives, outcome assessment, instructional materials, learner interaction, and course technology. The study included 122 undergraduate and graduate students. The treatment group consisted of students that participated in online courses taught by faculty members who had QM training. The control group consisted of students that participated in online courses taught by faculty members without QM training. Results from the study suggested that QM faculty training significantly enhanced learner interaction. The effects of faculty training on learning objectives, outcome assessments, and instructional materials was also marginally significant (Sun & de la Rosa, 2015).

ADDIE is a generic and simplified instructional designs systems model (Shiang & Hui, 2009). Analysis is the initial phase in developing an online course (Hanafi et al., 2020). In this stage, a needs analysis should be conducted to include an assessment of the content of learners' knowledge, what they want to learn, and why they need to learn it. In addition, the analysis should include their learning characteristics, motivation, technology affordance, and learning goals (Shiang & Hui, 2009). Design is the stage where all research planning is conducted (Hanafi et al., 2020). This includes learning objectives and design learning strategies, learning activities, assessments, and methods to organize and present the content based on learning objectives. In the development phase, materials required for the sessions are created. Implementation concerns the actual launching of the course, and finally, evaluation helps determine whether the curriculum was successful

and how it could be improved for the next implementation phase. The evaluation includes formative and summative evaluations (Shiang & Hui, 2009).

In a recent study by Hess and Greer (2016), a team of librarians used the ADDIE instructional design model to incorporate best practices in teaching and learning into an online, four-credit information literacy course. In this redesign process, the Association of American Colleges and Universities' high-impact practices and e-learning best practices were integrated as scaffolds for course content. The authors' experience with this systematic process and the concepts of instructional design suggest that the ADDIE model can be used to achieve several different ends in information literacy instruction. First, it can provide a structure around which librarians can develop a variety of instructional interactions. Second, it can help librarians consider student engagement, learning, and assessment more intentionally. And third, it can help to merge information literacy-specific standards and other learning guidelines, such as high-impact practices and e-learning best practices (Hess & Greer, 2016).

QM and the ADDIE model are two frameworks that have been used in the development and implementation of online learning courses. The ADDIE model is stronger in the design and development phase of an online course, where QM is a good model to use for evaluation of the design, navigation, structure, and implementation of a course. Although both have evaluation components, the QM rubric is a good checklist to make sure the course can run smoothly, while the ADDIE model is better for aligning the course content, assignments, and rubrics.

## **Online Student Engagement**

Over the past decades, student engagement has emerged as a fruitful framework for understanding the efficacy of students' educational experiences in college. Integrating elements from Tinto's (1975, 1986) student departure theory, Pace's (1980, 1982) work on the quality of student effort, Astin's (1984) student involvement theory, and Pascarella's (1985) general causal model of college environmental effects, the student engagement perspective builds on decades of research findings about activities, experiences, and environmental features related to desired learning outcomes. The student engagement perspective rests on the following propositions: (a) student learning is related to time and effort students devote to their studies; (b) students benefit from a collegiate environment that promotes and supports their success; and (c) colleges, universities, and individual faculty members can and should promote student success by emphasizing empirically supported effective educational practices in and outside the classroom (Paulsen & McCormick, 2020).

Moore (1993) identified three types of interaction inherent in effective online courses: (a) learner-to-learner, (b) learner-to-instructor, and (c) learner-to-content interaction. Learner-to-learner interaction is extremely valuable for online learning and leads to student engagement. This interaction helps prevent students from experiencing potential boredom and isolation in the learning environment. It also helps establish a sense of community (Martin & Bolliger, 2018). Revere and Kovach (2011) and Banna et al. (2015) found that traditional technologies for engaged learning, such as discussion boards, chat sessions, blogs, wikis, group tasks, or peer assessments, have served well in promoting student-to-student interaction in online courses. Learner-to-instructor

interaction leads to higher student engagement in online courses (Dixson, 2010; Gayton & McEwen, 2007). The use of multiple student-instructor communication channels is highly related to student engagement. It is recommended that online instructors pay special attention to student-instructor interactions because they may affect learning outcomes (Dixson, 2010; Gayton & McEwen, 2007). Rapport and collaboration between students and instructors in an interactive and cohesive environment, including group work and instructive feedback, are important for student engagement strategies that result in learning success. Students often contact instructors about assignments, course materials, and grades, but to be more effective, online instruction should include opportunities for students to interact with one another and their instructors to create meaningful learning experiences (Martin & Bolliger, 2018).

In an online learning environment, student engagement is facilitated in part through the design and organization of the learning material. Atherton et al. (2017) suggested that those students who frequently access the online learning material, discussion forums and/or other interactive learning components of an online course were seen as “engaged.” Engaged learners are self-regulated; they set their own learning goals and evaluate their achievements. These students are responsible for their own learning. The premise is that when students are engaged, learning is more likely to occur. Institutions are responsible for creating environments that make learning possible, and this occurs, in part, through designing for learning and effective teaching, with the final responsibility for learning resting with the students themselves (Cohen & Jackson-Haub, 2019).

Hutton and Robson (2019) recently conducted a study on improving student engagement in online courses. Course evaluations from the 2017-18 Science: Concepts and Practice course used in their study, showed high levels of satisfaction with the course resources; however, students were dissatisfied with the engagement in the asynchronous forums. Using these results, improvements were made before the October 2018 module began. To increase student engagement, tutors moderated the forums and were tasked with developing several optional scientific tasks for a staggered release to generate student discussion. Second, volunteer peer mentors from the 2017-18 presentation were recruited and trained as “student buddies” to provide non-academic advice and support. As a result of the improvements, student engagement was increased by a higher percentage of participation in the discussion forums during the October 2018 module. Emerging themes support earlier speculation that students were seeking a social space in which to build a community, and this likely takes precedence over academic matters during such early interactions. The clearest emergent theme from the tutors who moderated the discussion forums was that students were seeking to establish a study community rather than requesting subject-specific advice. Students’ responses to the buddies were also positive, evidenced by students being more willing to ask questions. Finally, data showed that the course registrations increased by 23.5% and withdrawals dropped to 2% (Hutton & Robson, 2019).

Student engagement was also studied by Farrell and Brunton (2020). In their qualitative case study, they explored central themes related to online student engagement experiences. Twenty-four online students were followed over one academic year as they completed online courses for a BA in Humanities degree. Data were collected in two

ways: two semi structured interviews per participant conducted mid-way and at the end of the academic year and participant-generated learning portfolio entries relating to their learning experience. Five themes were constructed during the analysis process – peer community, module supports, studying while balancing life commitments, confidence, and my approach to learning. In their narratives, the role of their peers as part of their learning experience and as a source of support was valued. In the module discussion forums and online tutorials, discussion and debate with classmates enhanced student learning experiences and deepened their understanding of sociology. The students formed informal study groups organically, which met face to face, on-line and on WhatsApp. They valued the support, reassurance and sense of community offered by peers in these informal study groups. Both the formal and informal communities formed by the students and tutors in the module engendered a sense of belonging to the program and was an integral part of their approach to how they completed their assignments. This author concluded by indicating that more insights into individual factors which influence online student engagement was needed (Farrell & Brunton, 2020).

With the increasing number of students who choose to learn online, it is imperative that educators understand the conditions necessary for student success in this environment. Previous studies have indicated that student engagement is essential to student learning, retention, persistence, and satisfaction (Blakey & Major, 2019). Blakey and Major recently conducted a study to understand how students conceptualize engagement in online courses as well as understand what elements students perceive as engaging. Their study consisted of 40 students who shared their perceptions of engagement. Key findings revealed behavioral engagement, cognitive engagement, social

engagement, emotional engagement, and agentic engagement (i.e., the action of taking initiatives that contribute to learning). Most student respondents stated that engagement in the classroom must be active. Students felt they had to put forth cognitive effort to be engaged. Students often described active learning activities to include project-based web searches and developing authentic projects such as portfolios. Students also indicated that they had to connect emotionally with the course. To do this, they had to have a positive view of the course and the importance of learning. Findings of the study indicated that students needed to have a strong desire to be involved. Students also mentioned collaborating with peers as a key to demonstrate engagement. Many students responded that discussion boards and forums are ideal tools for engagement, but also indicated that timely and insightful feedback from the instructor helped them be engaged in the course. Finally, students believed that engagement should be a shared responsibility between faculty and students (Blakey & Major, 2019).

In conclusion, facilitating an online course in today's student population requires educators to develop strategies that enhance student participation and build a sense of community. This leads to collaborative learning, developing relationships, and fostering educator feedback while facilitating independent networking and self-directed, proactive learning. Instructors with an active presence who guide students through the learning process and enhance their comprehension of the content while fostering a sense of proactive and student-centered learning, make successful online educators (Sharoff, 2019).



## **Online Learning and Socialization**

Social presence is a popular construct used to understand how people socially interact in online learning environments (Whiteside et al., 2017). Building interpersonal connections in asynchronous online learning is important, but it is harder to achieve compared to face-to-face learning experiences due to its mostly text-based nature. Many older Learning Management Systems (LMSs) such as Moodle, were task-oriented and not built to support socialization. They often allowed for lean, slow, and text-only interactions (e.g., email and discussion boards). Courses offered through these types of LMSs often suffered from low levels of social interactions. In addition, due to their asynchronous and text-based nature, most online courses could not effectively help bridge the physical distance between the individuals due to the limited number of sensory channels involved. Being physically disconnected and communicating only via textual modes, students could possibly feel frustration and lack of immediacy. With the tremendous improvements in technology, today's LMSs include many advanced features, such as video and audio, which can help increase social presence in the online courses (Akcaoglu & Lee, 2018).

Online group work has been championed for its capacity to produce deep, productive, social learning with the potential to enable learners to achieve a degree of metacognition and even social metacognition (Garrison & Akyol, 2015). This kind of learning has implications for the learner's sense of identity. It can impact the capacity for transformation of a learner's relationship to self, their relationship with others, and the world around them (Jaber & Kennedy, 2017). Social presence has even been argued to play a vital role of mediating online interactions that create knowledge by providing a

supportive learning environment in which students feel comfortable (Akyol & Garrison, 2011).

The advent of mobile communication technologies has significantly changed the way students interact (Tang & Hew, 2020). Statistics from a 2019 study showed that US adults are spending twice the amount of time per day with mobile messaging apps compared to that of 2015 (eMarketer, 2019a). WhatsApp, accessed by 1.5 billion users, was the leading mobile instant messaging (MIM) app worldwide, followed by Facebook Messenger (1.3 billion) and WeChat (1 billion). It is projected that 2.48 billion people worldwide will communicate via messaging apps in 2021 (eMarketer, 2019b). MIM has surpassed voice calls, emails, and even face-to-face communication, to become the most popular means for young people to communicate (Lenhart et al., 2010).

Facebook is being increasingly used in educational settings due to its social affordances and popularity, according to data from Pew Research Center (2015). With 74% of online adults using some form of social networking sites (SNS), Facebook is the most popular. According to Kreijns et al. (2013), “social media platforms, like Facebook, Instagram, and WhatsApp, are more sociable than traditional learning management systems (LMS) such as WebCT and Blackboard” (p. 232). In learning contexts, Facebook, or other social media apps, can be used as an outside-classroom communication space where permanent groups are used for focused discussions and sharing of resources and information. The use of SNSs for teaching and learning can lead to an improvement in both cognitive and socioemotional interactions. SNSs like Facebook, due to their design, can enable increased levels of interaction, communication,

and collaboration among learners, and provide instructors an additional communication tool that can supplement LMSs with SNSs (Akcaoglu & Lee, 2018).

In the context of online learning, where learners are limited in social aspects, there are positive outcomes for creating small learning groups. More specifically in online discussions, smaller groups are more conducive to making connections among students and promote a sense of community (Rovai, 2001; 2002). When placed into discussion groups, information overload and repetitiveness decrease (Qiu et al., 2014), and the amount of higher-order thinking and learner outcomes increases (Hamann et al., 2012; Wickersham & Dooley, 2006). Additionally, being in smaller groups positively impacts students' communication experiences in terms of their perceptions of the appropriateness and accuracy of messages and their willingness to participate and interact with others (Akcaoglu & Lee, 2016). Furthermore, Qiu et al. (2014) found that although students wrote a greater number of discussion posts when placed in whole-class discussions (15-22 students), students produced higher-quality discussion posts (length and reading level) in small group discussions. The data were especially in support of a configuration where small subgroups were created in a large class. Students showed a positive attitude toward small subgroups, wrote more, connected more with each other, and indicated that they felt more encouraged to talk; this especially affected students from second language backgrounds (Akcaoglu & Lee, 2016).

In a recent qualitative case study, Jaber and Kennedy (2017), researched how and why specific elements of communication create a social presence in online group work contexts. They also investigated the relationship that social presence has in being able to learn online, particularly at a deeper level. Three rounds of semi-structured interviews

were conducted online via Skype. The data were thematically analyzed and followed the six-step approach of Braun and Clarke (2006). Two meta themes emerged – identity and social presence – in descriptions of the learning self and in reflections on the way online social interaction was effective or not in supporting metacognitive learning. In terms of descriptions of self, the students repeatedly referred to their own sense of identity in terms of how they saw themselves as learners and their strengths or limitations. The students also referred to changes in identity that occurred because of studying online, for example, how their understanding of themselves or their topic transformed. Students reflected on the way social interaction and online communication affected their capacity to learn at a deeper level. This study concluded that group work has a vital role to play in helping online students achieve deeper learning outcomes. During the interviews, most student participants expressed the need to have more social interaction, relating it to emotional support as well as learning. However, when students are geographically separate from each other and meet only online, it can be challenging to achieve the level of trust required to make the most of the opportunities group work offers (Jaber & Kennedy, 2017).

In another current case study by Yildirim and Kilis (2019), used the Community of Inquiry (CoI) framework to probe the posting pattern of students' social presence, cognitive presence, and teaching presence in an online learning setting. The study used purposive sampling, and qualitative data were collected from 91 students in a fully online associate degree program. Asynchronous discussion postings of students were used to identify social, cognitive, and teaching presence. Students' posts were analyzed through qualitative and quantitative data analysis methods. The data were coded in accordance

with the categories of social presence, cognitive presence, and teaching presence. This study found a high level of social presence with one reason given for open communication and group cohesion using Facebook groups and/or a WhatsApp group. Furthermore, a high level of social presence could be reasoned to have been the result of students' own efforts, self-regulation, presence in a warm and comfortable learning environment, the instructor's effort and guidance, or even students' own innate characteristics. Cognitive presence revealed a substantial level which could be the result of the design and organization of the discussions, as well as a level of attractiveness of the topics covered. Another issue behind a high level of cognitive presence is cooperation among students. Many students placed significant emphasis on cooperation to foster their cognitive presence. Teaching presence resulted in a substantially or fairly high level. Encouraging students' contributions, reinforcing participation and collaboration, giving instant feedback, and addressing their misconceptions, as well as providing a comfortable learning environment, were the reasons behind establishing and sustaining a substantial level of teaching presence (Yildirim & Kilis, 2019).

Critical to student success in an online environment is social connectedness. This includes participation in academic and non-academic activities (Redman, et al., 2018). Examples of these activities include the opportunity to engage in learning material collaboratively as well as instances where students can create meaningful and purposeful relationships, such as the way students might do on campus. These activities help abate students' feelings of isolation or being overwhelmed (Cohen & Jackson-Haub, 2019).

## **Implications**

The findings of this case project study may inform college and university professors and administrators of the current state of students' perceptions regarding the importance of engagement in online courses. The data collected during this study may increase findings of any gaps that are occurring in the engagement of college students in online courses. It may also inform college officials and institutions of higher learning in regard to developing innovative practices for professional development needs of college professors, and possibly going beyond the QM or ADDIE models to prepare them to use current social media tools and apps to involve, engage, and support their students. This project study may positively impact students, as it could lead to changes in engagement and satisfaction in online courses. Ultimately, the goal was that this study may lead to improved teaching and learning in online courses, which may increase students' ability to succeed.

The data collected for this research study could have led to several different types of projects. One possible project was a white paper where I discussed the findings and implications of the data. This would lead me to a second project, which was the consideration of the creation of new professional development activities for online instructors to enhance their understanding of the importance of engagement and ways to engage students in online courses. A third possible project was a revision of online course templates to add student engagement tools. These revisions in the online course templates may help professors incorporate more student engagement activities, possibly leading to improved student success.

## Summary

In today's society, more and more colleges and universities are offering online courses; however, just because the colleges and universities offer online courses does not mean that they engage students (Markova et al., 2017). Nonetheless, there exists a gap in literature between online courses and student engagement practices. Therefore, the purpose of this basic qualitative study was to understand the perceptions of students who utilize social media to discover if it improved student socialization and engagement in online courses. The problem addressed in this basic qualitative study was that peer socialization and engagement are challenges in online courses. The problem of the study was explored through three research questions:

Research Question 1: What were students' perceptions about the importance of peer socialization in an online course?

Research Question 2: How were students using social media in online courses?

Research Question 3: What were students' perceptions about how social media improves online learning?

The review of literature focused on online learning and retention, online teaching and learning (design and delivery), online student engagement, and online learning and socialization. The conceptual framework for this study, engagement theory, has been explored by multiple researchers who posit students must be meaningfully engaged in learning activities through interaction with others and worthwhile tasks. The reviewed literature included studies regarding the motivational factors for taking online courses, retention of students in online courses, frameworks for developing and implementing

online courses, the importance of student engagement in online courses, and creating a social presence in online courses.

In Section 2, I describe the methodology, the participants, the data collection instruments that will be used in the study. The data analysis and limitations of the study will also be shared. Section 3 contains the online professional development course (located in Appendix A) that will be presented to my institution based on the results from the data.



## Section 2: The Methodology

In Section 1, I established the importance of peer socialization and engagement in online courses, the gap in the current practice of engaging students in online courses, and components of engagement theory pedagogy. The purpose of this basic qualitative study was to understand the perceptions of students who utilize social media to discover if it improved student socialization and engagement in online courses. In this section, I describe the qualitative research design and approach and provide a justification for the participant sample, the measurement tools, and processes for the data collection and analysis, and the possible limitations of the study.

### **Research Design and Approach**

To address the problem in this study, a basic qualitative approach was used (Creswell & Poth, 2018) because the purpose of this study was to analyze students' perceptions, opinions, and to understand their experiences of online learning. Qualitative research provides the opportunity to dig deeper into a problem to gain insight into it. This study followed the basic qualitative study approach that Trofort (2018) used to determine instructors' perceptions about the benefits and drawbacks of the use of an online forum to allocate time for reflection. Data collection included a review of online courses with a social media component, online interviews (see Appendix B), and online questionnaires (see Appendix C). The descriptive data derived from the study were important to identifying social strategies, technology tools, and students' experiences that have contributed to positive online learning. Following the recommendations of Creswell and Poth (2018), a purposeful sampling of students who were taking or have taken online courses at Focus Community College were invited to participate in the project

study. Narrative research was also considered for this research project. It focused not only on valorizing individuals' experience but also on exploration of the social, cultural, familial, linguistic, and institutional narratives within which individuals' experiences were, and are constituted, shaped, expressed and enacted. Data collection for narrative research can be collected using field notes, journal records, interviews, storytelling, and observations (Cresswell & Poth, 2018). Based on my research questions, a basic qualitative study was the most effective approach for this study. Interviews were conducted through a video conferencing tool. The online questionnaire was disseminated through email and posted in selected online courses at the college.

## **Participants**

### **Criteria for Selecting Participants**

In this study, specific criteria were needed for selecting potential participants. Since this project was looking at college students' perceptions of the importance of student engagement in online courses, participant selection for this basic qualitative study included students that have taken or were currently taking an online course. Students also must have graduated high school and were attending Focus Community College as a freshman or sophomore at the time of the study. Although Focus Community College provides dual-credit courses to area high schools, these students were not invited to participate in the study because they do not qualify as consenting adults.

### **Justification of Participants**

Only students that had taken or were currently taking an online course were asked to participate in this study since it was looking at college students' perceptions of the importance of student engagement in online courses. Students who had not taken an

online course would not be able to answer the questions on the questionnaire because they lack the experience of taking an online course, so they were excluded. The goal was to have 25 participants total, 10 participants through interviews and the remainder through the online questionnaire. This purposeful sample was based on Creswell and Poth's (2018) suggestion of a smaller group of comparison because of the potential to draw otherwise inaccessible conclusions. Saturation can be achieved by having 25 participants because a point will be reached when no new information is found to add to the understanding of the data (Creswell & Poth, 2018).

### **Gaining Access to Participants**

To gain access to students, I followed the procedures of Focus Community College. For this, I had to complete a formal research request. The form included the campus I chose for the study, the participant pool I wanted to survey, a detailed description of the qualitative research plan, a description of how the data will be used, and an outline of potential risks to the participants. I was also required to turn in a copy of my consent form. The Executive Council at the college reviewed my submitted information and granted me pending approval. Full approval was granted once Walden's IRB approval was granted (IRB Approval Number 05-25-21-0019813). Once full approval was obtained from both Focus Community College and Walden University, invitations to participate in the project study were posted in the courses as an announcement, emailed to students, and posted as flyers on Focus Community College's campus.

### **Establishing a Working Relationship with Participants**

A researcher-participant working relationship was helpful for this study to have a sufficient number of participants. Several of those who were invited to participate had a pre-existing relationship with me as a former instructor or administrator. Students were completing either an interview or an anonymous questionnaire. My contact information was included in the consent form and flyer if students needed to get in touch with me. Also, several participants may have taken courses with me and may have recognized my name, which could help to motivate them to participate in the study. As current Director of eLearning at Focus Community College, students may also know me by having contacted me for technical support and/or issues with their online courses. Finally, I had a positive working relationship with the instructors who agreed to place the survey in their course. Students in their courses were likely to have not taken previous courses from me.

### **Measures to Protect the Rights of Participants**

To protect participant's rights, all questionnaires were anonymous, and all participant names remained confidential. None of the questionnaires were traceable or linked to a particular student. Also, all students completed a consent form prior to completing the questionnaire. The consent form informed participants that being in the study could involve some risk of the minor discomforts that can be encountered in daily life, such as revealing things that are personal or uncomfortable talking about the topics. Students were also informed that they could stop participating in the study at any time without repercussions. With the protections in place, the study posed minimal risk to a participant's wellbeing. Finally, raw data were secured on a password-protected computer in my possession and will remain protected for 5 years before being destroyed.

## **Data Analysis**

This basic qualitative study consisted of participant questionnaires and virtual interviews with students who had taken or were taking online courses along with a review of online courses to investigate the perceptions about the importance of student engagement in online courses. The questions on the interview protocol (see Appendix B) and questionnaire (see Appendix C) established sufficiency in answering the research questions. The questionnaire and interview protocol for data collection were created in collaboration with my chair. Questionnaires were disseminated during a two-week period, and they were put in the course on a Monday. At the end of the first week, data were checked to see how many responses were received, and reminders were sent on the Monday beginning week two. At the end of the two weeks, the questionnaire became inactive. For the virtual interviews, flyers were placed around campus and in online courses one week prior with information for students to set up an interview. The virtual interviews were conducted during the two-week period that the questionnaire was live.

### **How and When Data Will Be Analyzed**

To effectively analyze the data, a systematic process to organize and highlight meaning was used. For this project study, two-step thematic coding was used to analyze the data. First cycle coding took place within one week of the questionnaire closing. This first level coding identified broad categories within the data. After reviewing my first level coding, I began the second level coding. Second level coding involved axial coding to “assign several subcategories to one category at a higher level...creat[ing] code hierarchies” (Rabinovich & Kacen, 2010, p.699). It also involved coding across the data extracted from first cycle coding to determine overarching codes, then categories, and

finally themes (Saldana, 2016). All repeated codes were categorized together. Descriptive data were sorted into coded categories until saturation was achieved (Saldana, 2016). These themes helped me to understand the perceptions of students who utilize social media to discover if it improved student socialization and engagement in online courses. Data analysis from the questionnaires and virtual interviews were completed by hand and by spreadsheet software.

Online courses that use a social media component were also observed after the online questionnaires and virtual interviews were completed. This allowed me to go look at specific courses that the students have indicated social media usage in. I observed how instructors were using social media in the course, the types of social media that they were using, and the quality of discourse from using a social media tool. These research logs were completed by hand and with word processing software.

### **Evidence of Quality and Procedures to Assure Accuracy and Credibility**

The trustworthiness of results is the bedrock of high-quality qualitative research (Birt et al., 2016); therefore, accuracy and credibility were assured throughout the project study. One way that this was achieved was through field testing my questions (Gani et al., 2020). The field test assisted me in determining if there were flaws, limitations, or other weaknesses within the interview design or questionnaire and also allowed me to make necessary revisions prior to the study. Another way to assure accuracy and credibility was through the adoption of research methods well established both in qualitative investigation in general and in information science (Shenton, 2004). Interviews and questionnaires were two well established methods used in qualitative research.

Triangulation was also used to ensure accuracy and credibility (Shenton, 2004). In this

basic qualitative study, virtual interviews, online questionnaires, and online course observations were used. According to Guba (1981) as well as Brewer and Hunter (1989), the use of different methods in concert compensates for their individual limitations and exploits their respective benefits. The supporting data from the online course observations provided a background knowledge and helped explain attitudes and behaviors of engagement in online courses. Finally, tactics to help ensure honesty in informants when contributing data were utilized. Each person participating in the online questionnaire or virtual interview was given opportunities to refuse to participate so as to ensure that the data collection session involved only those genuinely willing to take part and prepared to offer data freely. Participants were encouraged to be frank from the onset, and I indicated that there are no right or wrong answers. Participants were also assured that they could withdraw from the study at any point without retaliation (Shenton, 2004).

### **Procedures for Dealing with Discrepant Cases**

Discrepant data is data that are an exception to data patterns (Bashir et al., 2008). This type of data was included in my analysis to ensure there was no bias in reporting it. I also reported any discrepant data within the findings to help broaden the research and provide for a better, overall picture of the results. Including the discrepant data may also cause a modification of the patterns found in the results (Bashir et al., 2008).

### **Limitations**

There were several limitations of this project study. One limitation to the study was that I was an employee in the eLearning department on the campus where the study took place; however, I entered the project study with an open mind and neutral position

toward any data that I received. It was possible that I was also familiar with some of the participants within the study. I took great care to ensure that this association did not interfere with the collection of data and the results derived from the data. Another limitation was that this study only included one community college which limits the results. Data could have been collected from multiple community colleges inside and outside of the state. Generalization was another limitation of this study. I generalized the results of this study to a larger perspective. It was important to consider that participants attend one community college and their experience with social media being used in online courses may be limited. Finally, participant views toward the use of social media in online courses from this community college may not necessarily be consistent with similar participants within other colleges and universities.

### **Data Analysis Results**

This basic qualitative study examined student use of social media in online courses. Three research questions were used to gain insight into student socialization and engagement to see if results indicated an increase in student success and attrition. Based on the results, an online professional development course (see Appendix A) was created to address the student needs. Table 1 shows the alignment of the interview questions to the research questions, and Table 2 shows the alignment of the questionnaire questions to the research questions. The results from the study addressed the three research questions by highlighting the students use of social media in online courses.



**Table 1***Online Interview Questions Aligned to Research Questions*

Questionnaire Question	RQ1	RQ2	RQ3
1. Can you please share with me about your online learning experiences at Focus Community College?	X	X	X
2. Can you tell me about a creative use of social media in one of your online courses?		X	
3. How does social media through WhatsApp, Harmonize, Facebook, etc. improve engagement in online courses?			X
4. How can online discussion boards be improved?			X
5. If you are using Harmonize in one of your courses, tell me what you like and dislike about it.			X
6. How important are creating relationships with your instructor and other peers in online courses?	X		

*Note.* RQ = Research Question.

**Table 2***Questionnaire Questions Aligned to Research Questions*

Questionnaire Question	RQ1	RQ2	RQ3
4. What is your opinion about the importance of student-to-student interaction in online courses?	X		
5. Please explain how you have communicated with other students in online courses.	X		
6. How do student-to-student interactions in an online course help you to be more engaged?	X		
7. How could an online student feel isolated?	X		
8. Can you describe experiences from your online courses that made you feel engaged with others?	X		
9. How have you used social media (WhatsApp, Zoom, Harmonize, GroupMe, Google Meet, texts, Facebook, etc.) in your online courses?		X	
10. Describe how you have used Harmonize in an online course.		X	
11. When taking an online course, explain how you form study groups with others in the course.		X	
12. When using social media in online courses, are you forming peer groups on your own, or is the instructor forming the groups? Please explain.		X	
13. How do you contact the instructor via social media (text, email, WhatsApp, Zoom, GroupMe)?		X	
14. If you are forming peer groups in your online courses, please explain how you are using them throughout the course.		X	
15. How can a sense of community be developed in an online course?			X
16. How can student engagement in online courses be improved through social media?			X
17. How can the use of social media tools improve engagement with your instructor and peers?			X
18. How could adding a social media component (Flipgrid, Snapchat, Twitter, What's App, Zoom, GroupMe) to an online course increase socialization and engagement with the instructor and peers?			X
19. How could the integration of a social media component (Flipgrid, Snapchat, Twitter, WhatsApp, Zoom, GroupMe) in an online course help a student be more successful?			X

*Note.* RQ = Research Question.

Data were collected from students that had taken an online course via qualitative questionnaires and online interviews. Online interviews were conducted with two students. Each interview lasted 15-20 minutes and took place via Zoom due to the COVID-19 pandemic. In the interviews, predetermined, open-ended questions (see Appendix B) were asked of participants and recorded with participants' permission. Transcription of the interviews took place within one week of each interview. The transcripts were created by uploading the recording to Studio, which is password protected. I then edited the transcriptions to correct any inconsistencies from the Studio transcription. Member checking was performed by a colleague that has a doctorate in education. The professor reviewed my transcripts while listening to the recordings and agreed that the transcriptions were accurate.

Accuracy and credibility of the data analysis was confirmed through the analysis process in several ways. Member checks were used to ensure that my own bias did not influence the results. Member checking, which is also referred to as respondent feedback or respondent validation, was used to check the credibility and validity of data (Creswell & Poth, 2018). During this process, interview participants were asked to give feedback and comments regarding whether the analysis reflected their perspective. I also shared the data with a colleague that has a doctorate education. That professor reviewed my data and agreed with my results.

Online questionnaires were completed by 92 students. Each online questionnaire (see Appendix C) consisted of nineteen questions. The first three were demographic questions and ensured the students should participate in the study. If a student answered no for previously taking an online course or 18 year of age or older, the questionnaire

ended. The final demographic question asked which course the student had taken that used social media so that I could go in and observe some of the uses in the courses.

Questions 4 – 19 were open-ended questions.

The data collected through online interviews and questionnaires were analyzed through two-step thematic coding. According to Leavy (2017), coding may be completed by hand or using computer-assisted software. Coding for this study was completed by hand. First cycle coding took place within one week of the questionnaire closing. This first level coding identified broad categories within the data. After reviewing my first level coding, I then began the second level coding. Coding across the data extracted from first cycle coding was also used to determine overarching codes, then categories, and finally themes (Saldana, 2016). All repeated codes were categorized together. Descriptive data were sorted into coded categories until saturation was achieved (Saldana, 2016). These themes helped me to understand the perceptions of students who utilize social media and to discover that student socialization and engagement in online courses is improved with its use. The data analysis from the questionnaires and virtual interviews were completed by hand and by spreadsheet software.

Results from the online interviews and questionnaire consistently indicated that peer socialization and engagement are challenges in online courses. Although some online courses use social media, it is not consistently used. This was verified through online course observation. For example, one student indicated on the questionnaire that social media was used in the psychology course. Upon investigation, the course indicated a Facebook page for the course. I went to the Facebook page to find that a page had been created; however, only one post per semester was visible. Another student indicated that

Twitter was used in a particular American History course so I went to the Twitter page and verified that indeed it was an active account with current participation. It was also indicated by several students that Harmonize was used as a social media tool in several courses. Course observations found this to be true, but the consistent use of it could not be verified. A final example from the course observations included a student that stated Remind was used in an English course. A code to join the Remind class was present in the announcements and on the syllabus; however, I did not join the class to verify active participation.

Three themes with subthemes were predominant from the study (Table 3). The first theme derived was importance of interaction. The subthemes for this theme included builds relationships and prevents isolation. The second theme derived was the use of social media in online courses. The subthemes for this theme included forming study groups, communicating, and submitting assignments. The third theme derived was improving student engagement. The subthemes for this theme included developing a sense of community and increasing retention.

**Table 3**

*Themes and Subthemes from Qualitative Data Analysis*

Theme	Subtheme
Importance of Interaction	-Builds relationships -Prevents isolation -Forming study groups
Social Media Usage	-Communicating -Submitting assignments
Improving Student Engagement	-Develops a sense of community -Increases retention

### **Students' Perceptions about the Importance of Peer Socialization**

This research question probed students about peer socialization in online courses. The results consistently indicated that students valued interaction. One student that I interviewed stated, "It makes me feel like I am in a regular classroom." I then asked the student to explain that answer further. The student stated, "If I have a problem, I have someone I can go to whether it is the instructor or another classmate. Having the peer socialization helps me get feedback from other students, and it helps me from feeling like I am the only student in the class." Students on the questionnaire indicated that peer socialization in online classes help them to build relationships with other classmates. One student in particular stated that in face-to-face classes, he saw his other classmates twice a week. This helped him get to know the other students. He became friends with some, and he could go to them if he needed help. He said that in the one online class he took, there was no getting to know others. He felt like he was the only student in the class, and he had no one ask for help, which is another subtheme that emerged. Responses revealed lack of communication between the students and/or the instructor and not being physically present with others can cause a student to feel isolated. One student said, "when no one replies to your discussion post. I don't know if my answer is wrong or what."

In conclusion, the perceptions that were presented by the students indicate that peer socialization in an online course is important to students. It makes the students feel like it is as close to a regular classroom as possible. Most first-time college students have never taken an online course. All they know is classroom full of students and an instructor that they can interact with. When students take an online class for the first time,

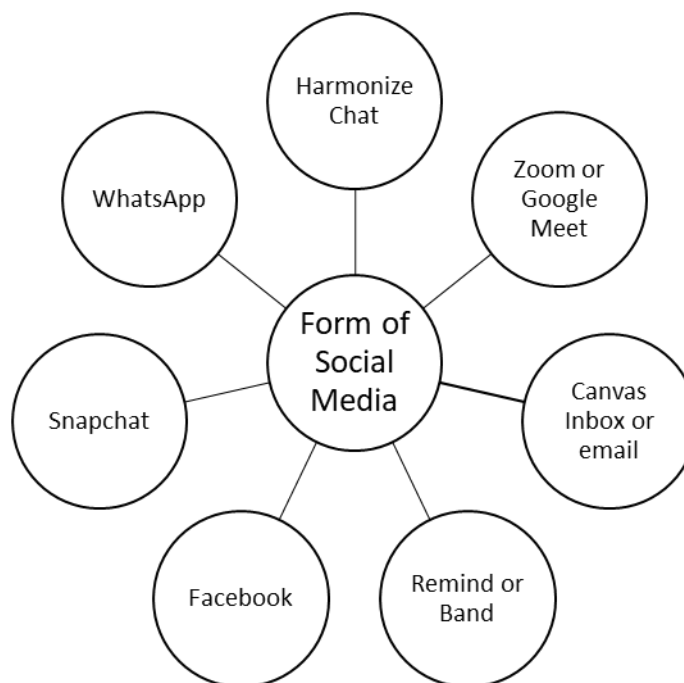
they do not know what to expect, but one thing that can help is including the peer socialization. Peer socialization, as indicated by the study, helps students have a form of communication, helps them understand the material, helps build relationships, and keeps students from feeling isolated.

### ***Students Usage of Social Media in Online Courses***

This research question probed students about social media usage in online courses. Results consistently indicated that students used social media to communicate with the instructor and other students. Results for the types of social media usage are shown below in Figure 1.

**Figure 1**

Forms of Communication Between Students in Online Courses



Two subthemes emerged under communication – forming study groups and submitting assignments. Students indicated that they were forming study groups either on

their own or with the instructor assigning them. Students were then asked how they formed their own study groups. One student said, “I go to Harmonize chat and tell everyone that I will be studying on a certain day, at a certain time, and at a certain place. If you want to join me, come on.” Other students indicated that they form study groups with people that they already know in the class. Students indicated that they were forming the study groups to study for tests, work on weekly assignments, work on group assignments, and to get help with assignments. Submitting assignments was the other subtheme that emerged. One student indicated that her instructor said their assignments would be submitted on Harmonize. At first, the student was confused because all past assignments had been submitted directly on Canvas. “I was nervous at first having to learn a new platform, but I love it now. Harmonize is amazing. I can submit files, videos, links, pictures, and more. My instructor even uses it to poll the students. I wish more instructors would use Harmonize.” Another student said that a instructor used WhatsApp before for submitting assignments. He really liked it because it was a platform that he was familiar with.

In conclusion, students use social media for multiple purposes in online courses. It gives students a platform to communicate with other students and the instructor. Since students are not physically sitting in a classroom, they need ways to communicate with other students and the instructor. Since students are familiar with social media, they have learned to reach out to other students using this platform. Social media has also given the option to move away from the traditional learning management system way of submitting assignments and has given way to new, creative forms of submission.

### ***Students' Perceptions About how Social Media Improves Online Learning***

This research question probed students about improvements to online courses. Results indicated that incorporating social media into online courses improved engagement. Students indicated that student-to-student interactions helped them create a sense of community. Students could be more engaged because it allowed them to hear different perspectives, helped them to understand the material, helped them feel like they are in a normal in-person classroom, allowed them to do group projects, and made them more comfortable to voice their opinion. Some of the experiences that made the students feel engaged include Zoom meetings, group projects, and the use of social media. One student indicated that she looked forward to the weekly Zoom meeting because she got to connect with other students in the classroom. She said that at the beginning of the semester she was very shy speaking up during the Zoom meetings, but the instructor made all the students feel comfortable asking questions and discussing the topics. In the beginning, the student said that the Zoom meetings might last fifteen to twenty minutes, but by the end of the semester they were lasting the entire hour that was allotted. She even stated that students became close friends and knew that her classmates were there for her and wanted her to succeed in the class. Results also indicated that retention in online classes improved. One student said, "If it weren't for the communication and help from other students, I would have dropped the course. I couldn't do it by myself. I needed classmates to give me direction and purpose for staying in one course, and it worked."

In conclusion, social media improves student engagement. Students get to know other students just as they would in traditional classes. They form bonds of trust and learn that they can count on other students to help them out. It also helps retention. Students



that might have dropped out of an online course will finish the course because of the engagement in the online courses.

### Section 3: The Project

The purpose of this doctoral project study was to understand if utilizing social media improves student socialization and engagement in online courses thus resulting in increased student success and increased attrition. In this study, I collected data from online surveys and virtual interviews. The project that I chose for this study was an online professional development plan (see Appendix A). The goal of the online professional development course is to provide new faculty members Harmonize training so that they will be on the same level as current faculty members. This will be a five-module professional development training that will teach instructors about Harmonize, discuss its features, and gain hands-on experience using the tool.

#### **Rationale**

The problem addressed in this qualitative project study were the peer socialization and engagement challenges in online courses at Focus Community College in a southeastern state. I chose to create a Harmonize Online Professional Development course as my project because it specifically addresses the local problem described by the student participants. Harmonize is a tool that has been adopted by the community college to improve peer socialization and engagement in online classes. This online professional development course can teach new instructors about the features of Harmonize and give them the hands-on experience they need to successfully implement it into their online classes.

#### **Review of the Literature**

Instructors need professional development and training to stay abreast of content and pedagogy in education (Bautista et al., 2016). The literature review for the online

professional development course relates to improving student socialization and engagement in online courses thus resulting in increased student success and increased attrition. I searched for empirical research studies in peer-reviewed journals in Education Source, Academic Search Complete, Thoreau, ERIC, and Taylor and Francis Online databases. For this literature review, search terms and phrases used were: *professional development, effective professional development, technology-related professional development, effective technology professional development, instructors' attitude toward new technology, technology professional development for instructor, and new technology adoption*. The search was completed using educational databases such as Education Source, Academic Search Complete, Thoreau, ERIC, and Taylor and Francis online databases from the Walden University Library.

Based on my analysis of the research, I concluded that professional development through an online professional development course is an appropriate method to address the needs of the instructors at the research site. The findings of my study were also consistent with the known literature on the topic. My literature review contains the reasons why this study confirmed what is known about college students' perceptions of the importance of student engagement in online courses.

### **Technology Professional Development Models**

As emerging technology continues to enter classrooms, instructors need to approach the integration of such technology in a systematic manner to ensure that such technology enhances the learning of their students. For instructors wishing to maximize their integration of emerging technology to improve student learning in their courses, a well-considered and meaningful lens through which to plan and reflect on technology

integration in their classroom is required. A lens that not only allows instructors to determine if technology use better meets student needs and learning objectives but also a lens out of which future directions and improvements can be gleaned (Hilton, 2016). It is helpful to contextualize our thinking about digital innovation in education within a clear framework that is useful and actionable. Using frameworks help to ground our understanding of some new or disorienting experience so we can generate contextual understanding and engage in fruitful meaning making. A meaningful technology integration framework can guide how educators think about, enact, and communicate educational innovation with technology to impact student learning more reliably (Magana et al., 2017). Three technology integration frameworks – TPACKS, SAMR, and T3 – have emerged to guide the integration of technology into classrooms.

### ***Technological Pedagogical Content Knowledge***

Technological Pedagogical Content Knowledge (TPACK) is a well-known technology integration framework intended to help instructors think about the integration of new technologies (Anderson et al., 2017). Developed by educational technology and psychology scholars Punya Mishra and Matthew Koehler (2006), TPACK focuses on instructor knowledge required for integrating technology within teaching, while acknowledging that this knowledge is complex and multifaceted. The TPACK framework focuses on technological, pedagogical, and content knowledge, as well their intersections: technological content knowledge; technological pedagogical knowledge; pedagogical content knowledge. Technological content knowledge is an instructor's knowledge of how to use the technology within their subject area whereas technological pedagogical

knowledge is a instructor's ability to incorporate technology using an effective teaching method (Eutsler, 2020).

Many new instructors often feel unprepared to integrate these knowledges to support student learning, especially if this preparation is not programmatic (Riegel & Tong, 2017; Tondeur et al., 2016). These feelings of preparedness are strongly influenced by instructor educator's beliefs about technology and the way that these beliefs are translated into their teaching and program design (Voithofer & Nelson, 2021). To help combat this feeling of unpreparedness, the TPACK framework has been applied in a variety of ways within some instructor preparation programs. For example, it has been used to serve as a technology integration blueprint for instructor educators (Baracaldo-Guzman, 2019), to qualitatively and longitudinally track preservice instructors over their 4-year program (Gill & Dalgarno, 2017), and to measure the impact of program support for developing TPACK skills (Baran et al., 2019).

In a study by Ali et al. (2020), researchers analyzed the impact of instructor educator knowledge of three elements of TPACK that include technological knowledge, pedagogical knowledge, and content knowledge. Using a quantitative approach, researchers used the survey method and two adopted questionnaires to gather data from all the instructor education institutes of public and private sector in Sindh, Pakistan. The findings of the study reveal that all three elements of TPACK have a significant positive impact on instructor educators' classroom teaching, this shows that it enhances students' achievement and the quality of education. The study recommends that administrators, policymakers and educational stakeholder, align instructor educators' continuing professional learning and development (CPLD) plans and curriculum of prospective

instructor educators (preservice instructors) with the specific factors that are known to improve an instructor's TPACK. The findings of this study are in accordance with numerous studies conducted in different parts of the world in a variety of contexts (Ali et al., 2020). Similar to the current research, previous studies have revealed that technological knowledge, pedagogical knowledge and content knowledge highly impact on instructors' classroom teaching (Harris & Hofer, 2017; Kirikcilar & Yildiz, 2018; Patria, 2019; Hill & Uribe-Florez, 2019).

### ***Substitution Augmentation Modification Redefinition Model***

The Substitution Augmentation Modification Redefinition (SAMR) model is a four-level, taxonomy-based approach for selecting, using, and evaluating technology that was developed by Dr. Ruben Puentedura (2013). Represented as a ladder, the model encourages instructors to move up from lower to higher levels of teaching with technology, which leads to higher (i.e., enhanced) levels of teaching and learning.

At the Substitution level, digital technology is substituted for analog technology, but the substitution generates no functional change. For example, in a middle school math class an instructor chooses to substitute a set of hard copy test review questions for digital versions. Another example is using word processing software in place of paper and pencil.

At the Augmentation level, technology is exchanged, and the function of the task or tool positively changes in some way. In a first-grade classroom, for instance, instead of an instructor-led, whole class read-aloud lesson, students instead use hand-held devices, such as a tablet, to simultaneously read and listen to individual digital stories on an app. In this case, hand-held devices augment the reading task.

At the Modification level, technology integration requires a significant redesign of a task. For example, in a secondary science class an instructor shifts how students learn about light by modifying the lesson and replacing showing a diagram of light on handout to engaging students in a virtual field trip by simulating the traveling of light in an interactive computer simulation with variables that students can change.

Finally, the Redefinition level is achieved when technology is used to create novel tasks. For example, instead of assigning a social studies-based persuasive essay, a fifth-grade instructor requires students to create and present their arguments through individually created and edited videos (Hamilton et al., 2016). The two lower levels – Substitution and Augmentation – are providing enhancement to learning with the use of technology and the top two levels – Modification and Redefinition – are transforming learning using technology (Crompton et al., 2020).

In a study by Geer et al. (2017), SAMR was used as the framework to help determine the instructors' level of technology integration to determine the impact of iPads on pedagogy at four metropolitan schools in South Australia. The sample consisted of two government and two nongovernment schools. Two of the schools catered for students from Reception (5 years old) to their final 12<sup>th</sup> year, while the other two schools were primary schools (5–13 years old). One school had introduced the use of 20 iPads in 2010 in the lower years, and another school had first introduced iPads into the middle years of schooling (14–16 years old) in 2011. A mixed methods approach was used because of the range of participants: curriculum leaders, instructors and students, and the exploratory nature of this study. Methods used were semi-structured interviews, online surveys and focus groups. Data from the study suggested that instructors were diligent in

ensuring that iPads were not used all the time and were only used when they believed that students would benefit from the capabilities of the iPad. Generally, students were positive about their use of iPads, with 86% of the 259 students who responded indicating that they found the iPad useful for learning. At the time of the data collection, the use of the iPads was a relatively new innovation in the schools, and so, it was not surprising that many of the instructors indicated that there had been little to no change in their pedagogy, suggesting that they were in the enhancement stage of the SAMR model with some moving towards modification. The features of the iPad and the way the instructors implemented them in the classroom enabled the students to use them for research, communication and product creation. With this use, there was evidence of increased collaboration, communication, self-reliance/ autonomy and authenticity in the classroom. Even at this initial stage of exploring the pedagogy associated with iPad technology, findings suggest that a structured professional learning program may assist some instructors to move from the substitution to the redefinition level (Geer et al., 2017).

### ***T3 Framework***

T3 is a framework that implements three different domains of educational technology use – translational, transformational, and transcendent. Translational uses of technology simply enable tasks that can be done in an analog or nondigital way to be done digitally, similar to the “Substitution” level in the SAMR model. The substance of the communication remains intact, but the language in which the communication is rendered changes to a different communicative form. In terms of teaching and learning, translational uses of technology can be regarded as doing old tasks in new ways—changing tasks from their analog to a digital one. For example, instructors might



distribute a Google Form to their students instead of administering a pencil-and-paper survey. While translational uses of technology provide the lowest level of value to the instructional or learning task, a person is bound to remain in this category if they are not aware of other, more advanced categories of technology use. Transformational uses of technology involve substantive disruptions or changes in either the nature of the task itself, the role of the individual engaged in the task, or the impact of the task on those who perceive the object of the task. Transformational uses of technology can be viewed as doing new things in new ways.

Transcendent uses of technology go beyond the normal range of expectations of use and practice. For example, students of all ages can create new learning environments and design new learning tools through the application of software coding. This framework was designed to necessitate the integration of digital tools in modern teaching and learning, provide a hierarchy of value for the use of technology within the context of learning environments, and offer a set of criteria to help instructors self-assess their current technology use while guiding the process of developing meaningful goals and receiving feedback on the way toward those goals (Magana et al., 2017).

Using Kolb's experiential learning theory and Magana's T3 framework, Anderson (2020) explored elementary instructors' perspectives on the usefulness of individualized virtual coaching in supporting blended learning implementation. In the basic qualitative study, the T3 framework supported the research design and the analysis of data collected during the research study. The T3 framework was also used during the data analysis phase to determine where the technology practices of elementary instructors fell. Using semi-structured interviews, K-5 instructors who had participated in at least one year of

virtual coaching were asked to participate. Results indicated instructors at higher modes of cognitive processing and higher levels of technology innovation found virtual coaching useful for (a) the implementation of technology tools and strategies, (b) for shifting instructional practices for student impacts, and (c) for reflective practices for professional growth (Anderson, 2020).

### **Technology Adoption**

Instructors' beliefs are a major factor in the effective use of new technology in teaching and learning. If instructors have positive beliefs concerning the use of a new technology to serve an educational purpose, they are more likely to attempt to integrate this new technology into their teaching processes. In contrast, if instructors have negative beliefs concerning the use of technology in the classroom, these perceived characteristics concerning technology may be a barrier to their use in the classroom (Carver, 2016).

There are numerous factors that determine the level of technology integration by instructors. Many of which are associated with instructor attitudes, beliefs, knowledge, and skills. Instructor-student relationships, self-efficacy beliefs of instructors and students, and instructors' technological-pedagogical-content knowledge and beliefs have been shown to have a mediating role on the technology-learning link (Taimalu & Luik, 2019). Instructors' personal pedagogical beliefs also play a key role in their pedagogical decisions regarding whether and how to integrate technology within their classroom practices. This makes for a bi-directional relationship. On the one hand, technology-rich learning experiences can change instructors' beliefs towards student-centered beliefs. On the other, instructors with such beliefs are more likely to use technology for student-centered learning. In both cases, however, the relationship is affected by perceived

barriers or beliefs, and needs sustained professional development to develop. Taking instructor perspectives into account while implementing technology into classrooms, involving instructors in the decision-making process, and addressing institutional complexities that affect instructors is essential (Miglani & Burch, 2019).

In a study by Junghoon and Sung (2019), instructors' beliefs and technology acceptance concerning smart mobile devices (SMDs) in South Korea were evaluated. The purpose of the study was to investigate the factors of instructor's beliefs concerning SMDs and to examine instructors' technology acceptance of SMDs into their lessons. To address the goals of the study, 378 primary and 390 secondary instructors participated in a study with a 25-item paired adjective questionnaire and a 12-item technology acceptance questionnaire. The results indicated that instructors' beliefs consistently revealed five factors – immediacy, interest, interactivity, instability, and inconvenience. Regarding the effect of the technology acceptance of SMDs on instructors' beliefs, the factors of instability, inconvenience, and interactivity strongly related to the perceived usefulness and ease of use of SMD. The findings indicated that instructors' beliefs that SMDs are unstable or uncomfortable can be the main barrier to the use of technology in the classroom (Junghoon & Sung, 2019).

### **Project Description**

The data analysis from this project study showed a need for additional student engagement in online courses. The online professional development course will follow the SAMR model. This model is the best fit because it encourages instructors to utilize technology for various tasks that range from basic to creative. This, in turn, leads to higher (i.e., enhanced) levels of learning. The online professional development course

proposed will be a four-module unit plus summative evaluation module for new faculty to learn how to incorporate Harmonize in their Canvas courses. The resources needed for the online professional development course include a Canvas account and a playground course for instructors to practice what they are learning in the Harmonize training. There are existing supports in place for instructors who need Canvas assistance. The Office of eLearning provides hands-on assistance to instructors every Friday from 9 AM to 11 AM Central Time. Instructors can reserve an appointment online to come in for a 30-minute training session. There are also some potential barriers. Some instructors are off-campus or teach classes on Fridays so they may not be able to come in for hands-on help. A possible solution to this would be to hold a Zoom session with the instructor when it is convenient for them. This Harmonize self-paced Canvas course would be available for new faculty the second week of the semester. This will ensure that instructors have time to prepare for their academic classes before starting the Harmonize course. Instructors will also complete the class by the end of October so that they are ready to integrate Harmonize into their courses beginning the second semester. Faculty will be required to login to the Harmonize course each week to complete activities and assignments. I will be responsible for evaluating the instructors work and providing feedback to them.

### **Project Evaluation Plan**

The evaluation of an implementation and the effectiveness of a new project are essential to examine its durability and to improve future projects. During the online professional development course, formative evaluations will be used to evaluate its short-term impact. At the end of each module, instructors will have to create a project using Harmonize in their course. This project will be based on using Harmonize with the

SAMR model. This is an acceptable evaluation tool because it will monitor instructor proficiency and provide ongoing feedback that can be used to make improvements. In addition, there will be a summative evaluation at the end (see Appendix A) that will gather feedback to know how the instructors perceived the online professional development course. Summative evaluation is an acceptable tool because it will determine the value of the online professional development course at the end of implementation. Instructors will also be asked to complete a course evaluation upon completion on training.

### **Formative Evaluation**

Formative evaluations will be conducted throughout the training to ensure that instructors are mastering Harmonize. Each of the modules will have the instructors implementing Harmonize with the SAMR model. This will be accomplished through discussion boards. Instructors will post possible ways that they could use in their class that corresponds to the related topic. In Module 1, instructors will post ways to use substitution in online learning. In Module 2, instructors will post ways to use augmentation in online learning. In Module 3, instructors will post ways to use modification in online learning. In Module 4, instructors will post ways to use redefinition in online learning. For each of the discussions, instructors will be required to reply to at least two other instructors giving them feedback related to their post. I will also be active on the discussion board giving feedback to each of the instructors.

Instructors will have a project in each module to complete as a mastery check. The projects will be based on the SAMR model. The evaluation for the first module will be a project that is based on Substitution. The evaluation within the second module will

be a project that is based on Augmentation. The evaluation within the third module will be a project that is based on Modification. The evaluation within the fourth module will be a project that is based on Redefinition. For each module, instructors will post their projects to the discussion board to get feedback from other instructors. The instructors will then revise their projects based on the feedback received. The projects will give the instructors hands-on experience using Harmonize so that they will feel comfortable assigning Harmonize activities to students.

### **Summative Evaluation**

Summative evaluation will be conducted at the end of each module and at the end of the online training course. Participants will submit their projects from each module to demonstrate mastery of Harmonize incorporating the SAMR model. Participants will be expected to score at least 90% or higher on each of the final module projects, which will be graded using a rubric. Participants will also complete a test during Module 5, which will demonstrate the use and application of Harmonize. This will be automated multiple choice/matching quiz. If participants do not score at least 90% mastery, they can retake the quiz up to three times to achieve mastery. Participants that score 90% or higher on the project and test will receive a certificate that they can keep in their annual evaluation portfolio as evidence they completed the professional development training course. Also, all participants will complete an anonymous course evaluation survey that will measure the overall learning experience. It will give participants the opportunity to reflect on how the online professional development course impacted their learning. Participants will give feedback to eight, open-ended questions that will indicate the significant components of the online professional development course and its effectiveness. The data collected from

the survey will direct future projects assuring that they will effectively promote content knowledge and skills related to student engagement in online courses.

### **Overall Evaluation Goal**

The overall evaluation goal is for new faculty to be confident in their abilities to implement Harmonize into their online courses so that students have a means to socialize and engage in online courses. By giving formative assessments throughout, I will be able to check to make sure faculty members are progressing throughout the curriculum unit. This will allow me to give feedback to faculty along the way instead of waiting until the end of the curriculum unit to see if they are making satisfactory progress. Instructors will need to complete their assessments and final exam with an overall grade of at least 90% to successfully complete the course. The key stakeholders for this curriculum unit's success would include faculty, the office of eLearning, administration, the Board of Directors.

### **Project Implications**

One of the most important implications would be an increase in socialization and engagement in online classes. Students would have a dedicated way of socializing and engaging with other students and the instructor in an online course. Online learning can be an isolating experience for students, so by providing a social media-style tool, it should help to promote student success through establishing a stronger sense of community and possibly increased student learning (Phirangee & Malec, 2017). Another implication would be an increase in student retention by providing an engaging learning experience. Having a dedicated means of communication for socialization and engagement would help students feel more active in the class (Martin & Bolliger, 2018). This means they would have someone to turn to if they had questions or wanted to form study groups, for

example. This would benefit the college because students would be more successful and therefore less likely to drop out of online classes.



## Section 4: Reflections and Conclusions

This section is a reflection and conclusion of the study. It discusses the project strengths and limitations as well as recommendations for alternative approaches. A reflection is provided on my work as a scholar, practitioner, and project study developer. Also, implications and applications of the professional development are addressed. Finally, I conclude by giving possible direction for future research studies.

### **Project Strengths and Limitations**

#### **Project Strengths**

The Harmonize Online Professional Development Course was developed to address improving peer socialization and engagement in online courses. If a student is physically and mentally involved in their course, they are more likely to persist (Ajjawi et al., 2020). One strength of the project is its design. Students' perceptions were captured from online interviews and surveys, and three themes emerged: importance of interaction, communication, and improvement in online learning. These themes are incorporated into the professional development training to help instructors understand that peer socialization and engagement are essential in online courses.

Another strength of the project is that the Harmonize online professional development course has the potential to build stronger relationships and rapport among instructors. Instructors will be submitting to the discussion board twice a week. Each of their posts will receive feedback from me and other instructors. Instructors will also submit their end of module project to a discussion board and receive feedback from other instructors. By doing this, instructors will learn to depend on other instructors and me to

help them improve their understanding and use of Harmonize and the SAMR model. This will help build community amongst the instructors.

### **Project Limitations**

As with any study, there are limitations. The main limitation of this project is that it is designed specifically for Focus Community College. Focus Community College is part of a consortium comprised of all the community colleges in the state. It allows students from any community college in the state to take an online course from another community college if their own community college does not provide the course. For example, Focus Community College does not offer some of the math courses that elementary education students need, so these students take these courses online through another community college while enrolled as a student at Focus Community College. If a student from another community college needs to take a course through Focus Community College, they do not know what Harmonize is. It takes them some time to learn it when taking one of our courses.

Another limitation would be that this study did not clarify if participants were from Focus Community College. Since students may attend other community colleges as well, this could have affected the data because this would be the only course they used this tool in. Their limited experience with it may have influenced their overall experience and opinions of it.

An additional limitation of this study would be that instructors were not included. Their perspectives and experience could have been useful for designing the professional development. The participants of my study were students; however, the project is for faculty.

Another limitation of the study may be the acceptance of the professional development. New instructors will be required to take the course so they know how to integrate Harmonize into their courses. Some instructors may feel apprehensive about having to utilize specific programs stating that their academic freedoms are being infringed upon. Finally, some instructors comfort level with new technology may limit their acceptance of the integration of Harmonize into their courses.

### **Recommendations for Alternative Approaches**

There are alternative ways that the initial project study could have been approached. One way would have been to interview sophomores who completed multiple online courses during their freshman year. With this approach, I could have investigated what motivated them in the online courses and what obstacles they faced. A mentoring program could have then been set up with the freshman and sophomores to help increase peer socialization and engagement in anticipation of increased engagement and retention in the online courses. Another alternative approach to the project could have been including instructor mentors. Since new instructors are the focus of the online professional development course, they have no assistance from other instructors who are currently using Harmonize. I could still use the online course as it is, but I could also include mentor instructors. This would be someone from the same department who is experienced in using Harmonize that the new instructor could go to for support and advice. At the end of each module, I would have the new instructor show the mentor instructor their project and receive feedback from them instead of receiving feedback just from the new instructors.

Instructors could also be given the choice to choose between different social media app. This would provide a differentiated approach, more flexibility, and choices that match the instructor's style. The expectations for communication and engagement would be the same; however, different technology tools could be utilized. Another recommendation would be for instructors to evaluate Harmonize. The study could be repeated changing the participants from students to instructors to get their perspective on the tool.

### **Scholarship, Project Development and Evaluation, and Leadership and Change Personal Growth as a Scholar**

Reflecting back, I can identify several areas of personal growth as a scholar. My research skills were vastly sharpened while planning and conducting the research, collecting data, and presenting the data. Learning how to manually code data to determine codes, categories, and eventually themes was a challenge, but I learned how to do it. I became knowledgeable about the process of accessing and examining scholarly literature to establish research relevance and significance.

Beginning the doctoral program, I had proficient writing skills; however, the completion of the project study has improved my writing even further. Learning to write with clarity, preciseness, and conciseness has been evidenced throughout this project study. This was achieved through numerous revisions and feedback from my chair. Also, learning to accept constructive criticism was very important. Many times, my narrow perspective was not what was needed. Being open to feedback helped broaden my perspective on my topic and helped me succeed in completing my project.

### **Personal Growth as an Education Practitioner**

Throughout my doctoral journey, I have grown as an education practitioner. Prior to beginning my doctoral journey, I had not previously taught any online courses. The doctoral program provided me with expert knowledge related to online teaching and learning, which I practice in the online courses that I currently teach. Digital scholarship has been improved as I am able to utilize academic, professional, and research practices. This personifies Walden University's scholar-practitioner definition of applying scholarly research and knowledge to practice.

### **Personal Growth as a Project Developer**

Throughout this journey, I have also experienced growth as a project developer. While completing the project study, I began to realize that my project would be based off the data from the study. Originally, I thought that a professional development/training was the direction the data were taking me. I was comfortable presenting professional development and trainings as that is part of my current job; however, based on the data from the study and the suggestion by my committee chair, it was decided that an online professional development course was the best option. Developing a five-module online professional development course is not something I have previously done, but it made sense to use this to show instructors how to utilize Harmonize with the SAMR technology model.

### **Learning and Growth as a Leader and Change Agent**

As a result of this doctoral program, I have experienced a high level of growth in my ability and confidence as a leader and change agent. I have always been a leader in many areas; however, it has grown to a different level. When problem arise now, my

mindset is different. The researcher/investigator side of me comes out. I dig deeper into problems to get to the bottom of them instead of just looking at surface level. I have also always looked at data, but I look at it differently now. Data now informs my decisions. I look at problems as having more than one solution instead of thinking my solution is always best. I know that change is not always easy, but I know can speak confidently about change even though solutions may not be popular. Because of this doctoral journey, I have learned my leadership potential, and I can be a positive change agent.

### **Reflection on Importance of the Work**

This overall study is very important to the field of education and educational technology. With an increase in the number of students taking online courses, there was a need to fill the gap that students are experiencing in engagement in online courses. With numerous technology tools available to instructors and students, some can be used to help with peer socialization and engagement to increase retention in online courses. This study focused on using Harmonize with the SAMR technology model to improve peer socialization and engagement. Instructors will be trained on how to effectively implement Harmonize with the SAMR technology model the semester prior to it being required in their courses.

### **Implications, Applications, and Directions for Future Research**

This project has the potential to create social change in students, faculty, the college, and other institutions. By providing a well-designed online professional development course, instructors will be able to utilize Harmonize more effectively, thus resulting in an increase in student engagement and learning outcomes. Locally, district stakeholders can gain a better understanding of Harmonize and its impact on local college

students. It will also give stakeholders data to support the purchase of the product. It may also show instructors how to maximize engagement in online courses and ensure that students have a means to communicate and engage with other students in the online courses.

There are numerous ways that the online professional development course that was developed can be applied in different situations. One way would be to share it with the other members of the MSVCC Consortium since several other community colleges use Harmonize. It could also be shared with other institutions of higher education that are implementing this tool through Canvas Commons. Finally, the product could be shared with Harmonize for professional development use. Although technology plays a role in communication and engagement, instructors must continue to learn the program to support its successful implementation and help reduce the gap of engagement in online courses. Students must also have the motivation and encouragement from instructors and peers to communicate and engage in the online courses.

Future studies can also be conducted based on this current study. Harmonize could be compared to other higher education social media tools such as Nectir or GroupMe for evaluation. Another study could be conducted with a different community college within the MSVCC Consortium or even a college from another state that uses Harmonize and the data could be compared. Finally, future research could also duplicate this study with the instructors as the participants instead of the students.

Also, this online professional development course was designed specifically for Focus Community College. For future research, one focus could be to conduct the study with a larger sample size including all students within the Mississippi Community

College System, all college students in Mississippi (community college and university), or even nationwide. The increase in sample size would allow for more generalization and a wider range of perspectives on peer socialization and engagement. Another possibility would be to replicate the student to gather data from instructors, rather than students.

### **Conclusion**

Peer socialization and engagement play a key role in online courses and contributes to successful completion of the courses. As new technologies are developed, it is important for instructors to implement them into their online courses to help ensure that students are engaged. This project study has the potential to impact students, instructors, and stakeholders. Community college instructors will benefit from the that was developed for this project study to help them succeed in implementing Harmonize with the SAMR technology model into their online courses. Community college students will benefit from increased peer socialization and engagement in their online courses. Finally, there will be an increase in graduation rates due to increased retention in the online courses that are offered at the community college.



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## Appendix A: The Project

Below is an outline for the 5 proposed modules in the Using Harmonize to Increase Student Engagement that will be integrated into Focus Community College's learning management system, Canvas, once approved. All five modules have been created in their entirety giving instructors an overview of tools in Harmonize and ways to incorporate the SAMR model into Harmonize. By the end of the five modules, instructors should feel confident in their abilities to integrate Harmonize into their online courses. This course should take instructors around 15.5 hours to complete. This is equivalent to three full days of instruction.

### **Module 1 – Introduction to Harmonize/Substitution**

Overview - In Module 1, instructors will learn how to add videos, external links, milestones, and autograde in Harmonize. They will learn about the Substitution level of the SAMR module.

Instruction – Instructors will watch videos and read journal articles related to module one Harmonize topics and the Substitution level of the SAMR model. Instructors will also watch a video that I produce relating to these topics.

Assessment – Instructors will demonstrate their knowledge of Harmonize and Substitution by completing practice activities, giving examples of how to incorporate Substitution, and completing quizzes on the videos and readings.

## **Module 2 – Augmentation**

Overview - In Module 2, instructors will learn how to use settings, activity reports, reactions, tagging, plagiarism detection, and anonymous posts in Harmonize. They will also learn about the Augmentation level of the SAMR module.

Instruction – Instructors will watch videos and read journal articles related to module two Harmonize topics and the Augmentation level of the SAMR model. Instructors will also watch a video that I produce relating to these topics.

Assessment – Instructors will demonstrate their knowledge of Harmonize and Augmentation by completing practice activities, giving examples of how to incorporate Augmentation, and completing quizzes on the videos and readings.

## **Module 3 – Modification**

Overview - In Module 3, instructors will learn how to annotate videos and images, insert close captioning, schedule meetings, and insert polls and question and answer boards in Harmonize. They will also learn about the Modification level of the SAMR module.

Instruction – Instructors will watch videos and read journal articles related to module three Harmonize topics and the Substitution level of the SAMR model. Instructors will also watch a video that I produce relating to these topics.

Assessment – Instructors will demonstrate their knowledge of Harmonize and Modification by completing practice activities, giving examples of how to incorporate Modification, and completing quizzes on the videos and readings.

## **Module 4 – Redefinition**

Overview - In Module 4, instructors will learn how to create polls and question and answer boards, use the grid view, flag questions for instructors, and use the chat feature. They will also learn about the Redefinition level of the SAMR module.

Instruction – Instructors will watch videos and read journal articles related to module four Harmonize topics and the Redefinition level of the SAMR model. Instructors will also watch a video that I produce relating to these topics.

Assessment – Instructors will demonstrate their knowledge of Harmonize and Redefinition by completing practice activities, giving examples of how to incorporate Redefinition, and completing quizzes on the videos and readings.

## **Module 5 – Conclusion**

Overview - In Module 5, instructors will demonstrate their knowledge of Harmonize and the SAMR model.

Instruction –Instructors will also watch a video that I produce recapping Harmonize and the SAMR model.

Assessment – Instructors will demonstrate their knowledge of Harmonize and Substitution by completing an assessment.

## **Module Layout**

Each module is arranged in the same format. It begins with a module overview. The module overview describes the material that is covered in the module. There is also a video where I go more in-depth about the module. Each video that is placed in the course is in Studio. Studio allows me to go through and see which instructors what the video and

how much of the video they watched. This gives me a foundation to start with when instructors are having difficulty. I can view to make sure that they watched the video. It also allows instructors to comment on the video. Instructors can comment at specific timestamps in the video with questions or comments, for example. The next part of the module is Read and Watch. This section breaks down Harmonize and SAMR. Videos and readings are included in this section. The last section is Activities and Assessments. This is where the instructor gets to practice using what they learned in the module and demonstrate proficiency. Instructors will practice using the Harmonize skills they learned in the module, create activities that use the part of the SAMR model for that module, and create real classroom examples where Harmonize and SAMR are combined.

### **Rubrics for Activities and Assessments**

Each of the instructional modules will contain activities and assessments at the end of the module to assess instructor's proficiency. Since each module contains the same format of activities and assessments, the rubrics will be the same for each module. The only difference will be the Harmonize rubric because there are different elements that instructors are practicing each week.

Harmonize Rubrics - Each Harmonize discussion will be worth 100 points, and each Harmonize element will count an equal percent of the 100 points.

## Module 1 Rubric

Harmonize Discussion			
Criteria	Ratings		Pts
Directions The teacher gives a description of the assignment.	20 pts Full Marks	0 pts No Marks	20 pts
Video The teacher includes a video for the students to watch.	20 pts Full Marks	0 pts No Marks	20 pts
External Link The teacher provided an external link in the assignment.	20 pts Full Marks	0 pts No Marks	20 pts
Milestones The teacher provided milestones related to the submission of the assignment.	20 pts Full Marks	0 pts No Marks	20 pts
Autograde The teacher selected autograde feature and assigned point values.	20 pts Full Marks	0 pts No Marks	20 pts
			Total Points: 100

## Module 2 Rubric

### Harmonize Module 2 Practice

Harmonize Module 2 Practice			
Criteria	Ratings		Pts
Post Settings It is set where students have to post prior to seeing other comments.	16.67 pts Full Marks	0 pts No Marks	16.67 pts
Reactions The reactions settings is turned on so students can react to posts.	16.67 pts Full Marks	0 pts No Marks	16.67 pts
Visibility Settings The visibility setting is set to students in the same section.	16.67 pts Full Marks	0 pts No Marks	16.67 pts
Default Layout The default layout is set to grid.	16.67 pts Full Marks	0 pts No Marks	16.67 pts
Default Language The default language is set to Spanish.	16.66 pts Full Marks	0 pts No Marks	16.66 pts
Turnitin Turnitin setting is enabled	16.66 pts Full Marks	0 pts No Marks	16.66 pts
			Total Points: 100



## Module 3 Rubric

### Harmonize Module 3 Practice

Harmonize Module 3 Practice			
Criteria	Ratings		Pts
Video Annotation Instructor annotated a video	20 pts Full Marks	0 pts No Marks	20 pts
Image Annotation Instructor annotated an image	20 pts Full Marks	0 pts No Marks	20 pts
Equation Editor Instructor used the equation editor	20 pts Full Marks	0 pts No Marks	20 pts
Closed Captioning Instructor used closed captioning on a video	20 pts Full Marks	0 pts No Marks	20 pts
Web Conferencing Instructor scheduled a meeting using web conferencing	20 pts Full Marks	0 pts No Marks	20 pts
			Total Points: 100

## Module 4 Rubric

### Harmonize Module 4 Practice

Harmonize Module 4 Practice			
Criteria	Ratings		Pts
Polls Instructor created a poll	25 pts Full Marks	0 pts No Marks	25 pts
Q & A Board Instructor created a Q & A board	25 pts Full Marks	0 pts No Marks	25 pts
Grid View Instructor changed the layout to Grid view	25 pts Full Marks	0 pts No Marks	25 pts
Chat Instructor sent a chat message to the instructor	25 pts Full Marks	0 pts No Marks	25 pts
			Total Points: 100

## SAMR Rubric

### SAMR Discussion

SAMR Discussion			
Criteria	Ratings		Pts
Initial Post The teacher provided an example activity and told how the activity could be changed using the appropriate part of the SAMR model.	50 pts Full Marks	0 pts No Marks	50 pts
Reply The teacher replied to another teacher telling an alternative way to use the appropriate part of the SAMR model.	50 pts Full Marks	0 pts No Marks	50 pts
			Total Points: 100

## Final Project Rubric

### Final Project

Final Project			
Criteria	Ratings		Pts
Harmonize The project integrates different features of Harmonize.	50 pts Full Marks	0 pts No Marks	50 pts
SAMR Model The project incorporates the appropriate part of the SAMR model.	50 pts Full Marks	0 pts No Marks	50 pts
			Total Points: 100

## Module 1 Introduction to Harmonize/Substitution

Below is an image showing the Canvas layout for Module 1.

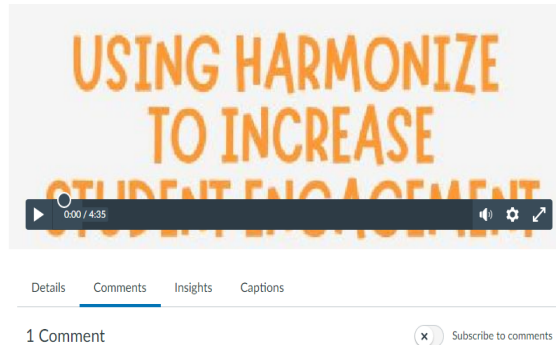
☰	▼	<b>Module 1 - Introduction to Harmonize/Substitution - 3 hours</b>
☰	📄	<b>Module 1 Overview - 7 minutes</b>
☰		<b>Read and Watch</b>
☰		<b>Harmonize</b>
☰	🔗	<b>Harmonize Introduction Video - 2 minutes</b>
☰	🔗	<b>Harmonize Overview - 6 minutes</b>
☰	📄	<b>Harmonize Benefits - 5 minutes</b>
☰	🔗	<b>Create a New Harmonize Discussion Topic - 1 minute</b>
☰	🔗	<b>Commenting on a Post - 1 minute</b>
☰	🔗	<b>Adding Multimedia - 1 minute</b>
☰	🔗	<b>Adding Multiple Due Dates - 3 minutes</b>
☰	🔗	<b>Autograding - 2 minutes</b>
☰		<b>SAMR</b>
☰	🔗	<b>What is the SAMR model? - 4 minutes</b>
☰	📄	<b>The SAMR Model: A Critical Review and Suggestions for Use - 20 minutes</b>
☰	🔗	<b>SAMR - Substitution - 5 minutes</b>
☰	🔗	<b>SAMR - Substitution - 2 minutes</b>
☰	📄	<b>Harmonize Module 1 Practice - 30 minutes</b> 100 pts
☰	📄	<b>SAMR - Substitution Examples - 30 minutes</b> 100 pts
☰	📄	<b>Final Project - Substitution - 1 hour</b> 100 pts

## Overview with Video

### Module 1 Overview - 7 minutes

In Module 1, you will get an overview of Harmonize and SAMR. **Harmonize** is a suite of engagement tools that fully integrates with Canvas to provide an interactive space for students and instructors to engage in more dynamic and enriching exchanges. It is an online discussion board built to increase student engagement, promote equitable learning environments, and ease instructor workload. **SAMR** is a framework that helps teachers identify more meaningful and useful ways of selecting and using technology in the classroom and enables the effective use and application of technology in the classroom. The acronym SAMR stands for four levels of technology integration: Substitution, Augmentation, Modification, and Redefinition.

In each module, you will learn about different features of Harmonize and apply the SAMR model to assignments. In the first module, you will learn how to add videos, external links, milestones, and autograde. You will then create an activity/assignment in Harmonize that uses the Substitution level of the SAMR module.



### Transcript for Module 1 Video (only included for Module 1)

Hello, everyone, and welcome to the course, Using Harmonize to Increase Student Engagement. This course is required for all new faculty to help them become familiar with Harmonize. Our community college is putting a heavy emphasis on retention, and Harmonize can help with student engagement and retention. Throughout this course, you will also be learning about the SAMR technology framework and how it can be used in conjunction with Harmonize. Harmonize is an online discussion board built to increase student engagement, promote equitable learning environments, and ease instructor workload. The SAMR model framework was created to help instructors identify more meaningful and useful ways of selecting and using technology in the classroom. This course consists of four learning modules and a conclusion module. In each module, you will learn about the different features of Harmonize and create activities that are based on

the SAMR framework. At the end of the course, you should feel confident in your ability to incorporate Harmonize and SAMR activities into your classroom.

Module 1 is an introduction to Harmonize and some of its basic features. You will learn about the benefits, how to create and comment on a post, add multimedia, assign multiple due dates, and autograde. From TicTok to Instagram, student live on social media. This is one of the features that appeals to the students.... Harmonize's social media feel. Also, think about when you assign discussions to your students. Most discussion boards require the students to post and then go back and make replies. If students wait until the last minute to post and make their replies, they are not getting very much out of the discussion. The intent is to post and go back later and read the replies. We all know this is not what happens in most instances. With Harmonize, you can assign multiple due dates. You can require students to make their initial post early in the week, and then go back and reply to other students later in the week. This prevents students from waiting until the last minute to post. Another awesome feature of Harmonize is autograde. Think about those discussions where students just have to introduce themselves. This can be set to autograde for you. Boy, this is a timesaver.

Next, we are going to talk about the SAMR technology framework. SAMR is a model designed to help educators incorporate technology into teaching by enabling the instructor to design, develop, and infuse digital learning experiences so they result in higher levels of achievement for students. In this first module, we are discussing Substitution. With Substitution, there is no functional change in teaching and learning. In other words, computer technology is used to perform the same task that was done before

the use of computers. For example, back in the day when we had to hand write essays and turn them in. Now, students type their essays. This is an example of Substitution.

After learning about the basic tools in Harmonize and Substitution in the SAMR model, you get to practice using each of them. Each of you have a playground created for you. This is where you will go each week to practice. In Module 1, you have three assignments to submit. This first one is where you use Harmonize. You will create a Harmonize assignment that has directions, a video and external link, multiple due dates, and set to autograde. The second assignment lets you practice creating a Harmonize discussion. Post an activity that you could use in your class and tell how you could apply Substitution to the activity. Then you will go back and reply to another instructor giving them an alternative way to apply substitution to the activity they provided. Finally, you will complete the first part of your final project. Instead of submitting one huge final project at the end of the course, you will submit a part in each module. You will be integrating what you have learned to create a project that uses Harmonize and Substitution in your subject area.

Well, that is a wrap for Module 1. As always, I am here for you. If you have any questions, please feel free to call, email, or come see me.

### **Read and Watch**

This section contains web pages, videos, and journal articles related to Harmonize and SAMR covered in this module. There is a web page that shows the benefits of using Harmonize. There are videos introducing Harmonize and demonstrating how to use the features of Harmonize that are covered in this module. Finally, there are videos and

journal articles introducing SAMR and the Substitution level. Instructors will watch and read to get an overview of Harmonize and an understanding of the features of Harmonize discussed in this module (commenting on a post, adding multimedia, adding multiple due dates, autograde) as well as an overview of the SAMR technology model and Substitution.

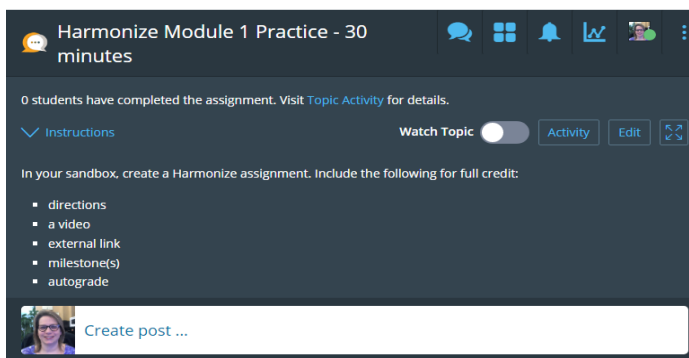
<b>Name of Activity with Link</b>	<b>Type of Activity</b>
Harmonize Introduction Video	video
Harmonize Overview	video
Harmonize Benefits	web page
Adding a Harmonize Discussion as an Assignment in Canvas	video
Commenting on a Post	video
Adding Multimedia	video
Adding Multiple Due Dates	video
Autograding	video
What is the SAMR Model	video
The SAMR Model: A Critical Review and Suggestions for Use	journal article
The SAMR Model at the Substitution Level	journal article
The Substitution Level of the SAMR Model	video

### **Activities and Assessments**

This section contains activities and assessments related to the first module. After completing the Read and Watch section, instructors will then apply what they have learned in the first module to demonstrate their competency. Instructors will create a

discussion board assignment that uses the features learned in Module 1 - commenting on a post, adding multimedia, adding multiple due dates, autograde. They will then give an example of an activity that they use in their class that could be applied to the Substitution level of the SAMR model. After giving an example, they will reply to another instructor telling them a different way that Substitution could be applied to the activity. Finally, instructors will create a project in Harmonize that uses Substitution in their grade level for part of the final project.

Activity Name	Type of Assessment	Description
Harmonize Module 1 Practice	Formative	Instructors will create a Harmonize assignment in their sandbox that includes items learned from Module 1: add directions, add a video, add an external link, add milestones, and set to autograde. This assignment will be graded using a rubric. Each item is worth 20 points.





## SAMR – Substitution Examples

Formative

The screenshot shows a Microsoft Teams topic activity interface. At the top, it says "SAMR - Substitution Examples - 30 minutes". Below that, it indicates "0 students have completed the assignment. Visit [Topic Activity](#) for details." There are two progress bars: "1 Post 50 points" and "1 Comment 50 points". On the right, an "Activity" section shows "0 Posts" and "0 Comments". A "Watch Topic" toggle is turned on. The instructions section reads: "Post an activity that you could use in your class and tell how you could apply the S (Substitution) from the SAMR model to the activity. Reply to another post giving an alternative way to apply the S (Substitution) from the SAMR model to the activity provided." At the bottom, there is a "Create post ..." input field with a user profile picture on the left.

Instructors will post an activity to the Harmonize discussion board that gives an activity that they could apply in their classroom that using Substitution. They will then reply to another instruction giving an alternative way to apply Substitution to the activity provided. This activity will be graded using a rubric where instructors receive 50 points for the post and 50 points for the reply.

## Final Project – Substitution

Summative

The screenshot shows a Microsoft Teams topic activity interface. At the top, it says "Final Project - Substitution - 1 hour". Below that, it indicates "0 students have completed the assignment. Visit [Topic Activity](#) for details." There are "Watch Topic" and "Activity" buttons. The instructions section reads: "This is Part 1 of your Final Project. Now that you have a good idea of Harmonize and SAMR, you will integrate both to create Part 1 of your final project. Take the suggestions that you were given on the discussion board related to the S (Substitution) in the SAMR model on the discussion board. Create a project in Harmonize that uses Substitution in your subject area." At the bottom, there is a "Create post ..." input field with a user profile picture on the left.

Instructors will take what they have learned throughout the module to create a project in Harmonize that uses Substitution in their subject area. This activity will be graded using a rubric where instructors receive 50 points for integrating Harmonize features and 50 points for integrating the Substitution part of the SAMR model.

## Module 2 Augmentation

☰	▼	<b>Module 2 - Augmentation - 3.5 hours</b>
☰	📄	<b>Module 2 Overview - 6 minutes</b>
☰		<b>Read and Watch</b>
☰		<b>Harmonize</b>
☰	📄	<b>Settings - 5 minutes</b>
☰	🔗	<b>Notification Settings - 10 minutes</b>
☰	🔗	<b>Activity Reports - 10 minutes</b>
☰	🔗	<b>Reactions - 5 minutes</b>
☰	🔗	<b>Tagging Classmates and Instructors - 5 minutes</b>
☰	🔗	<b>TurnItIn Plagiarism Detections - 5 minutes</b>
☰	🔗	<b>Anonymous Posting - 5 minutes</b>
☰		<b>SAMR</b>
☰	🔗	<b>SAMR - Augmentation - 9 minutes</b>
☰	🔗	<b>SAMR - Augmentation - 15 minutes</b>
☰	📄	<b>SAMR - Augmentation - 15 minutes</b>
☰		<b>Activities and Assessments</b>
☰	📄	<b>Harmonize Module 2 Practice - 30 minutes</b> 100 pts
☰	📄	<b>SAMR - Augmentation Examples - 30 minutes</b> 100 pts
☰	📄	<b>Final Project - Augmentation - 1 hour</b> 100 pts

## Overview with Video

### Module 2 Overview - 6 minutes

In the last module, you learned some basic features of Harmonize and learned how to apply substitution from the SAMR framework.

This week, you will learn some more features of Harmonize and apply augmentation from the SAMR model.



### Description of Video

A recap of module 1 is given, and module 2 is introduced. A discussion is given on the features of Harmonize covered in module 2 and Augmentation of the SAMR technology framework. It concludes by going over the activities and assessments due in this module.

### Read and Watch

This section contains web pages, videos, and journal articles related to Harmonize and SAMR covered in this module. There is a web page that shows the settings in Harmonize. There are videos demonstrating how to use the features of Harmonize that are covered in this module. Finally, there are videos and journal articles introducing SAMR and the Augmentation level. Instructors will watch and read to get an overview of Harmonize and an understanding of the features of Harmonize discussed in this module

(settings, activity reports, reactions, tagging classmates and instructions, TurnItIn, anonymous postings) as well as Augmentation in the SAMR technology framework.

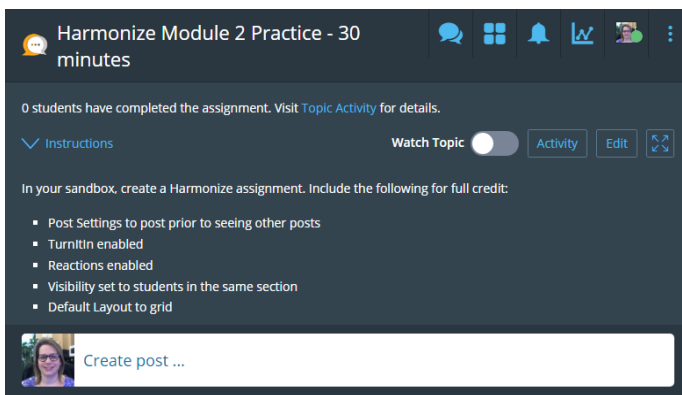
<b>Name of Activity with Link</b>	<b>Type of Activity</b>
Settings	web page
Notification Settings	video
Activity Reports	video
Reactions	video
Tagging Classmates and Instructors	video
TurnItIn Plagiarism Detections	video
Anonymous Posting	video
SAMR – Augmentation	video
SAMR – Augmentation	journal article
SAMR - Augmentation	Journal article

### **Activities and Assessments**

This section contains activities and assessments related to the second module. After completing the Read and Watch section, instructors will then apply what they have learned in the second module to demonstrate their competency. Instructors will create a discussion board assignment that uses the features learned in Module 2 – notification settings, activity reports, reactions, tagging classmates and instructors, TurnItIn, and anonymous posts. They will then give an example of an activity that they use in their class that could be applied to the Augmentation level of the SAMR model. After giving

an example, they will reply to another instructor telling them a different way that Augmentation could be applied to the activity. Finally, instructors will create a project in Harmonize that uses Augmentation in their grade level for part of the final project.

Activity Name	Type of Assessment	Description
Harmonize Module 2 Practice	Formative	Instructors will create a Harmonize assignment in their sandbox that includes items learned from Module 2: post settings, reactions, visibility, default layout, default language, and TurnItIn. This assignment will be graded using a rubric. Each item is worth 16.67 points.



## SAMR – Augmentation Examples

## Formative

The screenshot shows a LMS activity page titled "SAMR - Augmentation Examples" with a duration of "- 30 minutes". It indicates that 0 students have completed the assignment. The "Requirements" section shows 1 Post (50 points) and 1 Comment (50 points). The "Activity" section shows 0 Posts and 0 Comments. There are buttons for "Instructions", "Watch Topic" (toggle), "Activity", "Edit", and a dropdown menu. At the bottom, there is a "Create post ..." input field with a user profile picture.

Instructors will post an activity to the Harmonize discussion board that gives an activity that they could apply in their classroom that using Augmentation. They will then reply to another instruction giving an alternative way to apply Augmentation to the activity provided. This activity will be graded using a rubric where instructors receive 50 points for the post and 50 points for the reply.

## Final Project – Augmentation

## Summative

The screenshot shows a LMS activity page titled "Final Project - Augmentation" with a duration of "- 1 hour". It indicates that 0 students have completed the assignment. The "Instructions" section is expanded, showing the following text: "This is Part 2 of your Final Project. Now that you have a good idea of Harmonize and SAMR, you will integrate both to create Part 2 of your final project. Take the suggestions that you were given on the discussion board related to the A (Augmentation) in the SAMR model on the discussion board. Create a project in Harmonize that uses Augmentation for your subject area." At the bottom, there is a "Create post ..." input field with a user profile picture.

Instructors will take what they have learned throughout the module to create a project in Harmonize that uses Augmentation in their subject area. This activity will be graded using a rubric where instructors receive 50 points for integrating Harmonize features and 50 points for integrating the Augmentation part of the SAMR model.

## Module 3 Modification

☰	▼	Module 3 - Modification - 3.75 hours
☰	📄	Module 3 Overview - 5 minutes
☰		Read and Watch
☰		Harmonize
☰	🔗	Video Annotations - 15 minutes
☰	🔗	Image Annotations - 15 minutes
☰	🔗	Equation Editor - 15 minutes
☰	🔗	Closed Captioning - 15 minutes
☰	🔗	Web Conferencing Integration - 15 minutes
☰		SAMR
☰	🔗	SAMR - Modification - 11 minutes
☰	📄	SAMR - Modification - 15 minutes
☰		Activities and Assessments
☰	📄	Harmonize Module 3 Practice - 30 minutes 0 pts
☰	📄	SAMR - Modification Examples - 30 minutes 0 pts
☰	📄	Final Project - Modification - 1 hour 0 pts

## Overview with Welcome

### Module 3 Overview - 5 minutes

In the last module, you learned some more features of Harmonize and learned how to apply augmentation from the SAMR framework. This week, you will learn some more features of Harmonize and apply modification from the SAMR model.



### Description of Video

A recap of module 2 is given, and module 3 is introduced. A discussion is given on the features of Harmonize covered in module 3 and Modification of the SAMR technology framework. It concludes by going over the activities and assessments due in this module.

### Read and Watch

This section contains videos and journal articles related to Harmonize and SAMR covered in this module. There are videos demonstrating how to use the features of Harmonize that are covered in this module. Also, there are videos and a journal article discussing Modification of the SAMR model. Instructors will watch and read to get an understanding of the features of Harmonize discussed in this module (video annotations, image annotations, equation editor, closed captioning, web conferencing integration) as well as Modification in the SAMR technology framework.



<b>Name of Activity with Link</b>	<b>Type of Activity</b>
Video Annotations	video
Image Annotations	video
Equation Editor	video
Closed Captioning	video
Web Conferencing Integration	video
SAMR Modification	video
SAMR Modification	journal article

### **Activities and Assessments**

This section contains activities and assessments related to the third module. After completing the Read and Watch section, instructors will then apply what they have learned in the third module to demonstrate their competency. Instructors will create a discussion board assignment that uses the features learned in Module 3 – video annotations, image annotations, equation editor, closed captioning, and web conferencing. They will then give an example of an activity that they use in their class that could be applied to the Modification level of the SAMR model. After giving an example, they will reply to another instructor telling them a different way that Modification could be applied to the activity. Finally, instructors will create a project in Harmonize that uses Modification in their grade level for part of the final project.

Activity Name	Type of Assessment	Description
Harmonize Module 3 Practice	Formative	Instructors will create a Harmonize assignment in their sandbox that includes items learned from Module 3: video annotation, image annotation, equation editor, closed captioning, web conferencing. This assignment will be graded using a rubric. Each item is worth 20 points.

The screenshot shows a Canvas LMS activity page. At the top, the title is "Harmonize Module 3 Practice - 30 minutes". Below the title, it states "0 students have completed the assignment. Visit [Topic Activity](#) for details." There is a "Watch Topic" toggle switch which is currently turned off. To the right of the toggle are buttons for "Activity", "Edit", and a refresh icon. Below this, the instructions read: "In your sandbox, create a Harmonize assignment. Include the following for full credit:" followed by a bulleted list:

- Video annotation
- Image annotation
- Equation editor
- Closed captioning
- Web Conferencing

At the bottom of the screenshot, there is a user profile picture and a "Create post ..." button.

## SAMR – Modification

## Formative

SAMR - Modification Examples - 30 minutes

0 students have completed the assignment. Visit [Topic Activity](#) for details.

Instructions Watch Topic  Activity Edit ↕

Post an activity that you could use in your class and tell how you could apply the M(Modification) from the SAMR model to the activity.

Reply to another post giving an alternative way to apply the M(Modification) from the SAMR model to the activity provided.

Create post ...

Instructors will post an activity to the Harmonize discussion board that gives an activity that they could apply in their classroom that using Modification. They will then reply to another instruction giving an alternative way to apply Modification to the activity provided. This activity will be graded using a rubric where instructors receive 50 points for the post and 50 points for the reply.

## Final Project – Modification

## Summative

Final Project - Modification - 1 hour

0 students have completed the assignment. Visit [Topic Activity](#) for details.

Instructions Watch Topic  Activity Edit ↕

This is Part 3 of your Final Project.

Now that you have a good idea of Harmonize and SAMR, you will integrate both to create Part 3 of your final project.

Take the suggestions that you were given on the discussion board related to the M(Modification) in the SAMR model on the discussion board. Create a project in Harmonize that uses Modification in your subject area.

Create post ...

Instructors will take what they have learned throughout the module to create a project in Harmonize that uses Modification in their subject area. This activity will be graded using a rubric where instructors receive 50 points for integrating Harmonize features and 50 points for integrating the Modification part of the SAMR model.

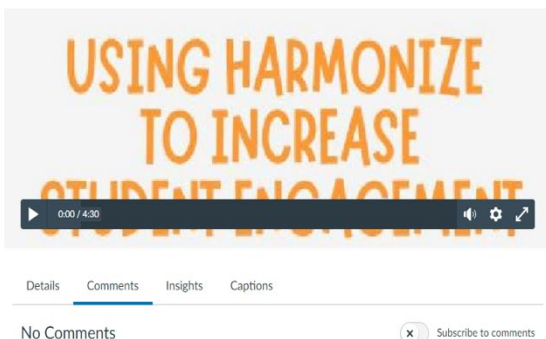
## Module 4 Redefinition

☰	▼	<b>Module 4 - Redefinition 3.75 hours</b>
☰	📄	<b>Module 4 Overview - 5 minutes</b>
☰		<b>Read and Watch</b>
☰	🔗	<b>Polls - 5 minutes</b>
☰	🔗	<b>Creating a Poll - 4 minutes</b>
☰	🔗	<b>Q and A Boards - 15 minutes</b>
☰	🔗	<b>Grid View - 5 minutes</b>
☰	🔗	<b>Flag a Question for the Instructor - 3 minutes</b>
☰	🔗	<b>Chat - 30 minutes</b>
☰		<b>SAMR - Redefinition</b>
☰	🔗	<b>SAMR - Redefinition - 15 minutes</b>
☰	🔗	<b>SAMR - Redefinition - 23 minutes</b>
☰		<b>Activities and Assessments</b>
☰	📄	<b>Harmonize Module 4 Practice - 30 minutes</b>
☰	📄	<b>SAMR - Redefinition Examples - 30 minutes</b> 0 pts
☰	📄	<b>Final Project - Redefinition - 1 hour</b> 0 pts

## Overview with Video

### Module 4 Overview - 5 minutes

In the last module, you learned some more features of Harmonize and learned how to apply modification from the SAMR framework. This week, you will learn some more features of Harmonize and apply redefinition from the SAMR model.



### Description of Video

A recap of module 3 is given, and module 4 is introduced. A discussion is given on the features of Harmonize covered in module 4 and Redefinition of the SAMR technology framework. It concludes by going over the activities and assessments due in this module.

### Read and Watch

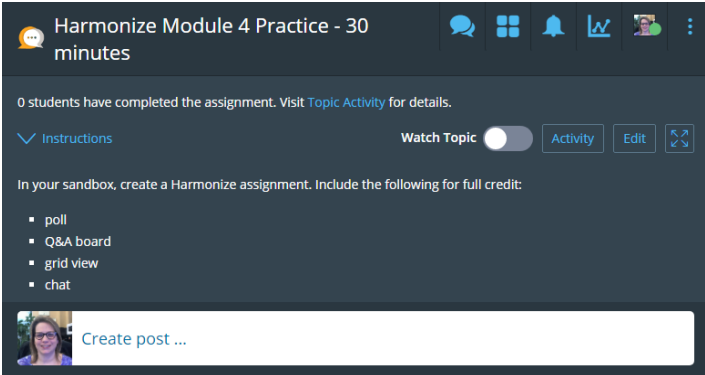
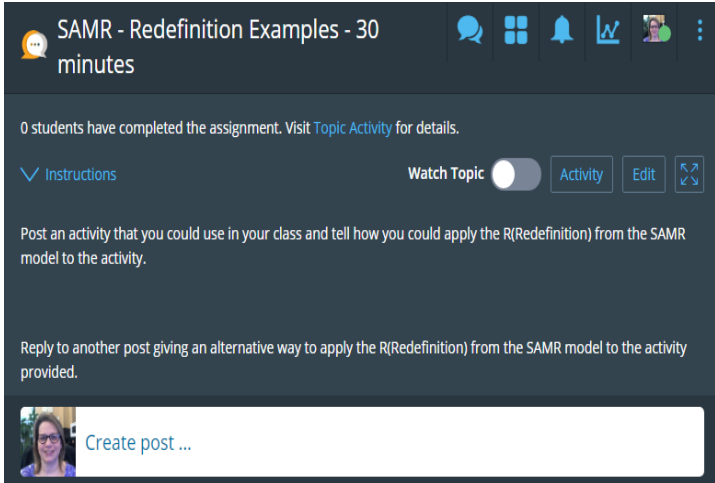
This section contains videos and journal articles related to Harmonize and SAMR covered in this module. There are videos demonstrating how to use the features of Harmonize that are covered in this module. Also, there are videos and a journal article discussing Redefinition of the SAMR model. Instructors will watch and read to get an understanding of the features of Harmonize discussed in this module (polls, Q&A boards, grid view, flagging questions, and chat) as well as Redefinition in the SAMR technology framework.

<b>Name of Activity with Link</b>	<b>Type of Activity</b>
Polls	video
Creating a Poll	video
Q and A Boards	video
Grid View	video
Flag a Question for the Instructor	video
Chat	video
SAMR Redefinition	journal article
SAMR Redefinition	video

### **Activities and Assessments**

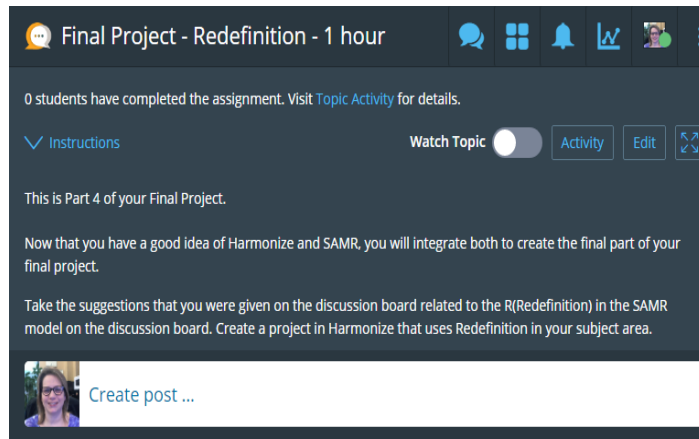
This section contains activities and assessments related to the fourth module.

After completing the Read and Watch section, instructors will then apply what they have learned in the fourth module to demonstrate their competency. Instructors will create a discussion board assignment that uses the features learned in Module 4 – polls, Q&A boards, grid view, flagging questions, and chat. They will then give an example of an activity that they use in their class that could be applied to the Redefinition level of the SAMR model. After giving an example, they will reply to another instructor telling them a different way that Redefinition could be applied to the activity. Finally, instructors will create a project in Harmonize that uses Redefinition in their grade level for part of the final project.

Activity Name	Type of Assessment	Description
Harmonize Module 4 Practice	Formative	Instructors will create a Harmonize assignment in their sandbox that includes items learned from Module 4: polls, Q&A board, grid view, and chat. This assignment will be graded using a rubric. Each item is worth 25 points.
		
SAMR – Redefinition	Formative	Instructors will post an activity to the Harmonize discussion board that gives an activity that they could apply in their classroom that using Redefinition. They will then reply to another instruction giving an alternative way to apply Redefinition to the activity provided. This activity will be graded using a rubric where instructors receive 50 points for the post and 50 points for the reply.
		

## Final Project – Redefinition

## Summative



The screenshot shows a Canvas LMS topic page. At the top, the title is "Final Project - Redefinition - 1 hour". Below the title, it states "0 students have completed the assignment. Visit [Topic Activity](#) for details." There are several icons for communication and navigation. Below this, there is a section for "Instructions" with a "Watch Topic" toggle switch, "Activity", "Edit", and a refresh icon. The main content area contains the following text:

This is Part 4 of your Final Project.

Now that you have a good idea of Harmonize and SAMR, you will integrate both to create the final part of your final project.

Take the suggestions that you were given on the discussion board related to the R(Redefinition) in the SAMR model on the discussion board. Create a project in Harmonize that uses Redefinition in your subject area.

At the bottom, there is a "Create post ..." input field with a user profile picture on the left.

Instructors will take what they have learned throughout the module to create a project in Harmonize that uses Redefinition in their subject area. This activity will be graded using a rubric where instructors receive 50 points for integrating Harmonize features and 50 points for integrating the Redefinition part of the SAMR model.



## Module 5 Conclusion

☰	▼	<b>Module 5 - Conclusion - 1.5 hours</b>
☰	📄	<b>Module 5 Overview - 15 minutes</b>
☰	✈️	<b>Summative Assessment - 1 hour</b>
☰	🚀	<b>End of Course Survey - 15 minutes</b> 0 pts

### Overview

This video recaps all the features of Harmonize and the SAMR technology framework. It then discusses the final summative assessment and the end of course survey the instructors will take. It concludes by thanking the instructors for the time they have put in this course and encourages them to keep learning more about Harmonize, SAMR, and technology in general to best benefit students.

### Summative Assessment

The summative assessment contains matching, hotspot, true/false and essay questions. The questions take information that instructors have learned in the course and makes them apply it.

1

10 points

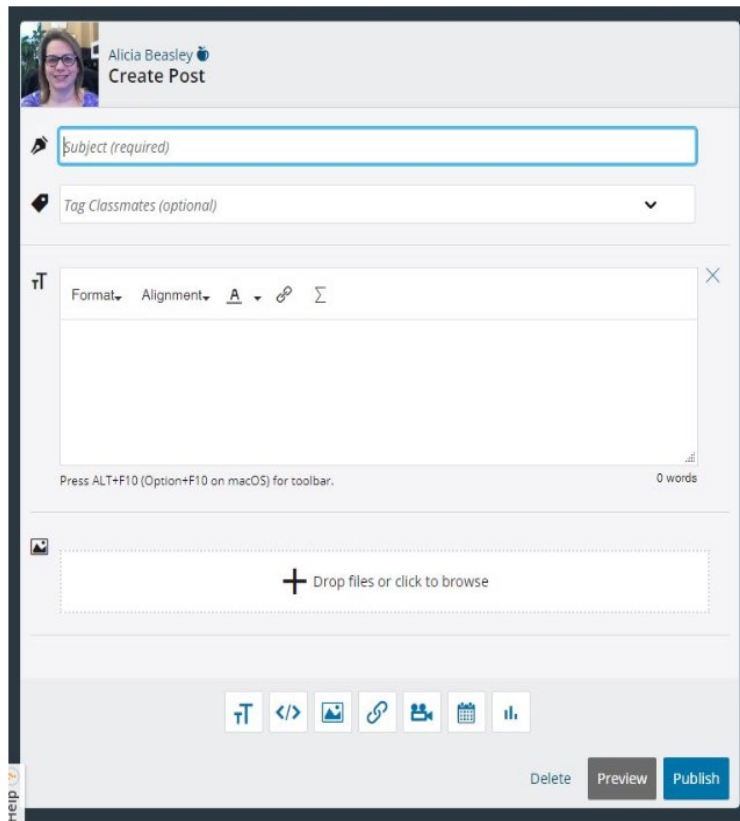


Match each part of SAMR to an example.

Substitution	_____	_____
Augmentation	_____	_____
Modification	_____	_____
Redefinition	_____	_____

3 3 points

Where would you click to create a poll?



4 3 points

Where would you click to enable Turnitin?

## Harmonize Module 1 Practice - 30 minutes

Authorize Canvas Extensions

⚠ Setting the due date or available until date helps to set clear expectations to students about when participation is required for this topic. Refer to this [guide](#) if you need help setting dates.

Instructions

Post Settings

Milestone Due Dates  
& Auto-Grading

Student Facilitators

Format Alignment A Link Σ

In your sandbox, create a Harmonize assignment. Include the following for full credit:

- directions
- a video
- external link
- milestone(s)
- autograde

Press ALT+F10 (Option+F10 on macOS) for toolbar.

+ Drop files or click to browse

Turnitin Code Image Link User Calendar List

5 2 points

I have two different sections of History that I combine into one section. I can change the setting in Harmonize so that only students from the same section can see posts and replies.

- True
- False

6 2 points

Harmonize insights allows instructors to monitor topic activity and warn about students with low participation the first week of class.

- True
- False

7 2 points

To encourage more participation in discussions, instructors can enable milestones.

- True
- False



**13** 40 points

Explain an activity that you use in your class. Then tell how you could use substitution, augmentation, modification, and redefinition for different parts of the activity.

12pt Paragraph

## End of Course Survey

**Question 1** 1 pts

Please describe your experience in this class. Your experience related to navigating the course site, reading/assessment work load, and anything else you feel to be of value is most appreciated.

Edit View Insert Format Tools Table

12pt Paragraph

**Question 2** 1 pts

Please share an example(s) of the content and/or assessments that you feel were of the most value to you. Why was this content of value to you, and has it impacted future instructional design strategies?

Edit View Insert Format Tools Table

12pt Paragraph

**Question 3** 1 pts

Please share an example(s) of the content and/or assessments that you feel were not of value to you. Why was this content not valuable? What suggestions do you have for related content that would help you improve your instructional design strategies?

Edit View Insert Format Tools Table

12pt Paragraph

Question 4

1 pts

Please include any additional thoughts, comments, or feedback you'd like to share with the instructor below.

Edit View Insert Format Tools Table

12pt Paragraph | **B** *I* U **A**   T<sup>2</sup>          

## Appendix B: Interview Protocol

1. Can you please share with me about your online learning experiences at Focus Community College?
2. Can you tell me about a creative use of social media in one of your online courses?
3. How does social media through WhatsApp, Harmonize, Facebook, etc. improve engagement in online courses?
4. How can online discussion boards be improved?
5. If you are using Harmonize in one of your courses, tell me what you like and dislike about it.
6. How important are creating relationships with your instructor and other peers in online courses?



## Appendix C: Questionnaire

**Demographic Questions**

1. Are you 18 or older?
2. Have you recently taken or are currently taking an online course?
3. Please list a course that you have taken that has used social media.

**Research Question #1 – What are students' perceptions about the importance of peer socialization in an online course?**

4. What is your opinion about the importance of student-to-student interaction in online courses?
5. Please explain how you have communicated with other students in online courses.
6. How do student-to-student interactions in an online course help you be more engaged?
7. How could an online student feel isolated?
8. Can you describe experiences from your online course(s) that made you feel engaged with others?

**Research Question #2 – How are students using social media in online courses?**

9. How have you used social media (WhatsApp, Zoom, Harmonize, GroupMe, Google Meet, texts, Facebook, etc.) in your online courses?
10. Describe how you have used Harmonize in an online course.
11. When taking an online course, explain how you form study groups with others in the course.
12. When using social media in online courses, are you forming peer groups on your own, or is the instructor forming the groups? Please explain.
13. How do you contact the instructor via social media (text, email, WhatsApp, Zoom, GroupMe)?
14. If you are forming peer groups in your online courses, please explain how you are using them throughout the course.

**Research Question #3 – What are students' perceptions about how social media improves engagement in online learning?**

15. How can a sense of community be developed in an online course?
16. How can student engagement in online courses be improved through social media?
17. How can the use of social media tools improve engagement with your instructor and peers?
18. How could adding a social media component (Flipgrid, Snapchat, Twitter, What's App, Zoom, GroupMe) to an online course increase socialization and engagement with the instructor and peers?
19. How could the integration of a social media component (Flipgrid, Snapchat, Twitter, WhatsApp, Zoom, GroupMe) in an online course help a student be more successful?