TRANSITIONING FROM FACE-TO-FACE INSTRUCTION TO ASYNCHRONOUS VS. SYNCHRONOUS PLATFORMS: LESSONS FROM COVID-19

Stephanie West, Grand Canyon University

ABSTRACT

This reflective paper examines the issues involved in moving from in-person college instruction to either an asynchronous or synchronous online course. The primary focus of this paper is the issues and challenges college systems across the United States faced when the COVID-19 caused nationwide school closures. The transition from traditional classroom settings to online environments was done quickly with the course content as the focus of these courses. As the course got underway, new issues arose, such as student engagement and the use of Learning Management Systems (LMS). Using Moore's Types of Interactions, this reflection will examine the effectiveness of the transition to interactions with the instructor, student to student, course content, and college's technical system. The school closures of this magnitude have created a need to re-evaluate school emergency closure plans, training on schoolwide LMS, student engagement, and student social and emotional intelligence.

Keywords: asynchronous, synchronous, online learning, student engagement, social and emotional intelligence, emergency school plans, Moore's Types of Interactions.

STATEMENT OF PURPOSE

In the Spring of 2020, the COVID-19 virus caused many colleges across the nation to close their doors to face-to-face instruction. This closure required college professors that I was affiliated with, to make a choice in their transition from face-to-face instruction into either an asynchronous or synchronous platform in a noticeably short amount of time.. Just as most K-12 schools around the country were required to stop in-person instruction and move to an online platform, so were colleges. School and college administrators, teachers, professors, students, along with parents and guardians scrambled to comply with state mandates. The question that remained was what the best online platform was for each grade level and subject matter. The purpose of this research was to find the most effective transition to an online platform, asynchronous or synchronous learning and instruction, as a college

adjunct professor teaching reading development to college freshman.

College administrators and leaders had to keep in mind many issues that arose out of the transition during the COVID-19 pandemic. Issues not only focused on how to deliver the instruction, but also how to ensure all students had what they needed to be successful in their academic day. There was the issue of accommodations for those with special needs and under college disability plans. Furthermore, what about the students that were already struggling readers and learners in physical classrooms and were moving online? There was also the issue of international students being able to keep their visas. Another issue was how to ensure students had the technology, such as computers and internet access needed to complete an online course. Still another issue was how to access the content and instruction. Perhaps the most vital question was whether students would

be successful in an online environment when they initially chose to be in a face-to-face course.

At the colleges I was teaching at, professors were given the task to transition to the online modalities and had the choice to conduct the online instruction in either an asynchronous or synchronous format. According to Dada, Alkali, and Oyewola (2019), asynchronous and synchronous learning are the preferred learning platforms within the online environment. Asynchronous learning is when students work completely on their own and on their own time (Dada et al., 2019). The professor produces a course guide, which lists the assignments along with their due dates. Course design is a key component in creating an online environment where students feel positive about attending an online course (Rios, Elliott, & Mandernach, 2018). Within the asynchronous platform, students work completely independently from the instructor by using e-books, discussion forms, and email. There is often little interaction with the professor within an asynchronous course.

On the other hand, synchronous learning entails live or real-time instruction or communication. One of the observed obstacles of an online course is the transactional distance between professors and students (Holbeck & Hartman, 2018). In the synchronous platform, professors conduct online course lectures at the time of the course's scheduled face-to-face time. These sessions are usually mandatory and when learners can interact with the instruction and the content. Then assignments are explained, and questions are answered. This type of atmosphere enables all members of the class to interact with one another, similar to the in-person sessions on campus. During the pandemic when in-person courses were moved online, all of this needed to be done in a way that the practical, manageable approaches and strategies could not only integrate the course content into the instruction but also keep in mind student engagement strategies as well (Rios et al., 2018).

This reflective paper is framed through the lens of Schon's (1983) reflective practitioner's thought process. As a reflective practitioner, I followed Schon's advice to think, act, and then reflect on what worked and what did not (Schon, 1983). As a result of this reflection, I came to see that asynchronous online learning does work for some students, but that the synchronous online learning is more effective for first-year and struggling college students. This paper examines my journey through the COVID-19 college closures and discovering what worked for my students in reading development courses.

STATEMENT OF THE PROBLEM

As the colleges I was teaching for closed their doors over a weekend in March of 2020, I was faced with how to transition my face-to-face reading development course to an online modality. I was given a choice of either an asynchronous or synchronous platform. As each professor at the colleges and universities were faced with this question of which platform to use, I also had to keep in mind what would work best for my student population. As a professor working within reading development courses, the question did not seem to have an answer. Along with working with the struggling readers and the international students in a face-to-face setting, I was also working in an asynchronous online environment in the teacher preparation program. I chose to conduct the reading courses in an asynchronous platform since it was the platform of instruction I was most comfortable and experienced with. The problem and the unknown were how would my struggling readers and international students do in an asynchronous learning modality when they were used to me, as their instructor, teaching them face-to-face.

Hew, Qiao, and Tang (2018) discovered the task of engaging students within an online course is often more challenging than a conventional on-campus setting. Online learners usually do not know their classmates, are not supervised directly by the instructor in a face-to-face setting, and are under no expectation to complete the course. The main purpose of this study was to discover whether transitioning to an asynchronous instead of a synchronous learning platform was the best method used for the quick transition from face-to-face instruction. Angera et al. (2018), found that online instructors can increase student engagement by closely communicating with students through strong discussions based on course-related topics. Since students have fewer opportunities to interact with classmates and instructors, online student engagement strategies need to be utilized in the online environment (Martin & Bolliger, 2018). Furthermore, online instructors should

include value-enriching educational experiences in the course content that is above and beyond the surface content.

According to Angera et al. (2018), even though student engagement ultimately rests in the students' lap, online faculty need to be designing purposeful course content, which will promote interactions, participation amongst the class members, and effective communication between students and professors. These types of interactions need to be examined within the setting of the online learning through tools such as Zoom meetings (whole group and one-on-one), recorded lectures within the course content, and online office hours where students can meet with the teacher through Zoom, Google Meets, or Google Hangouts. The amount of student interaction has been linked to improved online student educational experience (Bouhnik & Marcus, 2006). Therefore, it is important to examine how online instructors can increase their dialogue with their online students in a variety of forms, such as using Zoom and WebEx meetings during one-on-one instruction.

The problem that I was faced with, was that the online modality had to be chosen quickly, and then implemented within a few short weeks. I chose the asynchronous platform since I was comfortable with this type of online instruction. The students were anxious, and so was I, on how the class was going to look, so communication had to be built in where it was constant and fluid and so the asynchronous continued to feel as though that was the best route to take. In the end, I came to see that I had made the wrong choice and that asynchronous learning did not work for the first year, struggling readers.

ACTIVITY/PROJECT DESCRIPTION

In the spring of 2020, almost all U.S. colleges and universities were closed due to the COVID-19 pandemic. As a college adjunct professor, I was asked to transition a face-to-face course to an online course. As each of us scrambled to transition our courses, the greatest concern was what would be the most successful way to accomplish this. Since I was already an online instructor for a four-year university, this task did not seem as daunting as it may have been for others that had not had the experience within an online platform. I made the decision to move my face-to-face reading development course over to an asynchronous platform. The Learning Management System (LMS) was already in place, so I had the task of designing an asynchronous online course within the LMS, along with ensuring student success.

I set this course up by using my course content that I had already planned on using to finish out the spring semester. The course was set up with PowerPoint presentations, assignments, discussion forums, and reflection writing, along with all text needed to complete the assignments. I had been using a reading textbook, but since it was not available to the students as an e-book, I found articles that I could use for these assignments. I tried to build in a teacher presence online, which research has shown as a key component to student success (Martin, Wang, & Sadaf, 2018). With this in mind, I recorded my class lectures and posted them within the LMS so that the students would have direct instruction to refer to.

By the time courses resumed in the online format, my course was up and running successfully. Students were logging in, and not many questions arose the first week. The course was originally slated for eight weeks, but with the closure, the course now only had six weeks left. By the end of the second week, 8 out of the 37 students had stopped participating and five students dropped the course. Students were struggling with the assignments, and not many of the students were viewing the recorded lectures. Only half of the students would check-in to the once-a-week Q & A discussions, and none of the students were signing up for one-on-one appointments for help. At the end of the sixth week, only 20 out of the original 37 passed the course.

The issue that I did not evaluate before moving to the asynchronous platform was the academic level of the students. 20 out of the 37 learners were international students, in the US on student visas, still learning the English language. The other 17 learners were struggling readers, four of which were on college accommodation plans for disabilities. The students that did pass had either given up or just stopped logging into the course. Other than the assignments, there was no accountability built into the course to make sure the students watched the recorded lectures or participated in the question-and-answer sessions.

While I was struggling with the spring course,

I was assigned a summer reading development course with 15 students, and it too needed to be conducted online. For the summer course, I decided to switch over from an asynchronous to the synchronous platform. According to Zainuddin, Hermawan, and Mahardiko (2018), an online course professor needs to be able to instruct in a way that allows the students to be motivated, self-directed, and interact with their learning. However, Angera et al. (2018) found that online instructors can increase student engagement by closely communicating with students through strong discussions based on course-related topics. Besides, synchronous online instructors can include value-enriching educational experiences into the course content that is above and beyond the surface of the content. After reviewing the six-week spring course along with the student data collected, the decision to move to a synchronous course made sense.

The same steps were followed as before, but this time I met with the students twice a week online through WebEx, a system that allows for video/voice conferencing. The recorded class lectures were removed from the course content, and the WebEx meetings were conducted instead. At the same time, during the class lectures, I reminded students to sign-up for one-on-one video conferencing sessions for extra help, which many of the students took the time to do. In addition, student questions were answered during online class lectures. I also set up a "Questions for Dr. West" in the discussion forums so the students could ask me questions. I made sure that each student had my email so that they could contact me when needed. Connections were made between instructor and learners, along with learners to the course content through technology-based tools. By the end of the five-week course, all 15 students passed the course, and the attendance at the twice-a-week meeting was 100%.

Looking back on both courses, I could see that the main issue that prevailed was the interaction with me as their instructor. According to Bouhnik and Marcus (2006), the more students interact with the instructor, the more there is improved student achievement and success. In the first course, the students were mainly on their own to figure out the content and assignments, only interacting with me when they felt like attending the question-and-answer sessions. When I compared the data of student success to the summer course where I had more interaction with the students, I could see that this interaction was what made all the difference to the students and their academic achievement. By including the online class lectures through the synchronous platform, the level of student-to-instructor interaction increased, which enhanced student motivation within the learning process, reduced the isolation factor, and improved student performance online (Martin & Bolliger, 2018).

REASONS FOR THE PROBLEM

The closing of college campuses across the nation due to the COVID-19 virus could not have been foreseen. The nation had been hearing about the Corona Virus in China for months, but when it hit Italy with devastating deaths, educational institutions had no idea how fast the closures would come down. As schools started to close their doors, educators at all levels had to develop a new way to instruct millions of students in as quick as a week. As an adjunct instructor, I was teaching two sections of in-person reading development courses. The students in these sections were struggling readers and needed face-to-face instruction, but the problem remained, how to deliver the instruction where the students would be most successful.

The first issue that arose, was how to transform the existing face-to-face course into an online course. As an online adjunct professor of many years at a four-year university with online courses, my first reaction was to move over to an asynchronous platform. This platform was comfortable for me, and I knew how to set it up an asynchronous online classroom. During this quick transition, the students and their current academical level were not considered. I had three weeks to transform my in-person instruction over to an online platform, so my main objective was to ensure the course materials were successfully transferred over to the LMS. PowerPoints and class lecture notes were revised, along with assignment due dates. Exams had to be realigned to be taken fully online along with all course readings, which included textbook passages, articles, informational text, and so much more. Everything had to be digitally available to the students.

The next issue that arose was getting the

students engaged into the course. Classes resumed on April 6, 2020, with 37 enrolled students between the two sections. I held the first day class meeting through WebEx, going over the LMS and where the students could find all the course materials and class lectures, which had been recorded and uploaded. I then scheduled a once-a-week check-in with the students where they were able to meet with me for question-and-answer sessions. These were posted as mandatory with participation points awarded if they showed up on the WebEx videoconference. Only about 20% of the students showed up for each weekly meeting. By the end of the second week, 30% of the students had stopped showing up in the LMS and stopped turning in assignments. The course lost three weeks of instructional time, so by the end of the eighth week going into finals week, the 30% still did not get back into the course. Only about 5% of the class earned an A or B, whereas most students only earned a C.

The final reason for this reflection of the Spring 2020 course, was how to ensure student success within the course. Before the summer session began at the end of May, I reviewed the spring semester student data along with the course materials. Along with the student success rates and attendance within the course. During the spring semester, student achievement and success was always at the forefront of my mind, but it was such a quick transition in the spring, that I was overwhelmed with the course content. This fact changed because I had more time as I started to look forward toward the summer courses that would begin at the end of May 2020

Upon my review of the spring student data, I knew the summer course would need to be changed from an asynchronous course to a synchronous course. From the start of the summer semester, I held mandatory class lectures twice a week at the same time students would have met with me if they were in my face-to-face class lectures. The recorded class lectures from the spring semester, were taken down, and only the PowerPoint presentations and class notes were posted. Emails were sent out to students before the course start date explaining how the course would be run along with the expectations within these class lectures. Attendance was taken at the online lectures , which were set up through WebEx and recorded

so that students could review the recordings if they had questions. Along with the twice-a-week mandatory class lectures, I held once-a-week question-and-answer sessions and set up any one-on-one student sessions for those students that needed the extra help. There were 15 students enrolled in the Summer Reading Development course, and all 15 students attended the mandatory meetings and passed the course. Eight out of the fifteen students received an A, six received a B, and one student passed with a C.

EVALUATION OF REASONS FOR THE PROBLEM

As face-to-face professors in higher education, the closure of schools due to COVID-19 was a shock to what we were used to doing. Changes to the way we conducted college courses were coming in at such a rapid pace, that many of us felt blindsided. Even though more and more college courses were being moved to an online and hybrid environment, those of us teaching in-person courses were not prepared for the issue of transitioning to the online format. Students that were taking face-to-face courses had originally chosen to take those courses and not the online courses. When the closure came down on professors' shoulders, there was a huge scramble.

The reasons for the issue of how to transition face-to-face instruction to an asynchronous or synchronous platform was far-reaching. The first of those reasons was that it had to be done. The safety of the students, professors, staff, and leadership were at risk. No one knew the ramifications of the virus and where it was headed. The nation had been hearing about the Coronavirus originating in China since the winter of 2019, but it had always seemed so far away from the people in Arizona. According to Lauer et al. (2020), scientists were unsure how the disease was transmitted along with how long the incubation period was. In most cases, they saw an incubation period between 2 and 11 days, but there were so many unknowns from January to February 2020. Lauer et al. (2020) used the novel strain of the coronavirus within the severe acute respiratory syndrome (SARS) and the Middle East respiratory syndrome (MERS) data to form baselines of the spread of the virus, which is now being called the Coronavirus or COVID-19. The fundamental unknowns were how the virus transmitted, what the incubation period

of the virus was, and what age group was the most likely to contract COVID-19. With the unknowns came the decisions on how to properly handle the spread of the virus, which resulted in wide-spread closures and lockdowns of school districts, colleges, universities, places of worship, physical fitness gyms, pools, businesses, and restaurants. Everyone across the US was closing their doors and staying home to a new normal no one had seen before. As a result, educational institutions were changing how they taught students of all ages. Educational instruction needed to continue in each classroom, but in a new format.

As I reviewed the data and the reasons behind this reflective paper, I chose to examine these issues through the lenses of Moore's Three Types of Interaction (1992). Moore (1992) discovered three categories that are essential within the element of interactions: (a) interaction with the content; (b) interaction with the instructor; and (c) interaction with the students. When considering an online course where the instruction is delivered in a context that is not face-to-face, Markwood and Johnstone (1994) suggested that a fourth category needed to be added. This fourth category is that of interaction with the system or interface, which plays an important role in the learning process, especially in the online environment (Markwood & Johnstone, 1994). This reflective paper examines the integral role of interactions between students, teachers, and content within formal education, along with understanding the role of technology within an online course, and how these four components of interactions and their influence on

Image 1. Moore's (1982) Model of Interaction.
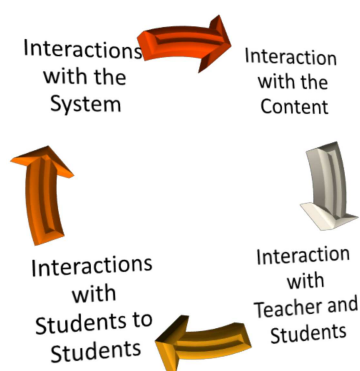
an online student's level of academic success.

When looking at Moore's Four Types of Interactions (1989), I knew that as an instructor I needed to ensure students still had access to interactions with myself as the instructor, but they also needed interactions with their fellow students, with the content, and with the system. Learning Management Systems (LMS) were put into place where the instruction could be delivered through a platform that housed all the course content and materials. Even though most colleges and universities had the LMS in place, not all the professors were comfortable or proficient at using these types of platforms. Cabero-Almenara, Arancibia, and Del Prete (2019) discovered that 75% of professors use the LMS to upload the course syllabus, publish course materials, and request and collect assignments. As the pandemic transition began, instructors were asked to move everything they would be doing to the LMS, including class lectures and class notes, and then conduct their online class meetings through the LMS. I had used the current LMS for several years, and so the transition to this format was comfortable and doable.

Additionally, the decision needed to be made by each instructor whether to move to an asynchronous or synchronous platform. Many professors had little or no understanding of these two platforms, so being instructed to go fully online, most of the instructors chose to move to an asynchronous format. Martin, Budhrani, Kumar, and Ritzhaupt (2019) discovered that for professors to adequately transition from the traditional setting of in-person instruction to the online environment, they needed to be fully trained in all aspects online learning. Martin et al. (2019) also found that online instructors assume five roles within the online course: facilitator, course designer, content manager, subject matter expert, and mentor. Instructors are used to most of these roles, but they may not feel as comfortable away from their students in these specific roles. Since the closure was so sudden and not much time was given, the stress of the transition was immense for many college professors, and many of these roles and considerations were hard to overcome.

Finally, student success needed to be at the forefront of the transition. As college professors rushed to transition their in-person courses to an online format, the students' success may not have been properly placed at the forefront. When

instructing students in a face-to-face setting, the course is run as a teacher-directed course. Cabero-Almenara et al. (2019) said instructors teaching an online course need to re-think their instructional approach and make the shift from teacher-centered instruction to student-centered instruction. This type of instruction includes discussions, open forums, videoconferencing, one-on-one discussions, and tutoring, along with the instructor being flexible within the course content. As the pandemic transition happened, many of the student needs were not considered, which led to the students dropping the course or failing to show up.

DECISION

As the fall of 2020 semester approached, the decision was made to keep the college campuses closed to all courses, due to the rising numbers in COVID-19 cases, and continue to conduct courses online. According to Bouhnik and Marcus (2006), the most important component of an online course is the interactions that take place. Arizona had seen a spike in COVID-19 cases, thus professors at my college were all scheduled to conduct the fall courses online. The difference between what happened five months prior was that we were all a little more prepared for the switch. The administrative teams along with the college professors, had done research and conducted similar studies on the best way to run these online courses. Since my summer reading course went so well, I decided to take the five-week summer course and align it to the 16-week fall semester reading development course.

Moreover, Bouhnik, and Marcus (2006) discovered that the more students are interacting within the online course, the higher the student success. Online learning may be appealing to students, but for those students that struggle in reading, the design of the course must ensure student engagement to meet the needs of struggling readers. According to Bolliger and Martin (2018), student engagement has a positive relationship with student course fulfillment, dedication, and academic achievement. Keeping in mind Moore's (1992) three types of interaction and Markwood and Johnstone's (1994) interaction with the system, I aligned my course content to the four different areas of interactions with the content, teacher, students, and system.

Interaction with the content. Zainuddin et al. (2018) said a well-designed online course needs to establish a strong interaction between the students and the course content. Bouhnik and Marcus (2006) discovered interaction with the content occurs when the students can acquire new knowledge by gathering new information and combining it with what the student already knows. In my case, the fall 2020 course content was fully reviewed along with the student data from the summer reading development course, which included student engagement data with the content. The course content was then aligned to meet the 16-week course length requirements. Zainuddin et al. (2018) said that for content to be most effective in the online environment, the course materials should be designed so that students can engage with the content interactively. For my fall 2020 course, I decided to add in an academic vocabulary development module, interactive practices that could be completed online, online quizzes, instructional videos, additional course readings, and a mid-term assignment. The class lectures would be held once a week, each Monday throughout the semester. Since the once-a-week question-and-answer sessions were not well attended, these were deleted from the course schedule, but I still offered one-on-one appointments for any student that felt as though they needed extra help.

Interaction with the teacher. Positive interaction between the online learner and the professor occurs when the student is influenced by the professor (Moore, 1992). Within this concept, Moore includes that the professor is especially important in responding to the students' application of the new knowledge. The role and expertise of the professor in making sure the students' learning process is efficient becomes extremely important. Bouhnik and Marcus (2006) recommended that online professors fill three roles: cognitive, affective, and presence. The cognitive role is to ensure the instruction shifts to a deeper complexity using online tools, such as online readings, videos, videoconferencing, and other online tools. The roles of affective and presence entail the online professor has a strong online presence and requires greater attention to the details, along with additional student monitoring and support. With these components in mind, I scheduled class lectures every Monday

during the time slot the course was scheduled for by the college. Each class lecture would be 75 minutes in length and would include reading instruction, discussions, interactive practices of reading skills, note-taking, videos, and any additional activities to ensure the instruction was full and productive for student learning. I also included in my syllabus, a way to communicate with me and the promise that I would respond within 24 hours to student questions and inquiries. Student appointments with me through videoconferencing was encouraged so that the students felt the support that they needed from me.

Interaction with the students. In a traditional in-person classroom, students can discuss questions, work in collaborative groups, share ideas, and even disagree with others. According to Bouhnik and Marcus (2006), students who work together in small and large groups provide social and emotional support to those around them. Zainuddin et al. (2018) discovered student-to-student interactions support the learning of new information with their peers, and assist those around them to understand the content of a course. Research has shown that when there is a strong student-to-student interactions within the online classroom, students are more satisfied with taking an online course (Bolliger & Martin, 2018). With this research in mind, students were assigned weekly discussion forums that they would participate in. The students were required to post an original response to a prompt and then respond to a minimum of two classmates each week. In addition, during class lectures, students discussed an array of topics related to the course content. According to Bolliger and Martin (2018), learners are more likely to engage in the course content when they feel as though they are a part of the learning community.

Interaction with the system. This type of interaction is described as the interaction between the students and the technology used within the course (Zainuddin et al., 2018). Within an online course, the benefits of the online tools can be lost if the complexity of the tools are not explained, appreciated, understood, and supported by both learner and instructor. According to Bouhnik and Marcus (2006), if technology and technical problems are not dealt with promptly, the students' satisfaction in the course and learning will

diminish. Even though most of the students within the reading courses were millennials, during the first class lecture, their comfort level with the college's LMS needed to be evaluated, and they needed to be taught skills to be successful with the LMS. Along with this, the videoconferencing system, WebEx, needed to be fully explained to the students. I therefore designed the first-class lecture around the technical needs of the students and the course content. This enabled the students to see firsthand where the course materials were housed and how to navigate the LMS classroom. Furthermore, my response time of 24 hours for emails and questions was reiterated with students and followed through by me.

Online and hybrid instruction is on the rise within higher education. According to Malik and Fatima (2017), online learning has become the focus of educational discussions and research within higher education. Colleges and universities have been evaluating these online resources to give as educational opportunities' and accessibility to the maximum number of students at any time and in any location. These learning resources include videoconferencing, social media sites, YouTube, and so many more that are readily available to those who do not have access to traditional educational platforms (Malik & Fatima, 2017). The significance of this proved to be true during the COVID-19 pandemic as learning needed to be accessible around the clock, with timely delivery.

In recent years, there has been a persistent push by educational leaders to increase student engagement within the physical college classroom, because studies show it leads to raised achievement levels. This same concept needs to be reviewed and implemented within the online environment as well. Hew et al. (2018) discovered when comparing a conventional on-campus setting, the task of engaging students within an online course is often more challenging. Instructors needed to change their view of themselves to be less of a "teacher," and more of a facilitator that guides the learning process through different modalities (Martin et al., 2018).

As online college courses become more the norm in academia, we need to make sure we are keeping the needs and achievement in the forefront. Each course needs to be evaluated fully before implementing either an asynchronous or synchronous course. In the end, I learned that

students in their first year of college, along with those that struggled academically, did not do well with the online platforms, thus, conducting these types of basic, ground-level courses need to be either a synchronous, hybrid, or face-to-face, if possible. My students in my 200-level and above courses who had been to college previously, did do better within the asynchronous classrooms.

REFLECTIVE CRITIQUE

Throughout this project, along with the five-month-plus isolation due to the COVID-19 pandemic, I have come to realize that the technology we use and take for granted, needs to be more fully utilized in the college classrooms. Technology continues to evolve within the educational system, but we are not as focused on technology as maybe we should be. The COVID-19 pandemic was an event no one could have foreseen happening, but now that it has, school leaders need to implement new protocols within the system to ensure student achievement. Instructors need to plan for the new normal by ensuring they are trained fully in the LMS along with how to deliver content remotely. This new way of teaching needs to ensure student engagement and understanding of the course materials in a way that leads the students to being successful.

Skillful professors and instructors, for the most part, know how to raise student engagement to ensure student success. We are also good at creating and delivering curriculum within the face-to-face classroom and interacting with our students through discussions and collaborative groupings. As we move forward, we need to start to consider how to connect to students online, along with how to interact with students as we do online in a similar fashion as our face-to-face interactions. We need to keep in mind the social, emotional intelligence of our students so that student needs are being met in all aspects of learning. Student engagement is only the first step in this direction; by meeting the students' social and emotional needs, we will raise student engagement and student success.

Recommendations: The campus closures of 2020 taught us many things. Moving forward in the new normal as set forth by the pandemic, the following research about transitioning a face-to-face class into an asynchronous or synchronous course should include the following:

Emergency school closure plans. The education field is good at planning for fires through fire drills, intruders, snow days, and storms, but we have never had to consider the closure of schools due to a pandemic. Navarro, Kohl, Cetron, and Markel (2016) reviewed the issues of the H1N1 virus of 2009 and the possibility of closing schools. Their research examined the historical controversies of the spread of the H1N1 flu virus and how closing the schools may reduce the spread of the virus. According to Brooks et al. (2020), closing schools should not be taken lightly, because not only is the health of the children at risk, but so is the mental health and well-being of the school-aged student. Kaden's (2020) research showed the importance of having a plan in place so that when schools do close, the transition to at-home instruction or virtual instruction is seamless and smooth. As many educators discovered in the spring of 2020, we were unprepared to move from in-person instruction to virtual instruction. It is highly recommended that all schools, Pre-K through 20 and beyond, have an emergency closure plan in place so that the instruction and student needs are met seamlessly.

Learning Management Systems (LMS). The first Learning Management Systems (LMS) were introduced in the late 1990s. These systems were designed to house academic information, contact information, and a way for parents and students alike to track academic progress. These LMS include programs such as Canvas, Blackboard, School-Master, and many more. Ouadoud, Nejjari, Chkouri, and El-Kadiri (2017) stated an effective LMS will open lines of communication between instructors and learners. These programs should have tools embedded within the program that allow students to have full access to the instruction and course resources as seen in Image 2 below.

The benefits of a well-designed LMS is the knowledge and interactivity of learners. According to Ouadoud et al. (2017), the main pedagogical functions within an effective LMS should include the ability to present information, such as virtual class lectures, videos, PowerPoint Presentations, and space where teachers and learners can interact. The LMS should also provide assignments and exercises, a space to explore the instruction and course materials, and a space to interact with the classmates. Rhode, Richter, Gowen, Miller, and Wills (2017) discovered that an effective LMS has become a necessary tool for higher education
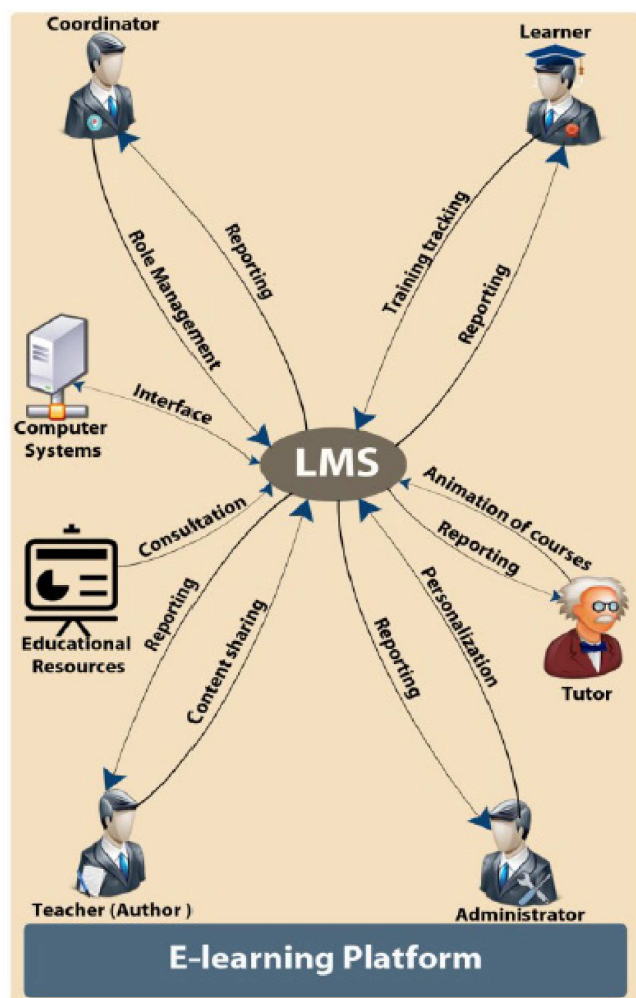
Cited from Ouadoud, M., Nejjari, A., Chkouri, M. Y., & El-Kadiri, K. E. (2017, October). Learning management system and the underlying learning theories. In Proceedings of the Mediterranean Symposium on Smart City Applications (pp. 732-744). Springer, Cham.

institutions along with being a driving force in virtual learning. The recommendation for college and university leaders would be to discover the comfort level of professors within the LMS program they are using. Leadership needs to ensure that professors and staff are fully trained in these LMS programs, so the transition from in-person instruction to virtual instruction is seamless during times of emergency school closures.

Online student engagement strategies. According to Bolliger and Martin (2018), professor-student interactions are essential in student engagement. Improving student-to-teacher relationships is an important, positive, and long-lasting implications on students' long-term academic and social development. Building student-teacher relationships will not produce gains in achievement

by itself, but those students who feel connected to their teachers through positive and supportive relationships will attain higher levels of achievement than students who do not feel connected to their instructors (Bolliger & Martin, 2018). Positive teacher-student relationships draw students into the process of learning, which in turn, promotes their desire to learn and to grow academically.

There has been an overabundance of research conducted on the importance of building positive academic relationships between teachers and students. These connections build in mutual respect between student and teacher, which in turn, builds in engagement within the content. According to Angera et al. (2018), instructors can raise the level of student engagement through interacting with their students through the course content, along with adding in value-enriching experiences into their instruction. Student engagement ultimately rests in the student's hands, but as online instructors, we need to design online courses that will promote interaction, participation, and communication within the technology-based learning environments. However, most online students do not have any face-to-face contact with their instructors, are not closely supervised by a teacher, and/or do not know their peers in the courses (Hew et al., 2018). The amount of student interaction has been linked to improved online student educational experience (Bouhnik & Marcus, 2006). Therefore, the recommendation is to examine how online instructors can increase their use of online student engagement strategies to better ensure a higher level of student success and achievement in the virtual classroom.

Online social and emotional intelligence strategies. An aspect of the school closures that many of us did not think about was the social and emotional needs of our students. A college professor in an in-person classroom can gauge the engagement and social issues of a student, but when these courses shifted to the online format, many of us felt as though we had lost touch with the students. Social and emotional intelligence has been described as the ability to be aware of our own and others' feelings, along with being able to use this knowledge in knowing how to deal with the situations we are faced with. Engin (2017) described learners' social and emotional intelligence as being ready mentally and physically for online

experiences. This readiness or non-readiness could influence the student's abilities to be successful in the virtual classroom. Koc (2019) discovered that students who were low in their social and emotional intelligence were more likely to not be self-directed within the virtual classroom. The recommendation would be for college professors need to be trained fully in social and emotional intelligence strategies for the online classes so that when students are asked to move to the virtual classrooms, the instructors will be better able to assist students in doing so. Knowing how to implement these types of strategies will better ensure student achievement and success.

CONCLUSION

Invariably, emergency school closures will happen again as we move forward. As college professors, and even the lower levels of educators, we need to be able to ensure that our students are still receiving the best possible education. According to Kaden (2020), the COVID-19 pandemic has caused educators across the nation to evaluate how to best educate our students in a time of unprecedented disruption to society and education. As educators, we still need to find ways to connect with our students and ensure that they are engaged in the course materials and instruction. We need to ensure our student needs, social and emotional, are being met through research-based strategies so that their education is not disrupted in the process. Educational institutions need to ensure the faculty and staff are well-trained in all components of the virtual world, including the school's LMS. The world of education has changed, and educators need to spread their wings and find ways to ensure that emergency school closure plans are in place, along with being able to move to the virtual classroom at a moment's notice.

.

References

Angera, J., Arnekrans, A., Deschaine, M. E., Rouech, K., VanDeusen, B., & Otteman, T. (2018). Launching an interdisciplinary network for understanding student engagement (INFUSE). Student Engagement in Higher Education Journal, 2(1), 93-98.

Bolliger, D. U., & Martin, F. (2018). Instructor and student perceptions of online student engagement strategies. Distance Education, 39(4), 568-583.

Bouhnik, D., & Marcus, T. (2006). Interaction in distance-learning courses. Journal of the American Society for Information Science and Technology, 57(3), 299-305

Brooks, S. K., Smith, L. E., Webster, R. K., Weston, D., Woodland, L., Hall, I., & Rubin, G. J. (2020). The impact of unplanned school closure on children's social contact: Rapid evidence review. Eurosurveillance, 25(13), 2000188.

Cabero-Almenara, J., Arancibia, M., & Del Prete, A. (2019). Technical and didactic knowledge of the Moodle LMS in higher education. Beyond functional use. Journal of New Approaches in Educational Research, 8(1), 25-33.

Dada, E. G., Alkali, A. H., & Oyewola, D. O. (2019). An investigation into the effectiveness of asynchronous and synchronous e-learning mode on students' academic performance in national open university. International Journal of Modern Education & Computer Science, 11(5).

Engin, M. (2017). Analysis of students' online learning readiness based on their emotional intelligence level. Universal Journal of Educational Research, 5(n12A), 32-40.

Hew, K. F., Qiao, C., & Tang, Y. (2018). Understanding student engagement in large-scale open online courses: A machine learning facilitated analysis of student's reflections in 18 highly rated MOOCs. International Review of Research in Open and Distributed Learning, 19(3).

Holbeck, R., & Hartman, J. (2018). Efficient strategies for maximizing online student satisfaction: Applying technologies to increase cognitive presence, social presence, and teaching presence. Journal of Educators Online, 15(3), n3.

Kaden, U. (2020). COVID-19 school closure-related changes to the professional life of a K-12 teacher. Education Sciences, 10(6), 165.

Lauer, S. A., Grantz, K. H., Bi, Q., Jones, F. K., Zheng, Q., Meredith, H. R., ... & Lessler, J. (2020). The incubation period of coronavirus disease 2019 (COVID-19) from publicly reported confirmed cases: Estimation and application. Annals of internal medicine, 172(9), 577-582.

Malik, M., & Fatima, G. (2017). E-learning: students' perspectives about asynchronous and synchronous resources at higher education level. Bulletin of Education and Research, 39(2), 183-195.

Markwood, R., & Johnstone, S. M. (Eds.). (1994). New pathways to a degree: Technology opens the college: Final evaluation to the Annenberg/CPB Projects. Western Interstate Commission for Higher Education.

Martin, F., & Bolliger, D. U. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. Online Learning, 22(1), 205-222.

Martin, F., Budhrani, K., Kumar, S., & Ritzhaupt, A. (2019). Award-winning faculty online teaching practices: Roles and competencies. Online Learning, 23(1), 184-205.

Martin, F., Wang, C., & Sadaf, A. (2018). Student perception of helpfulness of facilitation strategies that enhance instructor presence, connectedness, engagement, and learning in online courses. The Internet and Higher Education, 37, 52-65.

Moore, M. (1992). Three types of interaction. American Journal of Distance Education, 3(2), 1-6.

Navarro, J. A., Kohl, K. S., Cetron, M. S., & Markel, H. (2016). A tale of many cities: A contemporary historical study of the implementation of school closures during the 2009 pA (H1N1) influenza pandemic. Journal of Health Politics, Policy, and Law, 41(3), 393-421.

Ouadoud, M., Nejjari, A., Chkouri, M. Y., & El-Kadiri, K. E. (2017, October). Learning management system and the underlying learning theories. In Proceedings of the Mediterranean Symposium on Smart City Applications (pp. 732-744). Springer, Cham.

Rhode, J., Richter, S., Gowen, P., Miller, T., & Wills, C. (2017). Understanding faculty use of the learning management system. Online Learning, 21(3), 68-86.

Rios, T., Elliott, M., & Mandernach, B. J. (2018). Efficient instructional strategies for maximizing online student satisfaction. Journal of Educators Online, 15(3), n3.

Schon, D. A. (1983). The reflective practitioner: How professionals think in action. Basic Books.

Zainuddin, Z., Hermawan, H. D., & Mahardiko, S. (2018). Implementing Moore's Model of Interaction in flipped-class instruction. In 2018 Electrical Power, Electronics, Communications, Controls, and Informatics Seminar (EECCIS) (pp. 90-95). IEEE.