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A Case Study of Technology Integration at a Community College During a Disruption of Learning Due to a Global Pandemic

by

Cara Suzanne Barth-Fagan January 26, 2024

A Dissertation submitted to the Education Faculty of Lindenwood University in partial fulfillment of the requirements for the degree of

Doctor of Education

School of Education

A Case Study of Technology Integration at a Community College During a Disruption of Learning

Due to a Global Pandemic

by

Cara Suzanne Barth-Fagan

This Dissertation has been approved as partial fulfillment of the requirements for the degree of

Doctor of Education

Lindenwood University, School of Education

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Abstract

This paper discusses the challenges and opportunities of remote learning during the COVID-19 pandemic. It highlights the financial stress, digital divide, and inequalities in educational opportunities that arose during this period. However, it also acknowledges the advantages of remote learning, such as flexible scheduling, individualized learning, and global collaboration. The study design used was qualitative, aiming to identify the perceived levels of student engagement and support between faculty and students, and the perceived levels of success of completing a blended learning course in an online, hybrid, or hyflex format during a global pandemic. The paper concludes by emphasizing the importance of incorporating effective strategies to create a more flexible and inclusive education system that combines the benefits of traditional classroom learning with the advancements made during this period of remote education.

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Chapter One: Introduction

The COVID-19 epidemic created changes in a number of areas of the world, including the educational system. Universities and schools had to transition from traditional face-to-face instruction to online learning quickly. This abrupt transition led to various challenges, including technical difficulties, a lack of access to resources, and social isolation. One of the critical factors that the transition impacted was student self-efficacy, the belief in one's ability to complete a task or achieve a goal. This study aimed to investigate the impact of COVID-19 on student and instructor self-efficacy in online classes. The shift to online instruction brought forth by COVID-19 presented considerable difficulties for student self-efficacy. The requirement for in-person engagement with peers and teachers and the necessity to adjust to new learning styles and online platforms were all challenges for students.

College students register for upcoming semester classes once a semester. They do so based on the course content, instructor, mode of delivery, and time of day. Although students had the freedom to set their own schedules, the COVID-19 Pandemic demonstrated an unanticipated chain of events that changed the way students received instruction for the latter part of the spring 2020 semester. The delivery of curriculum changed from on-site, seated instruction to online and hybrid learning, which presented challenges for both instructors and students. No one anticipated the effects the worldwide epidemic created. Joosten et al. (2021) reported:

The promise has never been more realized than in the world's response to a global pandemic and the urgency for academic continuity through emergency remote instruction

that required online learning technologies to mix or replace students' onsite experiences with a new online experience (p. 5).

Instructors rushed to rethink how they taught students who were directed to stay at home. Students were required to have access to technology and the internet, in order to successfully complete online assignments. Despite their struggles, students and instructors persisted for the rest of the spring 2020 semester. Joosten et al. (2021) declared, "Educators persevered through a global pandemic, a collective trauma of our lives, learning more than ever the weaknesses of technology, the strengths of togetherness, and the need for thoughtful and inclusive strategic planning" (p. 5). Although it appeared difficult for instructors to fully carry out instruction, they used a remote learning environment to maintain continuity through the remainder of the 2020 spring semester. Blended learning, a teaching technique already used in the world of education, was resurrected. Instruction included online and face-to-face components; therefore, the blended learning model helped educational instruction during the COVID-19 pandemic.

A global public health crisis caused by the air-borne COVID-19 virus nearly shut down the world economy system (Joosten et al., 2021). Hughes reported earthquakes and polar vortexes birthed the continuation of instruction through online methods (2020). Ozadowicz (2020) further explained:

An unprecedented challenge was the COVID-19 pandemic threat that broke out in March 2020 and radically changed in practice all aspects and rules of daily life. In many countries across the world, governments have needed to subject people to

prolonged periods of lockdown, ordering them to stay at home with strongly limited personal contacts outside. (p. 2)

All non-essential operations, including colleges and universities, were shut down, thereby making it difficult for teachers to provide students with a continuous curriculum. As a result, instruction shifted online or to a remote learning setting. The coronavirus epidemic was requiring worldwide testing with remote learning (Govindarajan & Srivastava, 2020). The delivery and experience of education changed due to remote learning during COVID-19. While the abrupt switch to online platforms came with many difficulties, it also demonstrated how adaptable and resilient students, instructors, and educational institutions are. Institutions of higher learning were vital in the fight against COVID. Colleges were keenly aware of their obligation to work proactively to continue education. Additionally, Engzell et al. (2020) reported educational institutions should act against the COVID-19 pandemic. Nearly all students worldwide were affected by the decision by governments to stop face-to-face instruction in schools due to the virus' spread, which resulted in the biggest disruption in educational history (Engzell et al., 2020). The new instructional methods led to isolation and remote work environments (Wang et al., 2020).

At the onset of the pandemic, universities and schools were forced to close for weeks, with an unknown plan for a re-open date (Ozadowicz, 2020). Students did not have an option to return to campus but were asked to finish their semester through online blended learning instruction. Institutions and colleges faced many challenges, such as keeping the health and safety of students at the forefront while they attempted to offer seamless instruction. Consequently, the unknown future of the student mental health and

well-being would be a side effect. The assistance teachers required to move to new teaching styles, such as blended learning, left them in limbo and, for some, at a loss for how to proceed. Additionally, the shift to online and blended learning instruction brought forth by COVID-19 presented considerable difficulties regarding student self-efficacy. The requirement for in-person engagement with peers and teachers and the necessity to adjust to new learning styles and online platforms challenged students. According to Glynn et al. (2009), a crucial factor in a student's self-efficacy in online classes is the support of the instructor. Students' levels of self-efficacy increased when instructors gave regular feedback, prompt responses, and clear directions.

The COVID-19 outbreak had a significant impact on education and was cited by students as a cause of learning disruptions and a drop in student participation.

Nevertheless, there were several instructional methods applied to encourage student participation despite the difficulties. Valentina (2020) reported, "The Blended Learning method is a learning method that combines face-to-face lectures with learning using communication and information technology. This combination is intended to give students the freedom to study independently, free to use their real abilities" (p. 396).

Blended learning was not a new concept to education; in fact, it was established in the late 1840s, and was coined "distance learning" by Sir Issac Pitman. Letters were mailed back and forth between instructors and students, and feedback and assignments were a major component (Pappas, 2015). Blended learning earned its seat in the early 2000s as introduced by The Chronicle of Higher Education (2002) "where traditional face-to-face classroom engagements are mixed with e-learning activities" (p. 33).

According to the American Society for Training and Development, one of the top 10

developments to hit the knowledge delivery market in 2003 was blended learning (Rooney, 2003). Joosten et al. (2021) emphasized, "Blended Learning is our future" (as cited in Joosten et al., 2013, p. 96). Blended learning, online learning offered in synchronous and asynchronous modalities, emerged organically and out of necessity.

COVID-19 forced students to stay home; they were not allowed on campuses, and the interaction between students and instructors changed. Ozadowicz (2020) stated, "The impossibility of direct contact between lecturers, assistants and students as well as students with each other, forced them [the instructors/lecturers] to organize works and exchange information in a new way, remotely, at a distance" (p. 2). One of the advantages of online learning was its ability to ensure continuity of education during the pandemic. Despite the physical limitations, remote, online learning allowed students access to educational resources and interact with teachers from the safety of their homes. Remote, online instruction played a crucial role in minimizing the disruption to learning and maintaining academic progress. Instructors had to "focus on the possibility of supporting the traditional models and approaches in education, with creating new trends such as hybrid teaching and learning, including completely remote, distance modes" (Ozadowicz, 2020, p. 3). Digital technology affected every element of the student experience in higher education, including a stronger emphasis on student participation (Bond et al., 2020).

Disengagement had a significant impact on student learning outcomes, and cognitive development and is a predictor of student dropout in both secondary and higher education (Bond et al., 2020). Educators found creative ways to keep students engaged and connected during the online remote instructional period. Kay and Pasarica (2019)

addressed student engagement factors and the behavior of students in pivoted blended learning classrooms:

Behavioral indicators included attendance, assignment completion, interactions, and the quality of the face-to-face and/or online interactions. The technology enhancements we introduced included transferring a session from an in-class, face-to-face, synchronous session to a distributed (asynchronous, fully online) learning session and the introduction of the *Zoom* platform to host a virtual, synchronous session. (p. 408)

Instructions provided clear communication and expectations through remote online instructional times. The use of learning management platforms provided means for communicating through announcements, emails, and other applications. Instructors provided access to multimedia resources and online discussion forums, which promoted synchronous and asynchronous activities. Instructors created ways to provide instructional outlets such as pre-recorded lectures, blended learning meet-ups or live discussions, and online quizzes. Group work and breakout rooms provided a means to student engagement and collaboration. Feedback and support of student work allowed teachers to interact and promote connections. When students participated in discussion forums, polls, whiteboards, and virtual class meetings, a sense of engagement was fostered, and promoted an increase of student motivation. Govindarajan and Srivastava (2020) posed three questions related to the pivot of on-ground to online instruction and the subsequent issues that arose:

- 1. Do students really need a four-year residential experience? (para. 4)
- 2. What improvements are required in IT infrastructure to make it more suitable for online education? (para. 11)

3. What training efforts are required for faculty and students to facilitate changes in mindsets and behaviors? (para. 15)

Armed with the information from the Center for Disease Control (CDC), administrative decisions were made and protocols were closely monitored and revisited weekly (CDC, 2020). Schools altered the ratio of in-person to online instruction as COVID-19 circumstances changed to maintain learning continuity while putting the well-being and safety of students and employees first. This adaptability made it possible to switch between several teaching styles with ease, as needed.

Courses pivoted from on-ground instruction to online blended learning, hybrid, or hyflex learning so students would not lose academic instructional time or previously learned content (Cardona, 2021). Graham (2004) reported the working definition of blended learning as "the combination of instruction from two historically separate models of teaching and learning; traditional F2F learning systems and distributed learning systems" (p. 3). Ozadowicz (2020) defined one method of teaching utilized during COVID as "hybrid courses and the BL, where lecturer and/or assistants combines different online learning activities and traditional courses, providing some virtual sessions and activities accessed remotely by student" (p. 4).

Background of the Study

This study focused on a Mid-Missouri community college and the perceived success of completing blended learning courses online, hybrid or hyflex format during a global pandemic. To reduce the danger of infection, nearly all (90%) of higher education institutions in the United States postponed in-person classes and instead engaged in some form of remote online learning to ensure academic continuity for the Spring 2020

semester (Shin & Hickey, 2021, p. 974). The phrase "emergency remote teaching" was coined to distinguish this brief shift in teaching modality owing to the COVID-19 epidemic from ordinary online learning training (Shin & Hickey, 2021, p. 974).

Hrastinski (2019) explained, "The term Blended Learning is relatively new. Before the term became widely used, the term hybrid learning was used quite often" (p. 565). It is not new to shift schooling to the internet during times of crisis. For example, colleges in New Orleans, Louisiana, gave online courses in the aftermath of Hurricane Katrina in 2005, while students in South Africa were given blended and online learning amid student demonstrations and university shutdowns between 2015 and 2017 (Shin & Hickey, 2021).

Reports of perceived levels of student engagement and support between faculty and students during the pivot from face-to-face or on-ground classes to blended learning or virtual learning environments have been considered. Vuori (2014) determined, "There is ever-increasing global interest in the concept of student engagement and its proclaimed value in higher education" (p. 209). Educators envision engagement as identical to attachment to indicate whether students feel they belong (Libbey, 2004). Student engagement includes success in personal and academic growth as an outcome of higher education (Kahu, 2013).

Conceptual Framework

The framework for this study was based on Badrul Khan's (2005) blended elearning framework, Watson's (2008) blended learning continuum, and Ozadowicz's (2020) modified blended learning approach. Siripongdee et al. (2020) explained, "Blended Learning can blend any approaches or pedagogies, including constructivism,

behaviorism, and cognitivist" (p. 906). Ozadowicz (2020) introduced the modified blended learning approach, which resulted from the halt of face-to-face instruction to fully remote work. Bruner's Constructivist Theory is interwoven within the blended learning world, as it supports the design and implementation of the blended learning environment. "The main theme inherent in constructivism is that people learn by constructing new ideas and concepts by interpreting them through comparison with previous knowledge" (Pagán, 2006, para 2). Blended learning forced students to rely on prior knowledge to build their scaffolds of knowledge and continue on with the online course environment during COVID-19. The integration of Vygotsky's social interaction theory and zone of proximal development models were intertwined as blended learning relied heavily upon the social interaction components from the students and the teacher. Students relied heavily upon the interactive components of the blended learning environment to gather and disseminate the instructional materials. Students participated in discussion forums, online web conferencing class lectures, projects, and discussions, which helped to promote a meaningful learning experience for many. Due to the nature of blended learning environments, social interactions were a vital component for measured student self-efficacy and success. Wertsch (1979) stated "social interaction plays in the development of all higher mental functions" (p. 2). Wertsch reported Vygotsky "argued that higher mental functions appear first on the 'interpsychological' (i.e., social) plane and only later on the 'intrapsychological' (i.e., individual) plane" (1979, p. 2), meaning that students rely first upon verbal interactions with others to learn and understand content, and then secondly rely upon themselves for processing and conceptualization. Instructors

that facilitated effective social interactions were likely key to their student academic successes.

COVID-19 was undoubtedly a trying time for many students and instructors. Both parties were forced to self-regulate or set goals for themselves. The switch to an online or blended learning environment posed a problem with a great deal of doubt or lack of comfort in using online platforms and using accessible technology, all while being independent and isolated from others. Zimmerman (2002) argued "many students have not learned to self-regulate their academic studying very well" (p. 64). Students (and instructors) were forced to become active learners by teaching themselves content and technology, setting goals, and staying motivated. Active learning is summarized as an activity that students undertake on their initiative rather than a concealed occurrence that occurs to them in response to education. Self-regulation is the process of controlling one's thoughts, feelings, and actions to achieve goals (Zimmerman, 2002). The goal-setting theories of personalized learning adopt Zimmerman's (2002) self-regulated learning, in which learners' metacognitive behaviors and motivation guide the learning process (Alamri et al., 2021, p. 65). Self-regulation and autonomy play important roles in a person's personal development. Throughout adulthood, autonomy is essential as individuals navigate life choices, career decisions, and personal relationships. Selfregulation involves controlling one's impulses, setting goals, and managing time effectively—all necessary for making autonomous decisions. According to Ryan and Deci's (2000) theory, there are three key components needed for human growth and development to occur. Those three are autonomy, competence, and social relatedness. Satisfaction of these needs supports intrinsic motivation, internalization, and autonomous

motivation. A final theory, Ames and Archer's (1998) goal-oriented theory, focused on the function of students' objectives and how it affected their drive, conduct, and performance in academic settings. Ames and Archer (1988) suggested the "goal-oriented theory prioritized students' mastery or performance of learning goals" (Alamri et al., 2021, p. 65). Teachers can design more effective lesson plans and help students reach their full potential in educational environments by identifying and addressing these orientations in blended learning environments.

Siripongde et al. (2020) revealed, "Blended learning is one proper solution for balancing of all stakeholders in long term" (p. 907). Many advantages of traditional learning are absent from online learning. The most significant shortcoming of these new approaches is that they do not provide students with the opportunity for social and faceto-face interaction with other students and the instructor (Kazu & Demirkol, 2014).

Self-efficacy and student satisfaction are driven by motivation and the ability to accomplish activities and tasks, leading to interactions within the blended learning environment (Commissiong, 2020). Self-regulation refers to an individual's ability to judge how to perform a certain goal or action (Commissiong, 2020). In addition, Zhang et al. (2021) stated, "The self-efficacy of college students is significantly related to student satisfaction" (p. 4). In other words, self-efficacy is a subjective measure of an individual's ability to construct a method prior to undertaking action to achieve a desired goal (Zhang et al., 2021).

Another measurement used to explore educational student learning satisfaction is the stimulus-organism-response (SOR) model. Zhang et al. (2021) explained:

The SOR model consists of three structures—namely, stimulus, organism, and response, which determine the behavioral outcome of an event. The concept of stimulus and response is described as "a part of behavior and environment."

Sudden changes in the environment will affect the psychological and emotional stability of an individual, thereby further promoting changes in their behavior. (p. 3)

Student interactions or the lack thereof can affect a student's emotional state and sense of self-efficacy (Zhang et al., 2021).

Statement of the Problem

Hrastinski (2019) verified, "Blended Learning was coined in the late 1990s" (p. 1). Blended learning is used in virtual learning environments, more recently called hybrid, hyflex, or emergency remote teaching, which became widely used in higher education during the COVID-19 pandemic (Shin & Hickey, 2021). Blended learning has been deemed "popular with some scholars referring to it as the 'new traditional model'" (Ross & Gage, 2006, p. 167) or the "new normal" in course delivery (Dziuban et al., 2018, p. 1; Norberg et al., 2017, p. 207). Therefore, this study focused on how a global pandemic affected the student learning process of multiple on-ground courses that were pivoted to numerous online blended learning courses at one Mid-Missouri community college.

The impact of the pandemic and the implementation of changing instructional modes mid-semester for college-aged students may have led to some significant issues such as inaccurate academic outcomes (Huber & Helm, 2020). Simamora (2020) stated, "Preparing to move education outside of traditional physical classrooms in response to

COVID 19 requires thought, coordination and careful decision making [and] lowered the success of student performance and students' academic abilities" (p. 99). Garcia and Weiss (2020) stated, "Successful online learning thus requires that students (and teachers) be familiar and proficient in their uses of those devices for learning" (para 20). As Garcia and Weiss (2020) further stated, with unsuccessful online and blended learning:

There are multiple requirements needed for online education to work as intended and deliver positive results. Just as the requirements for effective student learning have largely not been met during the pandemic, the same is true for effective online instruction. (para. 29)

Additionally, "weak systems of support, including lack of professional development on how to integrate computers into instruction, have left teachers less than optimally equipped to teach during the pandemic" (Garcia & Weiss, 2020, para. 33).

It is critical to consider that despite the settings, students made little to no improvement when learning from home, as Engzell et al. (2020) noted. Additionally, a decline in academic advancement and an increase in student anxiety occurred due to the switch from in-person to blended learning programs. Students from poorer socioeconomic backgrounds were at a disadvantage since they could not afford computers, software, or internet providers, according to Engzell et al. (2020).

The U.S. Department of Education (2021) reported academically inferior students and individuals from lower socioeconomic backgrounds may have been disproportionately affected by COVID-19-related health, socioeconomic, and childcare obstacles. College environments already raise questions about student mental health. The pandemic's occurrence raised awareness of it. Additionally, COVID-19 had a

disproportionate impact on the female population in terms of mental health difficulties and increased domestic labor, according to recent press reports (Shin & Hickey, 2020). The biggest barrier to academic performance is mental health difficulties. The nature of the pandemic has aggravated students' psychological health and well-being by fostering a sense of uncertainty, fear, and social isolation in both instructors and students, who may have experienced irritation, anxiety, and stress (Shin & Hickey, 2020). Students' motivation, focus, and social relations can be negatively impacted by mental illness; these are essential skills for success in higher education (Son et al., 2020). The stress of being a student can be debilitating for some students. Mental stress not only affects student health but also affects academic performance. COVID-19 caused stress, mental fatigue, and motivation; As Aristovnik et al. (2020) stated, "Students were mainly concerned about issues to do with their future professional career and studies, and experienced boredom, anxiety, and frustration" (p. 1). Historically, the frequency of an epidemic amplifies additional stresses, such as dread and worry for oneself or loved ones, limitations on physical activity and social interactions due to quarantine, and abrupt and extreme lifestyle changes (Son et al., 2020).

Purpose of the Study

The purpose of this case study was to examine students' levels of success and ease with achieved learning outcomes as related to on-ground, online or virtual, or blended learning environments. In this study, students completed a survey covering levels of stress associated with the changes, as well as levels of progress in their studies and academic self-efficacy. Faculty completed a survey and participated in an interview addressing levels of preparedness for the pivot to blended learning and virtual

environments. Faculty quickly created online courses, remote teaching plans, and practical methods for meeting students' fundamental needs—however, the difficulties were significant. Perspectives from both parties were considered regarding the college's decision to pivot from on-ground learning to alternative virtual learning environments. The pivot was the result of the mandate from the CDC to shelter in place orders. It was the college's best route to prevent the spread of the COVID-19 virus while continuing instruction to students during the Spring 2020 semester.

Research Questions

The following research questions guided the study:

- 1. What are the opinions of faculty regarding their ability to adapt to an online learning environment from an on-ground or hybrid modality?
- 2. What are the opinions of faculty regarding their ability to adapt to the online learning environment to ensure student success?
- 3. What are the opinions of students regarding on-ground and hybrid modality to online learning?
- 4. What are the opinions of students regarding their success in the online learning environment?
- 5. What modality of courses did returning students prefer to take when they returned for the fall 2020 semester?

Significance of the Study

This research is important since it is the first time the educational world made an immediate pivot in the delivery of curriculum. Instructors were forced to become creative in their delivery of information to students. Through the examination of survey results

from students and faculty interview responses, the findings from the study may serve to inform future postsecondary students' decisions to participate in online or blended learning courses. Barrot et al. reported the lockdown had a major impact on students' ability to learn. Students also mentioned certain difficulties they encountered when taking online programs. Anxiety, sadness, inadequate Internet connectivity, and an unsuitable home learning environment are all factor that are exacerbated when students are marginalized or from outlying places (2021). Finnegan (2021) found, "There is very little research on the academic impact of (a) pandemics on student performance and experience" (p. 2). Until the COVID-19 pandemic, there was little research related to implications of social and emotional effects of instruction as a result of blended, remote, and online learning environments. In comparison to students who reported minimal or moderate symptoms of mental distress, those who reported severe symptoms were twice as likely to report delayed study progress and four times more likely to have low academic self-efficacy (Grotan et al., 2019). Gonzalez-Ramirez et al. (2021) determined:

The preference of students to familiar, face-to-face instruction over remote learning was an expected finding, given the disruption and sudden transition to a fully online learning, replete with multiple challenges and problems that profoundly have affected students' academics, social connections, and healthy habits. (p. 19)

Gonzalez-Ramirez et al. stated higher education frequently places less emphasis on helping students identify and control their emotions as well as less attention to how emotions affect their performance and level of involvement (2021). According to Tinto's

(1988) theory of student departure, social interactions are important. Tinto (1988) explained further:

Because social interactions are the primary vehicle through which such integrative associations arise, individuals have to establish contact with other members of the institution, students and faculty alike. Failure to do so may lead to the absence of integration and to its associated sense of isolation, a lack of engagement and reciprocal social or academic commitment to the higher education institution and programs, cause a breakdown of students' self-regulating behaviors or a lack of persistence, and lead to attrition. (p. 446)

Amid the sudden shift to remote learning, as highlighted by Gonzalez-Ramirez et al. (2021), various facets of students' lives experienced significant changes. These encompassed shifts in their learning environment, financial situations, social connections, motivation levels, and overall well-being. This transformative period brought about not only social and emotional challenges but also pervasive effects on students' lifestyles. Indeed, the research conducted by Gonzalez-Ramirez et al. uncovered that students' exercise routines and healthy eating habits underwent a decline during this emergency online learning phase. Consequently, it becomes apparent that the repercussions of the abrupt transition extended beyond the academic realm, impacting students' overall well-being.

The Office for Civil Rights published a report titled "Education in a Pandemic: The Disparate Impacts of COVID-19 on America's Students" in June of 2021.

Regarding retention and enrollment of students in community colleges, the 2021 report stated:

Community colleges were also hit hard, with enrollment among 2020 high school graduates down 13.2% in fall 2020. And although overall enrollment in community colleges had been declining in recent years, the fall 2020 drop—by 10.1%—was almost 10 times steeper than the 1.4% decrease in overall enrollment reported in 2019. (Office for Civil Rights, 2021, p. 33)

The data from this study will provide information from students who did not have accessibility to technology. Moreover, this study will yield data to further understand what students did to complete their courses, how they were able to complete their courses, what methods they found helpful or harmful during the process, how they were or were not supported educationally and emotionally, and finally, their actual success in their online or blended learning courses.

Definition of Key Terms

For the purpose of this study, the following terms are defined:

Blended Learning

Hrastinski (2019) stated, "The term Blended Learning simply requires two or more different kinds of things that can then be mixed" (p. 564). Graham (2006) added, "Blended Learning systems combine face-to-face instruction with computer-mediated instruction" (p. 5). Garrison and Kanuka (2004) defined Blended Learning as "the thoughtful integration of classroom face-to-face learning experiences with online learning experiences" (p. 96).

Disruption to Learning

Disruption to Learning is interrupted learning, or a disruption of the learning process occurred. Salciccioli (2021) stated, "Given these disruptions to traditional

classroom-based instruction, education leaders have warned that the impact on student learning is a significant threat to achievement and equity" (p. 1). Additionally, "lost instructional time has serious ramifications for learning in both reading and math" (Salciccioli, 2021, p. 1).

Emergency Remote Teaching

Emergency Remote Teaching is defined by Hodges et al. (2020) as a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances. It involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses and that will return to that format once the crisis or emergency has abated. (para. 13)

Emotional Intelligence

Emotional intelligence is defined as "the ability to monitor one's own and other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking and behavior" (Salovey & Mayer, 1990, p. 189).

Global Pandemic

The term Global Pandemic is defined by the Association for Professionals in Infection and Control and Epidemiology (2022) as:

A pandemic is a global disease outbreak. It differs from an outbreak or epidemic because it:

- affects a wider geographical area, often worldwide.
- infects a greater number of people than an epidemic.

- is often caused by a new virus or a strain of virus that has not circulated among people for a long time. Humans usually have little to no immunity against it. The virus spreads quickly from person-to-person worldwide.
- causes much higher numbers of deaths than epidemics.
- often creates social disruption, economic loss, and general hardship.

Hyflex Learning

Hyflex learning is defined as a class that combines "equivalent learning activities in all participation modes" (Abdelmalak & Parra, 2016, p. 1).

Limitations and Assumptions

Several limitations were identified. The student survey was crafted using the *Qualtrics* platform, and an initial test email was dispatched to a currently enrolled student who did not meet the criteria for survey participation. While initial assumptions suggested that disseminating the survey link would proceed unimpeded, an unanticipated obstacle emerged when the intended recipient encountered a blockade to access the *Qualtrics* survey due to the institution's firewall measures. This unforeseen issue prompted the researcher to begin a dialogue with the Information Technology (IT) department of Mid-Missouri Community College. Upon consideration and in dialogue with the IT department, a decision was made to transition the survey platform to *Survey Monkey*. This transition was undertaken with the primary objective of circumventing the institutional firewall that had hindered the original survey's deployment. The adoption of *Survey Monkey* as the survey tool returned a desirable outcome; the links contained were not blocked by the institution's firewall. Therefore, the survey was successfully dispatched to its intended recipients.

Summary

In this chapter, the background of the study was presented, which included a discussion of the blended learning concept, student engagement, student support from faculty, and student achievement. Three important frameworks used for this study, Badrul Khan's (2005) blended e-learning framework, Watson's (2008) blended learning continuum, and Ozadowicz's (2020) modified blended learning were described. The research questions that influenced the study's creation were outlined, as well as the terminologies that were used throughout the investigation. Finally, details of the potential limitations, biases, and assumptions connected with such a qualitative investigation were presented.

The second chapter reviews the relevant literature on both the blended learning concept and the perceived student success, which served as the study's framework. In addition, student engagement and the quality of instruction provided during the pivot to a blended learning environment are reviewed, such as accommodations made for students during the pivot, the retention of students after the pivot, and perceived student success.

Chapter Two: Review of Literature

This chapter provides information related to platforms used for instruction in the world of education using a healthy investigation of publications in diverse knowledge areas, which include historical context, theories, and current practices in instruction.

Additionally, this chapter provides insight into students' and instructors' sense of self efficacy during a time when education was experiencing an uncharted phenomenon of alternative methods of instruction. The educational world took a turn for the worse, and the better, when the COVID-19 Pandemic happened. Teachers, administrators, and students were challenged to continue instruction and educational progress. A majority of the world felt unprepared, and many lacked the skills to progress, however, the idea of distance education or blended learning had already been in place for hundreds of years.

The Definition and History of Distance Education

According to Pregowska et al. (2021), distance learning is a style of education in which the lecturers and students are geographically separated, i.e., they live in different places, and the information is transmitted between them using various technologies. This educational model uses a variety of technologies to provide information while bridging their physical distances from one another. Holmberg (2005) suggested the term "distance education" refers to a variety of study methods at all levels that do not have tutors present with their students in lecture halls or on the same premises on a continuous basis but still receive the planning, direction, and instruction of a tutorial organization. Distance education, also known as online or remote learning, offers several advantages, which make it an appealing option for many learners. Keegan (1980) defined six elements intrinsic with distance education as being: (1) Separation of teacher and learner, (2)

Influence of an educational organization, (3) Use of media to link teacher and learner, (4) Two-way exchange of communication, (5) Learners as individuals rather than grouped, and (6) Educators as an industrialized form. Distance education is commonly characterized by the presence of both asynchronous and synchronous components.

Asynchronous learning is instruction from the teacher and learning by the students, occurring at different times. Synchronous learning occurs when the instruction and learning happens at the same time. When discussing distance learning, it is important to understand the educational model encompasses a diverse range of instructional methods, including audio lectures, readings from textbooks or materials, pre-recorded video lectures, PowerPoint Presentations, and instruction delivered through Learning

Management Systems (LMS) like Blackboard, Canvas, Google Classroom, and others.

One aspect of distance education, known as asynchronous learning, is traced back to the 18th century when it was initially referred to as correspondence education.

Distance Education in the United States

Some of the first recorded instances of distance education included Caleb Phillips in the United States, and Sir Issac Pitman in Bath, England, who offered correspondence courses for shorthand instruction (Archibald & Worsley, 2019). In 1873, the first correspondence school was called The Society to Encourage Studies at Home; it was created for women and was based out of Boston, Massachusetts. The first distance degree program was offered from Illinois Wesleyan College. In 1874, New York State formed a program to train Sunday school teachers. The first adult education program in New York was founded in 1878 in New York as well. The University of Chicago opened its first college-level distance learning program in 1892, and in 1915, The National University

Extension Association was formed to help education adult learners (Pregowska et al., 2021).

Distance Education Around the World

In other countries, like Canada, the inception of distance learning occurred in 1889, initially targeting rural educators. Then, in 1921, the concept of correspondence education marked a significant milestone. This occurred when parents, whose child resided at a considerable distance, reached out, requesting study materials to be sent to their home through the postal system (Pregowska et al., 2021). Poland created a correspondence course for artisans and The University of Warsaw created courses for physics. The United Kingdom's Open University and Germany's Fern Universitat in Hagen offered studies to degree-seeking learners and the latter to elderly, disabled or ill people during 1960s and 1970s (Pregowska et al., 2021). In the 20th century, the television and radio provided educational programs and lectures, which allowed people the option of learning from home (Novak, 2012). Charles Dickens established the first European degree in 1858 at the University of London, which was named The People's University (Pregowska et al., 2021). Distance education in Sweden began as early as 1898, and later France introduced formalized distance education in the 1930s (Pregowska et al., 2021). A focus on the history of distance education made evident that the evolution of educational delivery methods had a profound influence on how students engaged with learning.

How Students Learn

Diverse learning methods play a pivotal role in facilitating effective and comprehensive student learning. Teaching methods include a variety of tools, techniques,

and instructional strategies that give students the freedom to interact with the course material in ways that best suit student learning styles. Students may have distinct learning styles that differ from those of their peers when it comes to grasping course material. Diverse learning methods foster critical thinking and problem-solving skills. They encourage students to approach challenges from multiple angles, think creatively, and adapt to different situations. This type of cognitive flexibility is essential for success in both academic and real-world contexts, where problem-solving is a valuable skill. According to Nisbet and Shucksmith (2017), important elements that improve learning environments for students are supported by educational research. They include: (1) Active learning, (2) Personalization, (3) Real-world relevance, (4) Feedback, (5) Collaboration, and (6) Multisensory learning, (7) Clear objectives and expectations, (8) Metacognition, (9) Use of technology, (10) Scaffolding, (11) Motivation and engagement, and (12) Reflection and application. Joubert (2019) stated, "When students engage in active learning, such as working together to apply a new practice, they are more likely to retain what they've learned" (para. 1). Additionally, the benefits of active learning help students understand the topic at hand; it allows instructors to gauge how well the students are grasping the concepts, and it builds relationships among students, which has also been linked to course completion rates (Joubert, 2019).

Personalizing materials and curriculum within the classroom benefits student needs, as it tracks what students are most interested in. "Personalized learning has the potential to create customized learning environments in higher education via technology platforms that offer pathways that personalize students' learning" (Alamri et al., 2021, p. 63). It is important to remember various students might benefit from different mixes of

instructional approaches, and good teaching entails a degree of adaptability and flexibility to accommodate the requirements of diverse learners. Faust and Paulson (1998) specified that professors will choose to employ a variety of teaching methods to generate student engagement and that the two are intimately connected (Murphy et al., 2020, p. 106).

Students' highest preference for teaching methods were interactive in nature (Murphy et al., 2020, p. 106). Many students say they typically learn and retain information best in an interactive lecture, which falls somewhere between a traditional lecture and a high-intensity active learning environment, according to a Student Voice Pulse survey of 1,250 undergraduates conducted in March and published by Inside Higher Ed and College Pulse (2023). Curiously though, when asked which kind of educational environment they typically learn and retain information best in, students replied in various ways. More than one-third of students claimed interactive lectures, in which the professor takes at least one short break to give the class a chance to perform a particular learning exercise linked to the subject, are the greatest way to learn. The second most popular format for a class is traditional lectures, which are preferred by a quarter of the students. A quarter or more of students favor classes that emphasize active learning. Only 7% of students say they prefer a lab setting. 20% of students say they prefer the standard, discussion-based class (Flaherty, 2023). The large variety of classroom formats that students choose highlights the value of using a variety of teaching strategies to meet their unique learning requirements and personalities.

College mission statements frequently use terminology that encourages student empowerment or civic education. Accordingly, practical educational approaches are beneficial for students. In order to equip students to become global citizens and graduates

who are prepared for the workforce, traditional learning and teaching methods, which are often academic skills and content-based, may not always be appropriate, according to Morley and Jamil (2020). Students who receive a comprehensive and useful education that extends beyond the classroom with the help of real-world learning are engaged. Real world instruction promotes personal development and a sense of purpose while providing students with the knowledge, experiences, and self-assurance they need to thrive in school and in their careers.

Receiving feedback is an additional part of learning, and it can significantly affect students' academic progress and learning. According to Jonsson (2012), "feedback can be one of the most potent influences on student learning and achievement" (p. 63). Effective feedback helps students find areas for development, gives them important information about their progress, and inspires them to aim for greater standards of performance. On the other hand, students who do not read feedback, or know what to do with the information, are not utilizing it accordingly. According to Jonsson (2012), "not only are factors such as quality of information and timing important but also that the students need to be open to the feedback and know what to do with it" (p. 64). Therefore, it is not sufficient for educators to just provide or give feedback; both the quality and timing of the input are important. Students need to have the correct attitude, be open to criticism, and possess the necessary skills to use the feedback successfully to advance their learning and performance.

Collaborative learning was introduced as a tool in classrooms to provide students the opportunity to work together in and out of the classroom. It is also not just a teaching technique, it is "a personal philosophy, not just a classroom technique" (as cited in Panitz

& Panitz, 1998, p. 162). Collaboration promotes diverse perspectives, developing social skills, enhancing problem-solving skills, and it aids in practicing good communication and shared ideas. All of these would be useful in any type of classroom setting.

An aspect of a school's culture is the diversity of student learning styles. Its foundation is the understanding that every learner is an individual with distinct interests, abilities, and thought processes. In 1956, Abraham Maslow and Norbett Mintz discovered that happier people inhabit more aesthetically pleasant environments, according to Krajewski and Khoury (2021). Multisensory learning involves a variety of spaces and learning platforms. The physical learning environments as well as the online ones should provide different learning approaches to meet the need of the learning space. COVID-19 forced many students to transfer from traditional classroom settings to online learning environments, which for many instructors meant a reevaluation of teaching styles. For the students, it meant changing how they received their teaching and depending more on the teachers for guidance and support. Coursework went from being teacher-driven to student-driven. The foundations of good teaching that accommodate many learning styles are clear objectives and expectations.

In order to guarantee students know what is expected of them, clear objectives and expectations provide a structured framework. Setting expectations offers flexibility in accommodating different learning preferences. Effective teachers build a welcoming and inspiring learning environment where every student has the chance to succeed, regardless of learning preferences, by clearly communicating these objectives. Through direct teacher instruction and responses to suitable and incorrect student behavior, teachers help students understand classroom expectations. That is, teachers model behavior that is

consistent with each expectation while explaining the meaning behind each one (Creating expectations, n.d.).

Metacognition is the act of reflecting on one's own thinking. It speaks to the capacity to consider and exert control over one's own cognitive processes, including learning, problem-solving, and making decisions. Metacognition basically entails being aware of how one thinks, comprehending one's thought processes, and being able to control and modify them as necessary. It is essential for learning and solving problems (Fagan, 2020). Teachers frequently support students' metacognitive growth by creating an atmosphere that values introspection, self-evaluation, and goal-setting. Educators empower learners to become more independent and successful learners by assisting them in becoming more conscious of their own thought processes and offering advice on efficient learning techniques. It is a cognitive skill that allows individuals to monitor, reflect on, and regulate their own thought processes, making it a valuable tool for learning and problem-solving (Weil et al., 2013). The integration of technology in education not only supports and enhances the metacognitive process but also extends its benefits to a broader spectrum of learners.

The use of technology in educational settings enhances the ability to work synchronously and asynchronously. Technology accelerates, enhances, and spreads the impact of excellent teaching techniques when it is wisely developed and implemented. In harnessing the power of technology to cultivate critical thinking and problem-solving skills, the educational landscape is continually evolving. Thanks to technological advancements, researchers have unique chances to scaffold students' critical thinking and

problem-solving skills, utilizing cognitive technologies, technologies of the mind, and mind tools to create a more dynamic and effective learning environment.

Active learning and motivation promote engaged students in the online environment. Active learning includes every student interaction with the educational environment or with activities connected to it. Its three distinct characteristics are behavioral, emotional, and cognitive engagement. Engaged educators will offer their students emotional and motivational support throughout distance learning, including pedagogical compassion, participation closeness, acceptance, and assistance (Chiu, 2022). Teachers play a critical role in creating a virtual learning environment where motivation, engagement, and active learning flourish. They do this by offering students the emotional and motivational support they need to thrive in the online setting in addition to academic help.

With an emphasis on active learning, motivation, and teacher assistance, online education creates the foundation for students to reflect on their experiences and apply what they have learned to real-world situations. "Reflection plays an important role in the field of education" (2019, p. 95). Teachers help students learn content but also apply, evaluate, and synthesize it outside of the virtual classroom by creating a link between academic engagement and real-world application.

Current Practices

Current blended learning methodologies use a variety of cutting-edge strategies to give students a comprehensive and interesting educational experience. These methods have developed to satisfy the requirements of an educational environment that is rapidly changing as well as the wide range of learner needs.

The demand for alternative instructional approaches includes the blended learning setting. Garrison (2009) noted both the number of students enrolling and the number of universities including distant education in their curricula have grown dramatically as a result of the emergence of new technologies. Online education gained acceptance as a flexible and practical substitute for conventional classroom-based learning before the COVID-19 epidemic. It allowed students to pursue their education online, enabling them to get past regional restrictions and access a variety of courses and programs from reputable schools worldwide. A majority of institutions had experience with online course offerings in addition to hybrid and blended learning environments (Brooks et al., 2020). Interactive learning materials, multimedia resources, and communication tools were made available via online education platforms, encouraging student engagement and teamwork. Students mix their studies with other responsibilities and learned at their speed. Online education expanded and became more widely accepted as a valid educational option despite some skepticism and difficulties.

The COVID-19 Pandemic

The early stages of the COVID-19 pandemic reshaped the landscape of education, pushing for innovation, digital transformation, and a reevaluation of traditional learning methods. It highlighted the need for adaptable and flexible educational systems that could respond to unexpected disruptions. In early 2020, a global pandemic struck; close contact with people was dangerous, especially those infected with the SARS-CoV-2 "Coronavirus" (Barrett-Fox, 2020). The international pandemic resulted in substantial disruptions and urgent concerns for public safety. The uncertainty of the virus' short and long-term effects on the human body was unknown, and while measures to contain the

virus occurred, it began its rapid spread across the United States (Barrot, et. al, 2021).

Institutional leaders worried about accreditation and the perceived absence of face-to-face interaction.

By March 2020, "121,564 cases had been confirmed in over 110 countries with a death toll of 4,373 deaths" (Anderson et al., 2020, p. 1) due to the COVID-19 virus, which had its origins in Wuhan, Hebei (in China). Huber and Helm (2020) reported, "The crisis caused by the COVID-19 virus has far-reaching effects in nearly all social areas, including education. Indeed, schools were closed in March 2020 in nearly all countries in the world" (p. 238). The possible adverse effects that a quick transition to online classes could have on students' academic performance were supported by a developing body of research on online learning. According to the U.S. Department of Education (2021), there are other factors that might have contributed to the COVID-19 crisis and the resulting abrupt switch to virtual education, which may have resulted in poor outcomes for community college students. The COVID-19 virus caused health issues for certain students, or they had sick family members. Tens of millions of Americans lost their jobs in the spring of 2020, including a large number of community college students and their families. The stress of these layoffs may have limited students' ability to focus and pay attention in class (Bird et al., 2022). The pandemic forced schools to close, disrupting the traditional route of in-person learning. Students were shifted to remote learning and were forced to use online learning platforms, video conferencing, and other forms of technology using digital resources. Educators faced challenges transitioning to online instruction while finding ways to keep students engaged and learning online. Teachers were forced to adapt their methods of teaching. Numerous educational institutions

adopted hybrid teaching/learning models that included in-person video conferencing (synchronous learning) with online learning (asynchronous learning) to keep students safe and engaged.

Public school officials followed the Center for Disease Control (CDC) recommendations for protecting students, faculty, and staff (CDC, 2021). Because of the fast growth of COVID-19, governments closed facilities and used at-home distance learning (Al-Salman & Haider, 2020). The term Emergency Remote Teaching (ERT) developed as a result of the COVID-19 shelter in place mandate. Students did not choose to enroll in ERT and teachers were required to make the transition to online learning in a short amount of time. ERT, in response to COVID-19, differed qualitatively from typical online learning instruction (Brooks et al., 2020; Hodges et al., 2020; Johnsen et al., 2020). Issues of transition from conventional (face-to-face) learning to new remote formats were given priority in making significant decisions induced by post-pandemic effects in university educational activities. Several ongoing measures ensured study activities continued despite the lack of face-to-face instruction (Masalimova et al., 2021).

Adaptation to changing circumstances has become a common challenge in higher education. Newer tactics were devised, such as implementing Emergency Remote Teaching and online learning (Hollister et al., 2022; Simamora, 2020). The COVID-19 school lockdown context created a new and complex environment for digital learning; immediate information and educational policy and practice were defined (Huber & Helm, 2020). The International Association of Universities published a global report titled *The Impact of COVID-19 on Higher Education around the World*, in which Marinoni et al.

(2020) stated, "Fortunately, the majority of HEIs (higher education institutions) have contingency plans in place to mitigate this impact" (p. 12).

Before the pandemic, distance and online education primarily employed remote learning to address geographical barriers. The COVID-19 pandemic significantly impacted society, potentially intensifying social and economic inequalities (Bambra et al., 2020). Lockee (2021) agreed:

Before the pandemic, the primary purpose of distance and online education was providing access to instruction for those otherwise unable to participate in a traditional, place-based academic programme. As its purpose has shifted to supporting continuity of instruction, its audience, as well as the wider learning ecosystem, has changed. (p. 6)

To counter its growth, governments worldwide made advancements to cease face-to-face learning in schools, affecting nearly all the world's students- the most significant disruption in education history (Frey & Verhagen, 2021). The pandemic ruined elements of society, particularly education (Bambra et al., 2020). In response to this disruption, the objective had been to develop an online learning design or maintain the continuity of the current learning (Lockee, 2021). In consideration of the challenges discussed in Simamora (2020), it was important to plan and enhance the design of online courses to better prepare for the possibility of a future pandemic. This preparation may involve incorporating elements of blended learning to create a more resilient and adaptable educational framework.

Blended Learning

An educational strategy called blended learning, commonly referred to as hybrid learning, mixes traditional, in-person classroom instruction with online learning components. This strategy aims to enhance the benefits of both in-person and online education to produce a more efficient and adaptable educational experience. Graham (2004) believed the definition of blended learning was used to describe other blends, such as blending diverse pedagogical practices, technologies, and instructional practices (Hrastinski, 2019). The emergence of the COVID-19 pandemic led to a renewed interest in the blended learning modality (Lockee, 2021).

Blended learning is a concept dating back to the 1990s (Graham, 2004; Hrastinski, 2019). In a blended learning environment, students took some of their classes in person while taking others online. With some courses adopting a 50/50 ratio between in-person and online components and others possibly having a lesser or bigger online component, the precise blend might vary greatly. Two definitions of blended learning widely used and cited are from Graham (2006) and Garrison and Kanuka (2004). Before blended learning, *hybrid* was a practiced term. The terms *blended learning* and *hybrid* are considered similar and interchangeable (Hrastinski, 2019; Rahardjanto et al., 2019). Watson's description of blended learning defined blended learning as, "a major segment of a continuum between fully online and traditional face-to-face settings" (Watson, 2008, as cited in Hrastinski, 2019, p. 6). Blended learning is offered in synchronous or asynchronous formats while using multiple teaching methods (Martin et al., 2020; Moorhouse & Wong, 2021). Benefits of blended learning include flexibility of learning and coursework, interaction in both physical and virtual spaces, an active

learning approach, and a personalized learning environment for students. Kiviniemi (2014) believed hybrid learning helped students obtain higher grades and results in their courses. Graham (2004) reported blended learning was named one of the top 10 emerging trends in the knowledge delivery sector by the American Society for Training and Development in 2003 (p. 3).

Prior to the epidemic, only a small number of organizations had implemented blended learning. A goal of faculty during the pandemic was to provide uninterrupted learning so students did not fall behind in their coursework. Ozadowicz (2020) stated, "During the lockdown period, traditional course programs had to be broken, and one of the most important aspects was the need for academic teachers to react as quickly as possible to the new circumstances" (p. 2). The modifications needed and utilized during the pandemic included blended learning, hybrid, and online instruction. Classes were offered in synchronous and asynchronous forms. In *Advances in Physiology Education*, Kay and Pasarica (2019) reported that students and professors must be in the same place simultaneously in traditional synchronous learning formats to benefit from simultaneous student and instructor interactions.

On the other hand, asynchronous learning formats are not constrained by time or location, nor by the requirement for simultaneous student-student or student-faculty interaction (Kay & Pasarica, 2019). Instructors had to make sense of accommodating classes and students due to the pivot of instructional modes. Kay and Pasarica (2019) further reported in their study of undergraduate and graduate courses that used a synchronous, virtual method as part of the curriculum that a large number of student comments praised the method's convenience. Before the pandemic, a number of

publications provided a hybrid model of distant learning for university students in scientific discourse (Masalimova et al., 2021). Students approved the virtual option because it allowed them to stay at home for class, save money on travel expenses, and participate in class while sick or caring for their children (Kay & Pasarica, 2019).

Reaction to COVID-19 and Continuing Student Learning

Instructors scrambled to create courses in a blended learning format without losing instructional time. There are various reasons why an instructor, trainer, or learner may choose blended learning over other methods. Osguthorpe and Graham (2003) identified six reasons for designing or using a blended learning system: "(1) educational richness, (2) knowledge access, (3) social interaction, (4) personal agency, (5) cost-effectiveness, and (6) ease of revision are all important factors to consider" (p. 227-233). One of the better aspects of blended learning is that any approach or pedagogy, including constructivism, behaviorism, and cognitivist, can be combined with Blended Learning. Blended learning is a suitable choice for balancing the interests of all parties. (Siripongdee, et. al., 2020). Kiviniemi (2014) reported:

Although the rationale for providing blended learning experiences may vary widely across colleges and universities, from a teaching and learning perspective a critical question is whether such designs are effective at delivering course content and, given the shift from more strongly classroom-based delivery formats, whether blended learning approaches differ from more traditional classroom delivery formats in terms of the learning outcomes students achieve as a result of the course. (p. 1)

Govindarajan and Srivastava (2020) supported blended learning, noting that face-to-face college instruction can no longer be relied on for its benefits in the *Harvard Business Review*. Several variables, including the ever-increasing cost of tuition, which is already out of reach for most families, indicate that the market for postsecondary education is primed. The coronavirus pandemic might be a stumbling block.

Contemplative Practices during COVID-19

Information on the drawbacks of using blended learning was reported by the Organisation for Economic Co-operation and Development (OECD) in response to the COVID-19 pandemic, the published report titled *COVID-19: Protecting People and Societies*. The report stated that the quality of a student's home learning environment determined the success of interim educational methods employed during school closures, such as remote learning (OECD, 2020). Home educational resources, available space, parental level of education, parents' fluency in the language of school instruction, parents' digital abilities, and parents' engagement with schools were all important considerations (OECD, 2020). Students from low-income families were generally disadvantaged when continuing their education and studying at home (OECD, 2020).

Conceptual Framework

The implementation of blended learning in higher education institutions has increased. Margaret Driscoll (2002) defined blended learning using four different concepts:

1. To combine or mix modes of web-based technology (e.g., live virtual classroom, self-paced instruction, collaborative learning, streaming video, audio, and text) to accomplish an educational goal.

- 2. To combine various pedagogical approaches (e.g., constructivism, behaviorism, cognitivism) to produce an optimal learning outcome with or without instructional technology.
- 3. To combine any form of instructional technology (e.g., videotape, CD-ROM, web-based training, film) with face-to-face instructor-led training.
- 4. To mix or combine instructional technology with actual job tasks in order to create a harmonious effect of learning and working. (p. 1)

In Oliver and Trigwell's (2005) publication, titled "Can 'Blended Learning' Be Redeemed?", the term was defined in three ways:

- 1. The integrated combination of traditional learning with web-based online approaches (drawing on the work of Harrison);
- 2. The combination of media and tools employed in an e-learning environment; and
- 3. The combination of a number of pedagogic approaches, irrespective of learning technology use (drawing on the work of Driscoll). (p. 17)

Educators can interpret the flexibility of the term blended learning in several ways. It can follow multiple avenues, depending on the type of course, the objective of the course, the setup and layout of the classroom, the instructor, and the students. The point is that blended learning represents different things to different people, indicating tremendous opportunities (Driscoll, 2002).

Badrul Khan's (2005) blended e-learning framework, Watson's (2008) Blended Learning continuum, and Ozadowicz's (2020) Modified Blended Learning served as a guide to explore the effects of pivoting from on-ground course learning to online and

Blended Learning instruction during the COVID-19 pandemic in the spring of 2020. Watson's (2008) Blended Learning continuum comprises the following categories:

- 1. Fully online curriculum with all learning done online and at a distance and no face-to-face component
- 2. Fully online curriculum with options for face-to-face instruction, but not required
- 3. Mostly or fully online curriculum with select days required in classroom or computer lab
- 4. Mostly or fully online curriculum in computer lab or classroom where students meet every day
- 5. Classroom instruction with significant, required online components that extend learning beyond the classroom and beyond the school day
- 6. Classroom instruction integrating online resources, but limited or no requirements for students to be online
- 7. Traditional face-to-face setting with few or no online resources or communication. (p. 565)

Sahni (2019) claimed instructors act as facilitators and that students may interact, learn, and ask questions even outside of the classroom, making learning more and more engaging for both the teacher and the students. Govindarajan and Srivastava (2020) postured three questions related to the pivot of on-ground to online Blended Learning instruction and the subsequent concerns:

1. Do students really need a four-year residential experience? (para. 4)

- 2. What improvements are required in IT infrastructure to make it more suitable for online education? (para. 11)
- 3. What training efforts are required for faculty and students to facilitate changes in mindsets and behaviors? (para. 15)

A literature review of Blended Learning and its models was pertinent to the study. The models were used to guide the research and explore the definitions of Blended Learning. The framework came from the literature review over the past 19 years, when the original definition and examination of Blended Learning began.

Blended Learning and Perceived Student Success

Perceived student success in the Blended Learning and online environments depends heavily on the utilization of metacognitive skills, or the closely related ability of self-regulation, and are particularly important in blended and online environments (Adekola et al., 2017). Oliver and Trigwell (2005) argued: "studies of the use of blended learning claim that they are associated with improvements in aspects of learning" (p. 22). Active learning and active engagement are two predictors of a student's success in a Blended Learning environment. According to Garrison et al. (2009), social presence (interaction) is associated with student participation or engagement, while teaching presence (interaction) is associated with activities involving the student and subject or self-regulation abilities. Reedy (2021) followed up, "A strong link exists between cognitive, social, and teaching elements" (p. 191).

Another indicator is the "time spent with the material as a moderate predictor of student success" (Macarini et al., 2019, p. 3). The blended learning strategy was effective in getting pupils interested both inside and outside of the classroom (Ransdell & Gaillard-

Kenney, 2009). Macarini et al. added other indicators of successful student learning instructional, social, and cognitive presences (2019). Explained further, for students to be successful, instructors must have an active presence within the course. Instructors should post daily announcements, identify students by their names in emails and when grading assignments, and engage or interact with students in online discussions. Successful students connect to the material cognitively. They can learn the material through online interaction, reading materials, watching lectures, or exploring outside resources. Finally, students who actively connect with other students in the course are deemed more successful in Blended Learning courses (Sahni, 2019). Further, Ransdell and Gaillard-Kenney (2009) noted that more engaged students will initiate discussion more often and do better in their courses. When students communicate with professors and believe that they are available through multiple methods, they develop a sense of trust. Although the facilitator's presence is vital, each learning community may have unique demands regarding interactions with the facilitator (Martin & Bolliger, 2018). Student success in a blended learning environment has limitations, too. Adekola et al. reported barriers to student successes. Adekola et al. (2017) suggested student engagement in blended learning communities is heavily influenced by psychological variables, a lack of social cues, and time management.

Blended Learning and Student Engagement

Learner-Instructor interaction and the satisfaction of a student's experience in a Blended Learning course class are predicted by multiple factors. Martin and Bolliger (2018) reported that the learner-instructor relationship is a significant determinant of student happiness and achievement. According to research, the instructor could foster the

learner's sense of community and belong in various ways through interaction. Instructors can promote student participation and learn by modeling online behaviors and establishing an online presence by engaging in and guiding online discussions. Instructors can also enhance the students' feeling of community by providing multiple contact channels, support and encouragement, timely feedback, and establishing course expectations (Chiu, 2021; Martin & Bolliger, 2018).

In 2000, along with his colleagues, Anderson and Archer, Garrison created the Community of Inquiry Model (COI), a theoretical framework. When referencing the Community of Inquiry theoretical framework, Garrison et al., (2001) stated, "The model of this Community of Inquiry assumes that learning occurs within the Community through the interaction of three core elements" (p. 3). Further, Garrison et al., (2001) reported the COI represented a strategy for developing three interconnected components—social, cognitive, and instructional presence—to provide a profound and meaningful (collaborative-constructivist) learning experience.

The level of student engagement is an essential factor to consider when using the Blended Learning Model. "Students' engagement is multifaceted; it may be assessed at three levels, behavioral, affective and cognitive" (Sahni, 2019, p. 4). Sahni's (2019) report suggested the blended learning technique increased student engagement and effectiveness by integrating online activities. Sahni's (2019) results from the study used data collected from student surveys, interviews, and LMS records:

The study examined the impact of blended learning on student engagement (emotional and cognitive), learners' characteristics variable (self-efficacy, subject interest,

and tech-efficacy), students' time and quality of discussion on LMS, and finally, the perceptions of the students about the blended approach in their learning (p. 5).

Good communication is important for increasing student engagement and satisfaction in Blended Learning courses. Instructors should present students with various communication options that encourage learner—instructor interaction (Martin & Bolliger, 2018). Reddy (2021) inferred, "While the social presence and course content interactions among learners are essential in virtual learning, such interactions by themselves cannot provide students with effective online learning" (p. 190). Inside Higher Education's 2021 Survey of College and University Chief Academic Officers, authored by Jaschik (2021), reported:

about six in 10 provosts indicate that their faculty members feel at least very or extremely engaged with their work, but far smaller percentages report that their faculty feel very or extremely connected to (18 percent) or supported by (38 percent) the administration. (para 4)

Quality of Instruction in a Blended Learning Environment

The blended learning environment, as described by Gecer and Dag (2012), "should be considered as a teaching design approach, is a process that should be planned strategically applied in a teaching institution" (p. 439). Bouilheres et al.'s. (2020) conducted a Blended Learning study at an Australian university located in Vietnam. Bouilheres et al. (2020) research indicated, "The teachers' effective use of technologies (computers, electronic devices, and LMS software) and the capabilities of each play a role in how the Blended Learning approach is viewed by the learners" (p. 3053). When enhancing the educational environment and making it more relevant and engaging,

blended learning can be utilized to help. "Apart from technology, a learning environment that encourages peer-to-peer and peer-to-instructor cooperation is essential" (Bouilheres et al., 2020, p. 3053). Since technology often only supports a portion of the learning processes that students engage in, evaluating the quality of blended learning experiences is not a simple task. Because of this, assessing the role of technology in blended learning experiences requires research approaches sensitive enough to recognize and identify the relationship between technology and learning quality (Ginns & Ellis, 2007).

According to Huber and Helm (2020), based on Klieme's (2009) works, instructional quality can be divided into classroom management, cognitive activation, and constructive learning support. One of the strongest educational predictors of student academic achievement is classroom management (Huber & Helm, 2020). According to Huber and Helm (2020), "COVID-19 has largely eliminated the teacher's control over active learning time, instead of bringing students' self-regulatory, volitional and motivational abilities as well as parents' control over learning time to the forefront" (p. 244).

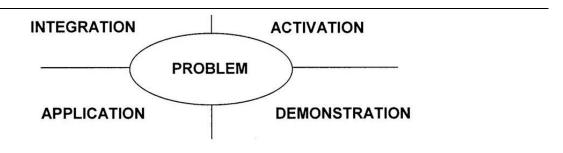
The second category, cognitive activation, is described as a pedagogical practice "that encourages students to engage in (co-) constructive and reflective higher-level thinking and thus to develop an elaborated, content-related knowledge base" (Klieme et al., 2009, pp. 140–141). The third category, constructive learning support, was developed using "teacher-learner interaction such as supportive teacher-student relationships, positive and constructive teacher feedback, and a positive approach to student errors and misconceptions" (Klieme et al., 2009, p. 141). The constructivist perspective "views an educational experience, in its best manifestation, as a collaborative communication

process for the purpose of constructing meaningful and worthwhile knowledge" (Garrison et al., 2001, p. 8). Further, Garrison et al. (2001) reported, "Collaboration is seen as an essential aspect of cognitive development since cognition cannot be separated from the social context" (p. 8).

Merrill's First Principles of Instruction (see Figure 1) used online or Blended Learning settings to define how distant learning works: authentic issues, activation, demonstration, application, and integration. These ideas are part of the above-mentioned cognitive activation component (Huber & Helm, 2020).

Figure 1.

Merrill's First Principles of Instruction



Note: The previous figure was created by M. David Merrill to illustrate Phases for Effective Instruction.

Merrill's (2009) First Principles of Instruction, as it is related to quality instruction, are described:

(a) Learning is promoted when learners are engaged in solving real-world problems. (b) Learning is promoted when existing knowledge is activated as a foundation for new knowledge. (c) Learning is promoted when new knowledge is demonstrated to the learner. (d) Learning is promoted when new knowledge is

applied by the learner. (e) Learning is promoted when new knowledge is integrated into the learner's world. (p. 43)

Instructors learn to understand the complexity of Blended Learning environments. Students who completed an EFL Blended Learning course in Indonesia reported that the online component of Blended Learning environments "bring some benefits in the forms of providing clear learning instructions, being reachable at any time, helping the lessons being followed, providing user-friendly features and comprehensive learning materials, clearly defining learning objectives, and providing learning materials needed" (Rianto, 2020, p. 62).

Additionally, provosts in higher education institutions who were faced with the pandemic reported:

For the fall 2020 semester, the first full semester of the pandemic, they thought quality was good. Eighty-three percent of provosts thought the quality of courses was good or excellent, but only 45 percent said that student engagement was good or excellent, and only 31 percent saw faculty research as good or excellent.

(Jaschik, 2021, para 6)

In the Blended Learning study by Bouilheres et al. (2020), results claimed, indeed, "student perception of their learning experiences as well as their engagement with peers, lecturers and content at the university were beneficially impacted as a result of the Blended Learning environment" (p. 3064).

These findings support the need to move away from the traditional pedagogical practices currently modeled in Vietnam's national school programs, and toward a broader learning spectrum includes not only a teacher-student interaction and also a peer

interaction as well as a digital online interaction component; however, given the somewhat mixed nature of the results and in particular how this technology has been used, these findings should be interpreted with caution (Bouilheres et al., 2020). Jaschick (2021) reported, the perception of provosts' beliefs of what will happen at their academic institutions after the shift of instructional methods due to the COVID pandemic. Jaschick (2021) reported "Provosts are confident in the academic quality of their institutions, despite negative changes brought about by the pandemic, according to the 2021 Survey of College and University Chief Academic Officers, published today by Inside Higher Ed and Hanover Research" (para 1). Later, Jaschik (2021) stated, "Institutions will probably offer more hybrid and online courses after the pandemic" (para 4).

There are reported issues with pivoting to Blended Learning environments. Rianto reported the main issue raised by the students concerned internet connectivity. The students had trouble utilizing the online platform in addition to their issues with the internet connection (2020). Students' issues to aid in the pivot to Blended Learning environments during the COVID-19 pandemic were related to technical issues, online learning management issues, lack of access to the internet, and lack of technology (IAU, 2020; Rianto, 2020).

Summary

The pivot to Blended Learning due to the COVID-19 pandemic drove institutions to provide an abrupt emergency plan to provide students with an uninterrupted, continuous instructional semester. During the pandemic's lockdown period, higher education institutions needed to keep their students engaged in the instructional process. COVID-19 had a huge impact on global higher education, especially in areas where

international students were directly involved. As a result, stakeholders, including higher education institutions and students, made significant modifications and legislative reforms (Haider & Al-Salman, 2020). "The challenges were mainly related to technology and the Internet, assessment, interaction, and lack of clear vision and regulations by policymakers" (Haider & Al-Salman, 2020, p. 1418). The inability of institutions to continue courses altogether would have had a significant adverse effect on students' educational prospects. (IAU, 2020). "All should be taken into account when analyzing a situation like the COVID-19 pandemic" (Huber & Helm, 2020, p. 260). An examination of research similar to this review of findings regarding the COVID-19 pandemic has been helpful. The three constructs explored, Blended Learning and Perceived Student Success, Blended Learning and Student Engagement, and Quality of Instruction in a Blended Learning Environment, are useful in exploring the impact of COVID-19's effect on education and student's success. The International Association of Universities (IAU) (2020) study called "The Impact of COVID-19 on Higher Education around the World" reported on community engagement at the institutions: "COVID-19 had an impact on community engagement. At a bit less than half of them, the impact was positive-the crisis increased HEIs' community engagement, whereas, at a bit less than one third, the impact was negative" (p. 36). Another concern related to the pivot of instruction was financial stress. COVID-19 prevented some international students from returning home and others the inability to work. The International Association of Universities (2020) reported:

Others are referring to the immediate financial impact on students that are not able to work and make a living, some are traveling back home to rural areas and

may not be in a financial situation that will allow them to return to the institution and continue their studies, once the epidemic is over. (p. 38)

Huber and Helm (2020) shared the goal of responsible science is to translate societal concerns into research and translate or link findings to policy and practice. Such research can now assist in describing the COVID-19 dilemma and analyzing its implications for schools and education. It is also in charge of coming up with findings and potential consequences of various stakeholders' actions, such as policy, practice, and, of course, additional study.

The pivot to Blended learning classrooms resulted in teachers being able to manage their Blended learning classrooms. Huber and Helm (2020) recognized, "particularly in times of crisis, such as the COVID-19 pandemic, it can be assumed that schools with a supportive culture of collaboration will be more likely to master current challenges, like the organization of digital instruction" (p. 254). Considering the COVID-19 pandemic, the evidence-based nature of this study aims to address some fundamental aspects of online Blended learning and student success, based on authentic first-hand reactions from some of the major stakeholders in the teaching-learning process, i.e., instructors and students. It is essential to acknowledge that remote, online learning is complex. Many students faced obstacles like lack of access to the necessary technology, reliable internet connectivity, and suitable study environments. Furthermore, the absence of in-person interactions and the challenges of maintaining focus and motivation without direct supervision posed unique hurdles for students and educators.

It was important to acknowledge the challenges that arose during the global pandemic. The digital divide became more pronounced, with disparities in access to

opportunities. Students from disadvantaged backgrounds often faced difficulties fully participating in remote learning, exacerbating existing educational inequities. There were also some unanticipated advantages to distance learning. Students were encouraged to be more independent and disciplined since they were required to take on more responsibility for their education. Additionally, online remote instruction promoted the acquisition of computer literacy abilities, which are now crucial in today's increasingly digital society. Moreover, remote learning gave teachers the chance to experiment with cutting-edge teaching techniques and use a variety of internet technologies to improve the learning process. The pandemic's global trial with remote learning undoubtedly sped up technology adoption in education and created new learning opportunities. Educators can now create a more robust, adaptable, and inclusive educational system for the future by accepting the lessons discovered and tackling the difficulties.

Upon further reflection, instructors help shape the future of education by identifying the best elements of in-person and online learning. By leveraging technology and incorporating effective strategies, instructors can create a more flexible and inclusive education system that combines the benefits of traditional classroom learning with the advancements made during this period of remote education. Remote learning enabled flexible scheduling and individualized learning opportunities. Students accessed lectures, tasks, and resources at their own pace to better fit their learning styles and preferences. Additionally, because students and teachers had the option to interact with classmates from many nations and cultural backgrounds through remote learning, it promoted global

collaboration and connection. Given the evolving nature of the pandemic, educational institutions can prepare to adjust plans and strategies as needed.

Chapter Three: Methodology

Using a qualitative study design enabled the researcher to collect data through qualitative methods, producing a range of findings that might further their knowledge (Khan et al., 2020). The study aimed to identify if there were reports of perceived levels of student engagement and support between faculty and students and the perceived levels of success of completing a blended learning course in an online, hybrid, or hyflex format during a global pandemic. Through the comparison, the researcher intended to identify current strengths and weaknesses of the coursework related to online and hybrid instruction. Additionally, the researcher attempted to determine whether teacher perceptions of the pivot to online/hybrid instruction differed and how academic outcomes were affected.

This study researched how a global pandemic affected the student learning process of on-ground classes that pivoted to online, blended learning classes in a Mid-Missouri community college. This study reviewed the literature using the following questions: Is a blended learning environment perceived as a positive experience? Does the blended learning environment promote student engagement with their classmates, teachers, and course materials? Faculty, staff, and students had a short amount of time to pivot all courses by using blended learning through online, hybrid, or hyflex (dual delivery mode) methods of instruction. In addition, the pandemic affected student learning and engagement, including student grades, self-confidence levels, and social, mental, and emotional health.

Problem and Purpose Overview

This case study examined what students answered as to how they felt about their success and ease with their learning outcomes in on-ground, online, virtual, and hybrid learning contexts. The college's option to divert from on-ground teaching to alternate virtual learning platforms was evaluated from both stakeholders' perspectives. The shift came because the college attempted to stop the COVID-19 infection from spreading.

This case study examined students' levels of success and ease with achieved learning outcomes related to on-ground and online or virtual learning environments. This study recruited students and faculty from one Mid-Missouri community college to complete a survey. Participants took part in an interview to obtain their perspectives related to the decision of the college to move from on-ground learning to alternative teaching methods, which included online, hybrid (or hyflex), and web conferencing. This choice was made in response to the elevated and growing risk that the COVID-19 pandemic posed. The rapidly rising number of COVID-19 cases, the possible pressure on healthcare resources, and the top priority for public health and safety drove the decision to take this step. Due to these factors, it became critical to implement policies limiting the virus's spread, safeguarding vulnerable populations, and easing the strain on healthcare systems. A common goal to safeguard individuals and communities from the pandemic's potentially detrimental health impacts and economic disruptions influenced the choice. Before the pivot, students had regular access to their teachers—accessible lines of communication and interaction. Students faced diminishing support when they pivoted to post-pandemic online or blended learning environments. Some students believed flexibility of access was an essential aspect of blended learning; others claimed it had

diminished their engagement with their teachers and peers (Bouilheres et al., 2020). In the context of the pivot, it is essential to note that many students had little to no access to technology, which posed a significant barrier. This situation aligned with the focus of the literature reviewed in this study, which directly addresses the impact of the COVID-19 pandemic.

The literature examined the impact on higher education classes that shifted from traditional face-to-face instruction to a blended learning environment due to the COVID-19 pandemic. The articles referenced in the review were accessed beginning in the year 2020. The literature review was designed to enhance the study's purpose. The literature acquired may help substantiate educators' theories about their students' educational well-being and success in blended learning classrooms. The review will compare, contrast, and analyze the cited and reviewed literature information.

Research Questions and Hypotheses

The following research questions guided the study:

- 1. What are the opinions of faculty regarding their ability to adapt to an online learning environment from an on-ground or hybrid modality?
- 2. What are the opinions of faculty regarding their ability to adapt to the online learning environment to ensure student success?
- 3. What are the opinions of students regarding the move from on-ground and hybrid modality to online learning?
- 4. What are the opinions of students regarding their success in the online learning environment?

5. What modality of courses did returning students prefer to take when they returned for the fall 2020 semester?

Research Design

Thematic analysis was an essential component in this study, as it is a widely used method that focuses on identifying data and reporting patterns or themes within the data. Based on their perspective, Sandelowski and Barroso (2003) proposed that study outcomes are visualized along a continuum that indicates the extent of data transformation throughout the analytical process, from initial description to final interpretation. This study's research is a good fit for qualitative thematic analysis since it aims to develop many levels of understanding through the interpretive process. The thematic qualitative process is a systematic approach that allows researchers to compare data collected through surveys, interviews, or focus groups. In the current study, data collection employed a combination of commonly used Likert-scale questions, open-ended online surveys, and structured interviews. These techniques were utilized to gather information from a voluntary sample of instructors, focusing on grounded theory. Any current tools did not cover the questions or groups under research.

The design of the research for this purpose is a qualitative approach. As a result, a unique survey instrument was developed and tested for validity and reliability. The student online survey, which had 15 questions and an informed consent page (see Appendix B), was emailed to students, asking them to participate in the survey during the Spring of 2023 semester. A list of students who were attending the institution and were enrolled during the spring 2020 semester was obtained from the college's Institutional Research Department. A second survey was sent to all part-time and full-time instructors,

asking them to participate. The survey consisted of a 13-question Likert scale survey and one open-ended question inquiring if they could be interviewed in person later.

Participants were asked eight open-ended questions in semi-structured interviews; the order in which the questions were asked changed depending on the answers (see Appendix B). The two separate surveys allowed for a comparison of replies. The open-ended interview enabled the discovery of common themes and items. Maxwell (2013) recommended against using survey questions as "a mechanical version of the research questions" (p. 101).

The findings from the study could contribute to the research survey results from student and faculty interview responses. Future postsecondary students may participate in online or virtual courses or opt for seated on-ground courses when faced with a natural disaster or global pandemic. Participants in the study at the research site were current employees, instructors, and students at the college in 2020. The researcher, the division chair for the college's education departments, humanities, social sciences, criminal justice, and early childhood development, may have also served as an instructor for some survey participants. The survey results are kept anonymous by utilizing *Qualtrics*, a service provided by Lindenwood University, and *Survey Monkey*. The researcher interviewed the faculty members, using *Zoom* video conferencing's closed captioning feature to capture and edit the transcript for the interview.

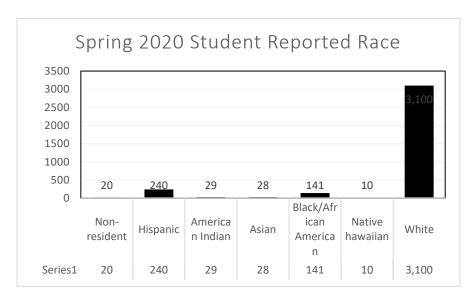
Population and Sample

The community in which the survey was collected had a population of approximately 21,500 people. There is a diverse population of races, which includes white, Hispanic, Latino, Asian, and African Americans. The community includes

residents with various levels of education and boasts various manufacturing facilities, including automotive parts, industrial equipment, and consumer goods. Agriculture is a large part of the economy including corn, soybeans, wheat, and livestock. An accredited school district and a college both serve as significant employment centers. Additionally, there are various retail shops and restaurants in the area.

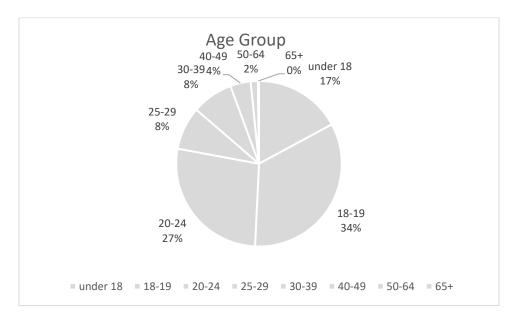
The demographics of the sampled community college population in the spring of 2020 were comprised of a total of 3,715 students. This total included high school students enrolled as dual credit students. The female-to-male ratio was 2:1, or 2,445 female students and 1,269 males enrolled. Of the 3,715, 20 were non-resident aliens, 240 were Hispanic, 29 were American Indian, 28 were Asian, 141 were Black/African American, 10 were Native Hawaiian, and 3,100 were White.

Table 1
Spring 2020 Enrollment by Race



The majority of students attending were in the 18-19-year-old range.





During the Spring of 2020, 37,502 credit hours were offered, with a mean of 9.55 enrolled hours per student. 1,976 students were enrolled as full-time students, and 1,952 were enrolled as part-time students. Of those students, 1,506 were students enrolled as 100% online students, 1,115 were enrolled as on-ground students, and 1,307 were enrolled in some online and some on-ground. A sample of eight faculty members and 10 students was randomly picked from a list of the college's current students and students. A student enrolled full-time during the spring of 2020 was selected as well as instructors who taught an on-ground course during the spring of 2020 who then moved to online instruction. The researcher selected the potential instructor participants using a random number generator. The participants were randomly selected so that every member of the college population had an equal chance to be selected (Fraenkel et al., 2019, pp. 94-95).

Site

The central location of this community includes a railroad train station and is a hub for other transportation routes. The city also hosts the Missouri State Fair, a major tourist attraction that plays a role in the economy. The Mid-Missouri Community College surveyed serves students from 14 counties and boasts areas of study that include Agriculture, Arts & Communication, Business & Computers, Health Sciences, Education & Human Services, Industrial Technology, and STEM programs. The college articulates credit with 16 four-year partner institutions, including five men's, five women's, and four co-ed sports. The mid-Missouri community college has on-campus student housing and includes satellite campuses in five other counties. Additionally, the community college includes fine and performing arts theatre, vocal music, and instrumental programs.

Instrumentation

Three separate tools were developed to collect data for this study. The survey statements were developed by the primary researcher and were influenced by the work of Holt and Nielson (2019), Kaufmann and Tatum (2018), Jereb et al. (2019), and Hwang et al. (2020). The qualitative, open-ended instructor interview and the surveys for instructors and students provided a robust data triangulation and a thorough grasp of the outcomes (Creswell & Creswell, 2018). The interview questions for instructors were developed by the primary researcher and were informed by the work of Aljawarneh (2019), Conklin et al. (2019), Depaepe et al. (2019), and Dea-Ayuela et al. (2020). As mentioned above, the researcher relied on Maxwell's (2013) recommendation against using survey questions as "a mechanical version of the research questions" (Maxwell, 2020, p. 101) to create the surveys and interview questions. A survey was conducted via

Survey Monkey to gather feedback from students at a Mid-Missouri Community College who transitioned from on-ground to online classes during the Spring 2020 semester. The survey included 15 questions, and the researcher emailed them to eligible students enrolled at the institution. Questions covered class modality preferences, reasons for modality choices, reactions to the switch, success measurement, instructor communication, support, assignment leniency, comfort with the switch, meaningful learning activities, organized learning environments, engagement tools, relationship building, and academic performance changes. The survey aimed to understand how students transitioned from on-ground to online instruction.

An online survey using *Qualtrics*, with seven questions, was emailed to both full-time and part-time instructors at Mid-Missouri Community College. The survey focused on their roles during the Spring 2020 semester, the impact of the switch from on-ground to online instruction, and their willingness to participate in interviews. Instructors were asked to identify their role, recall the number of courses they taught during Spring 2020, specify the modalities used at the start of the term, describe the initial format of their course, detail any adjustments made due to the switch, specify the new modality adopted, and indicate their openness to in-person or video conference interviews. The survey aimed to gather insights about instructors' experiences and adaptations during the transition to online instruction in Spring 2020. The purpose of the in-person or video conference interview questions was to delve deeper into the responses given in the survey. The interview questions for the instructors were developed to encourage authentic responses that would allow for answers to be described further, which would not have been gleaned from the survey answers (Maxwell, 2013).

Data Collection

The researcher obtained permission from Lindenwood University IRB and approval from the Mid-Missouri Community College site. Upon both approvals, the researcher communicated with the Academic Dean to begin sending out the surveys and start the collection of data. The research was conducted at a Mid-Missouri community college with the use of Survey Monkey web-based questionnaires for students in an email, and *Qualtrics* software for instructors (see Appendix B). The Face to Face interviews of instructors were completed by the researcher using Zoom to capture the audio and video, as well as closed captions of the interview. A second copy of all Qualtrics, Zoom, and Survey Monkey data was kept by the researcher on an external hard drive and was stored in the cloud and backed up externally. The accounts were password protected and only the researcher had access. The results of the dissertation study will be published through the Lindenwood Library. The participants were anonymous so that every member of the college population had an equal chance to be selected (Fraenkel, et al., 2019, p. 94-95). Students and instructors were sent an email with a recruitment letter and a letter of participation (survey). Instructors gave consent in question 7 of the survey to be interviewed. They were later sent the letter of participation (interview). After all data were collected, the researcher collected and organized the student and teacher surveys and data, according to the research questions.

Data Analysis

The researcher arranged the collected data according to the related study question.

Instructor Survey

RO 1 & 2: The school's academic dean received an email from the researcher inviting instructors to participate in the study. A survey link to the *Qualtrics* instructor survey was included in the email. Teachers who gave their consent completed the survey on the *Qualtrics* platform run by Lindenwood University. This platform provided data storage with security and secrecy. The survey information was automatically retrieved by *Qualtrics* then examined by the researcher. The researcher reviewed, highlighted, combined like responses, reread, and built themes to find themes and commonalities to evaluate the teacher survey data effectively. The themes were then created by the researcher by combining all of the highlighted terms, or codes (Burkholder et al., 2020). After examining the supporting evidence for each topic, the researcher concluded that each was valid. The replies to the *Qualtrics* teacher survey were examined and summarized (see Appendix X). Instructors agreeing to participate in the interview process were contacted and an interview time was agreed upon. The researcher interviewed each instructor and edited the closed captioning transcription from the Zoom recording. The researcher reviewed, highlighted, combined like responses, reread, and built themes to find commonalities and themes in order to evaluate the instructor data effectively. The themes were then created by the researcher by combining all of the highlighted terms, or codes (Burkholder et al., 2020). Again, after examining the supporting evidence for each topic, the researcher concluded that each was valid. The replies to the *Qualtrics* teacher survey were examined and summarized (see Appendix X).

Student Survey

RQ 3, 4, & 5: The researcher obtained a list of students who met the criteria of having been enrolled during the Spring of 2020 and were currently enrolled in the Spring 2023 semester. The researcher sent a recruitment survey inviting students to participate in the study. A survey link to the *Survey Monkey* student survey was included in the email. The researcher reviewed, highlighted, combined like responses, reread, and built themes to find commonalties and themes in order to evaluate the student data effectively. The themes were then created by the researcher by combining all of the highlighted terms, or codes (Burkholder et al., 2020).

Ethical Considerations

Providing confidentiality for all participants is of utmost importance. When doing qualitative research, it is equally crucial to establish and keep the study participants' confidence (Fraenkel et al., 2015). The participants in this research will remain anonymous, and answers were kept confidential through the use of *Qualtrics*, *Survey Monkey*, and *Zoom* programs. The researcher did not share any of the participants' answers or collected results so as not to share data that would be considered confidential. Personal identities, such as gender, age, or position, were not divulged. To mitigate risks in the quantitative component, the surveys were distributed to a broad range of anonymous participants, without specific restrictions on class, team, or demographics. The researcher removed unnecessary demographic questions and used a broad scale or range for identifiers such as age.

Summary

This study examined how a worldwide pandemic impacted student learning in oncampus programs that transitioned to online, blended learning classes at a Mid-Missouri
community college. This case study aimed to look at how successful students are and
how easy it is to learn in both traditional and online or virtual learning contexts. In this
study, students and faculty from a Mid-Missouri community college were recruited to
complete a survey and participate in an interview in order to obtain their perspectives on
the college's decision to shift from on-ground learning to alternative teaching methods
such as online, hybrid (or hyflex), and web conferencing.

The research for this paper was designed using a qualitative approach. The primary researcher created the interview questions for teachers, drawing on the work of Aljawarneh (2019), Conklin et al. (2019), Depaepe et al. (2019), and Dea-Ayuela et al. (2020). A random sample of 325 students and 10 faculty members were chosen from a list of current students and faculty members at the college. A full-time student enrolled in the spring of 2020, and instructors who had previously taught on-site courses before converting to online instruction were chosen. A third-party website used a random number generator to identify possible participants. To gather data for this study, two distinct tools were created.

Chapter Four: Results

This qualitative study examined students' levels of success and ease with achieving learning outcomes related to on-ground, online, virtual, and blended learning environments. The researcher investigated students' and instructors' survey results and interviews to find differences, similarities, correlations, and reoccurring themes in stress levels associated with the changes, as well as levels of progress in their studies and academic self-efficacy. The following research questions guided the study:

- 1. What are faculty opinions regarding their ability to adapt to an online learning environment from an on-ground or hybrid modality?
- 2. What are faculty opinions regarding their ability to adapt to the online learning environment to ensure student success?
- 3. What are students' opinions regarding the move from on-ground and hybrid modality to online learning?
- 4. What are students' opinions regarding their success in the online learning environment?
- 5. What modality of courses did returning students prefer to take when they returned for the fall 2020 semester?

This chapter presents the results from executing the data collection and data analysis procedures described in Chapter Three. The following sections of this chapter are a description of the demographic characteristics of the study participants. This chapter then describes the data analysis procedure applied to the interview data and open-ended questionnaire data. A more detailed presentation of the study findings follows, with the findings organized by research questions. A summary of the findings concludes this

chapter. This preparation may involve incorporating elements of blended learning to create a more resilient and adaptable educational framework.

Participants

Student and faculty participants were from one Mid-Missouri community college. Thirty-one faculty participants completed the questionnaire, and eight were selected for the one-on-one, semi-structured interview. Twenty-five students completed the student questionnaire.

Data Analysis

The faculty interview data and open-ended student questionnaire items were analyzed inductively and thematically. The data was read and reread in the first step of the analysis to gain familiarity with it. The purpose of this step was to understand the contents of the data as a whole to begin to identify patterns of meaning within and across individual participants. This step involved taking handwritten notes on recurring words, phrases, and concepts in the data to provide a foundation for code creation in the following analysis step. The second step of the analysis was the formation of initial codes. The first step in this process involved segmenting the information from the faculty interviews and the free-form student questionnaire replies into short passages, individual phrases, or sets of related phrases that each had a distinct meaning related to answering a research question. The information gathered from the faculty interviews in this study was pertinent to answering the first three research questions, and the information gathered from the open-ended student questionnaire was pertinent to answering research questions four and five. The following quote from student participant S1 is an example of a pertinent data excerpt: "Yes, I felt supported by my professors." Overall, 266 relevant

data excerpts were identified across the data sources, including 56 relevant data excerpts across the eight faculty interviews and 210 relevant data excerpts across the 25 student questionnaires.

The relevant data excerpts were then clustered into initial codes. Each data excerpt was assigned an initial code, and the code was labeled with a brief, descriptive phrase to summarize the meaning of the data assigned to it. For example, the previously quoted excerpt from student S1 was assigned to an initial code labeled "felt supported by instructors." When different data excerpts had similar meanings, they were assigned to the same code. For example, the student S3 stated of faculty during online learning, "I felt supported and empathized with." This excerpt had a similar meaning to the excerpts previously quoted from S1, so it was assigned to the same initial code. Overall, the 266 relevant data excerpts were assigned to 34 codes, including 12 codes for the faculty interview data and 22 codes for the open-ended student questionnaire data.

The next data analysis step was grouping the original codes for comparable and related items to identify themes. The purpose of grouping similar and related initial codes was to narrow down the data into a smaller number of more general items, such as overall patterns of meaning that would represent the significant study findings. As an example of how themes were formed, one theme was formed by grouping faculty initial codes that were identified as related because they all indicated faculty perceptions of their ability to adapt to the switch from on-ground or hybrid learning to online learning. As a second example, a theme was formed from student initial codes identified as related because they all indicated student perceptions regarding their success in the online learning

environment. The 12 initial faculty codes were grouped to form two themes, and the 22 initial student codes were grouped to form three themes.

Presentation of Findings

This presentation of the findings in this study is organized by research question. Under the heading for each research question, the theme that emerged during data analysis to address that question is presented. To maintain the confidentiality of the eight faculty interview participants' identities, their real names are replaced in the following discussion with the alphanumeric codes F1 through F8. Student data was collected anonymously. Students are designated in the following discussion with the alphanumeric codes S1 through S25.

Research Question One

RQ1: What are the opinions of faculty regarding their ability to adapt to an online learning environment from an on-ground or hybrid modality? The theme that emerged during data analysis to address this question was:

Theme 1: Most Faculty Felt Adequately Prepared to Adapt. Seven of the faculty interview participants contributed data to this theme. The remaining faculty interview participant provided partially discrepant data. The finding indicated that almost all faculty interview participants felt adequately prepared to adapt their classes from onground or hybrid formats to an online learning environment. The participants indicated that they felt prepared because they received professional development (PD) to prepare them to adapt their classes.

Seven out of eight participants indicated that they felt prepared to adapt their classes to an online modality. F1 said of their level of preparation for adapting to teach

online, "I felt pretty confident." F2 indicated that a feeling of preparation based in prior experience of teaching online:

I'm not gonna say I saw it [COVID-19 shutdowns] coming, but I was pretty prepared because I teach on Facebook Live. I was used to it, and so I was used to the hardest part of doing that is seeing your own face and hearing your own voice. So, all I have to do is transition and figure out a few things on sharing exactly what I wanted on the screen with *Zoom*. But it was kind of not a big deal for me at all.

F4 also reported feeling prepared because of prior experience teaching online: "I felt very prepared. I had been teaching online for 10 years." F4 added that the class that needed the most preparation for the adaptation was one that they had not previously taught online: "There was one class, Chem 2, I never taught it online. And so that one took me most of the prep time." F4 emphasized that converting any class from on-ground to online required some preparation, but that they had still felt prepared for the adaptation: "My online class is not the same as my on-ground, in-person, and so this idea that you can turn it on[line] from Wednesday to Thursday is a little silly. But I was very comfortable and very prepared with transitioning." F5 stated that they felt, "Very prepared," to transition to the online learning environment, "Because all of our classes were already online enhanced," which F5 defined as meaning, "We had online components for all of our classes." F7 agreed with F5, saying, "It was already hybrid to start, so it was pretty easy to just switch lectures to be online only." F8 also described their level of preparation for online adaptation as high:

They didn't have the sorts of supports in place that we do.

Most of our classes were ready to go because of the way [the college] has set their design up for courses. And in fact, we had other institutions reaching out to us, asking to use our content in their classes, because they were kind of desperate.

F3 was the only participant who provided partially discrepant data indicating that on an emotional level (as opposed to a practical level), they did not feel prepared. F3 explained, "Emotionally, I did not feel prepared. Emotionally I thought it was gonna be overwhelming, and I wasn't gonna be able to do a job, and my students were gonna get lost." However, F3's data was only partially discrepant because they added that on a practical level, they found that they were prepared: "We got some guidelines on what to do. I pulled it out, I printed it, and I was like, I've done all of that. So, although I didn't feel prepared, I was prepared." Thus, almost all participants reported that they felt prepared, and all participants reported that on a practical level, they were prepared for the transition from on-ground or hybrid modalities to an online learning environment at the beginning of the COVID-19 shutdown.

A factor that contributed to participants' preparation for the adaptation of their courses for the online learning environment, other than their previous experience of teaching online, was the PD they received for teaching online. F4 said of PD for converting courses to an online modality that it was offered but not needed: "I was offered it, but I have a master's degree in distance education. So again, I felt comfortable." F5 said the PD was offered before it was needed: "Yes, but that was before COVID happened." F7 said of PD, "We've had the different ways that you can use Canvas for that time period. So, I had previously had that training, so I would say yes,

that did help." F8 said, "I created the professional development," to prepare other faculty to teach online. Thus, PD and previous experience of online teaching prepared the faculty interview participants to adapt their classes to the online learning environment.

Research Question Two

RQ2: What are the opinions of faculty regarding their ability to adapt to the online learning environment to ensure student success? The theme that emerged during data analysis to address this question was:

Theme 1: Faculty Were Able to Promote Student Success Effectively by

Monitoring Grades. All eight faculty interview participants contributed data to this
theme. The finding indicated that one of the ways in which faculty were able to promote
student success effectively was by monitoring student grades and test scores. Some
participants further indicated that they were lenient in their grading during the shutdown.
When participants observed that a student was not participating in class, was chronically
absent, or was underperforming in their assessments, they would reach out to that student
personally via *Zoom*, phone, or email to check in. This individualized outreach was a
further practice for ensuring student success.

All faculty interview participants indicated that they monitored student grades and test scores to ensure student success in the online learning environment, and half of the participants indicated that they were lenient in their grading to enhance student success.

F4 stated how they monitored student success, "I have been measuring content success with a pre-posttest . . . [and] I use the Canvas Quiz tool to make daily homework assignments from a pool of questions . . . So, based upon their growth in that, I felt I was successful." F5 said, "I measured success with test scores and with overall grades." F8

said of students' overall success rates as measured by tests and grades, "I'm pretty sure the success rate in my class was fairly comparable . . . pretty close to success right now." F2 spoke of being lenient to ensure student success by throwing out exam questions that had not been specifically addressed in class or that students did poorly on, and by grading exams on a curve:

They would get asked all kinds of stuff that we hadn't even gone over. And so, I had to grade on a curve a little bit for the second half of the semester. The next semester, fall of 2020, what I would do is I would edit the exams that we're given on Proctorio. So, I would throw questions out that I hated, and I would make it my exam.

F3 spoke of grading more leniently to enhance student success and of giving students more latitude in turning in late work: "I felt like I was generous in allowing for more late work, for not grading quite as stringently as I typically did, because I felt like they were dealing with so much." F5 also reported being more lenient with assignment due dates:

I did have to become very flexible with the assignment dates because there were a lot of rural students who did not have the level of speed in their internet services that would have made it a little bit more easy for them. So, I was very flexible with my due dates.

F8 also provided flexibility with due dates to support student success: "Individually, as students approach me, I'm very flexible with due dates. I think they're important to have, but also just as important to meet students where they are." Thus, the participants monitored grades and test scores to ensure student success, and some of them also graded more leniently or provided flexibility on due dates to enhance student success.

Theme 2: Faculty Were Able to Maintain Personal Communications. When seven out of eight of the faculty interview participants' monitoring of student test scores and grades indicated that a student was not succeeding, they would work to ensure that student's success by reaching out to that student individually through *Zoom*, phone, or email to check in, assess needs, and offer support. F1 explained that when they did not see or hear from a student, or when the student was not succeeding on assessments, they would follow up with the student by email to check in:

If I don't hear from them, I email them and go, hey, what's going on? That's kind of how I measure it is that when you couldn't see them in class, and then they were hiding their faces, [or] I would see that somebody had dropped off on staying up with their assignments. So, I had to email and go, okay, what's going on?

F3 stated that when they had concerns about a student because of lapses in assessment scores, "I picked up the phone and I called them regularly. Like I would just call them out of the blue . . . I think that helped them know that I was there to help them." F5 conducted regular phone and email check-ins with students: "They were all good about calling and having phone conversations with me and they were sitting at their computer, or just through email." F7 encouraged students to join them in regular, individual videoconferences: "I did encourage one-on-one zoom sessions to help kind of lessen the gap of switching [to the online learning environment]." F8 also engaged students in one-on-one videoconferences to help ensure their success: "Definitely maintaining those conferences through *Zoom*. And then the way that we could measure whether or not the conferences were successful is the success on the final draft," of any one of the three

papers that were due in the class. Thus, the faculty interview participants perceived themselves as adequately able to ensure student success by monitoring grades and test scores and by communicating with students individually through videoconference, phone, and email.

Research Question Three

RQ3: What are the opinions of students regarding the move from on-ground and hybrid modality to online learning? The theme that emerged during data analysis to address this question was:

Theme 1: Most Students Felt Comfortable with the Switch to Online

Learning. Most student participants reported that they felt comfortable with the move

from on-ground and hybrid modalities to online learning, although some students

provided discrepant data on this point. Students indicated that they felt comfortable in

part because they felt supported by their instructors, because their instructors

communicated well, and because their instructors provided an organized online learning

environment, although a small minority of student participants provided discrepant data

on each of these points.

Nineteen student participants indicated that they felt comfortable with the move to an online learning environment. S1 stated, "I felt comfortable because I felt comfortable asking my professors questions and confident that they would respond as fast as they could." S2 described feeling worried at first but reported feeling comfortable after observing that instructors were handling the change competently: "I was certainly worried at first that the change would be difficult, but after seeing my instructors had fairly thoroughly planned out their changes to the curriculum, I felt much better." S10

described the online format as comfortable because it was preferable for them: "Yes, it actually worked better for me. I was able to be home with my children and save money due to not having to travel to on campus classes." S17 liked being able to work at their own pace: "I did feel comfortable. I got to work at my own pace and ask questions when needed." S21 reported feeling comfortable because of previous experience with online classes: "Yes, but only because I had done online classes two years prior." Four student participants provided discrepant data indicating that they did not feel comfortable with the switch to online classes. S25's response indicated the importance of instructor support, as the reason for their lack of comfort was their experience of a lack of instructor support: "No, no instructor support." S18 indicated a personal preference for an onground modality: "No, I didn't and still don't do well with online classes, so it was a very hard switch." S7 indicated a lack of comfort with the required technology: "No because then you had to learn Zoom and you had to learn all these online things that you weren't used to." Students' reasons for their reported comfort or lack of comfort were therefore divergent and included teacher support (or lack thereof), personal preference for an online or on-ground learning environment, and prior experience of online learning or a lack of familiarity with the necessary technology.

Theme 2: Most Students Felt Supported by Their Instructors. Twenty-one of the student participants indicated that they felt supported by their instructors during and after the move to an online learning environment. S1 felt supported because they were able to get help when they needed it:

Yes, I felt supported by my professors. I met with my business professor a couple of times over *Zoom* to ask questions about a project and met weekly as a class

with one of education classes. These helped me feel comfortable asking questions and gaining guidance.

S4 wrote enthusiastically of their instructor's support: "Yes, my instructor was amazing and kept the relationship that we had and was very helpful in my transition." Like S1, S8 wrote of feeling supported because of being able to meet with professors remotely: "Yes: I even met with instructors through Zoom. They were empathetic." S11 responded that they felt supported because their instructors were responsive: "Yes, I had great instructors who were there to answer any questions we had." S15 corroborated S11's response, describing responsive instructors: "I do feel the instructors have always been supportive and available when I reached out." S17 associated an instructor's supportiveness with flexibility regarding a due date: "Yes, because they knew it was an unexpected shock. When it first shut down, I believe on one project that was due right when it happened the class got an extension." Two participants provided discrepant data indicating that they did not feel supported by their instructors. S25 stated, "No, you basically taught yourself, no communication from instructors." S19 answered the question of whether they felt supported by stating only, "No." Students therefore associated instructor supportiveness with communication—particularly with responsiveness to student questions—and instructor flexibility, as with due dates.

Eighteen student participants reported that their instructors communicated well during and after the move to an online learning environment. S2 stated, "I never felt like I was waiting for information or confused on what was expected from me." S3 responded, "Many classes still required to meet via *Zoom* during this time, so expectations were shared during that time. Others sent emails and posted announcements to share their

expectations. My instructors communicated very well." S8 wrote, "All instructors were easy to reach out to and ask questions." S10 answered, "My instructors did a great job!" and S16 responded of their instructors, "I feel they communicated well." S20 indicated that the changes associated with the move to online learning were not overly disruptive: "I liked the switch. All the homework was online anyway, so the only thing that changed was we read the PowerPoint ourselves and took test online." S23 reported, "My instructors were awesome, just the communication was delayed because of the pandemic but overall, we accomplished everything that was required." Only two participants provided discrepant data indicating that they did not perceive their instructors as communicating well. S14 indicated that the move to online was challenging for instructors as well as students, writing of whether their instructors communicated well, "No. With that being said, no one could have completely prepared for what happened and so everyone struggled, not only the students." S21 provided a similar response, saying of how effectively instructors communicated that it was, "Not well, but it was completely unfamiliar for them as well, so we all gave them grace." Students therefore appeared to associate effective instructor communication with clear, frequent communication of expectations via the channels that were available in the online learning environment, including email and posting resources online. Students also continued to emphasize in their responses the importance to them of their instructors being readily available to them when they had questions.

Twenty-three student participants indicated that their instructors provided an organized online learning environment. S1 indicated that their instructors had provided an organized online learning environment because, "The modules and expectations were still

posted weekly on Canvas. We knew what assignments were due when based on this. If I remember correctly, I also received emails from them." S5 indicated that the online learning environment was organized because, "Modules were set up week by week with assignments and due dates." For S8, the learning environment appeared organized because, "Weekly assignments were easy to identify and complete." S9 reported that instructors were organized because, "They would often send a weekly announcement with the schedule for the week and all assignments and due dates." S15 described the online learning environment as, "Very organized, had the whole class planned to the minute to help with the flow." S21 provided partially discrepant data indicating that the instructor did not provide an organized online learning environment initially, but that it became more organized over time: "Not at first, but they gradually became more and more intentional and involved." Students therefore associated an organized online learning environment with clear, advance, written notice of due dates, assignments, and lesson plans.

Research Question Four

RQ4: What are the opinions of students regarding their success in the online learning environment? The theme that emerged during data analysis to address this question was:

Theme 1: Most Students Were Able to Maintain or Improve Their Grades in the Online Learning Environment. A large majority of the student participants reported that their grades stayed the same after the move from an on-ground or hybrid modality to an online learning environment. Only a small minority of the student participants reported that their grades declined. A majority of the student participants indicated that

their instructors were lenient in grading and provided flexibility in deadlines during and after the move to online, although a minority of student participants provided discrepant data indicating that they did not experience leniency from their instructors.

Twenty-two of the student participants indicated that their grades either stayed the same or improved after the move to an online learning environment, an outcome that the students associated with success in that environment. S1 stated, "My grades stayed the same." S4 cited an instructor's support as instrumental: "My grades stayed constant. I am a good student, but with my instructor's help it allowed me to continue my success in the classroom, and helped me be prepared to transfer to my university." S5 described consistency in all classes but one, in which they experienced improvement: "My grades stayed the same for all classes but one and in that class it improved." S9 reported improvement, but potentially due to cheating: "My grades improved but only because I was able to use books/other resources I wouldn't have been able to use in person." S11 reported succeeding despite having to work harder: "I feel they [my grades] stayed the same. I struggled a bit more in some classes, but I pushed through." S13 reported that their grades, "Stayed the same." S15 cited leniency on the part of the instructor as the reason for improvement: "My grades were actually better then, but I believe it was because the class was not as difficult." S21 responded, "My grades remained the same," and S23 reported that their grades, "Stayed the same." Like S11, S22 reported having to work harder, but as succeeding in keeping their grades constant: "I struggled slightly, but only because my 40-hour workweek became a 60-hour workweek. Add homework to that, and I did what I could and maintained my grades, just with more stress." \$25, who reported a lack of support and communication from instructors and discomfort with the

transition to online learning, nevertheless reported that their grades, "Stayed the same."

Only two participants provided discrepant data indicating that their grades declined. S14 reported a systemic lack of support as contributing to the decline in their grades:

Decline. I was a new student and did not have much guidance on my education journey. My family is very supportive but learning how to navigate my classes and the educational system completely online was difficult. The instructors and career guides and success coaches either did not know how to help or just allowed the students to figure it out for themselves. I suffered making the adjustments and my grades were affected in a negative for the classes taken during lockdown.

S19 also reported that their grades, "Declined," but without explanation. Thus, for those students who provided explanations of how the move to an online learning environment impacted their grades, most described a need for adaptation on their part, which they were able to make successfully enough that they maintained or improved their grades with some additional effort.

Eighteen student participants reported that their instructors assisted them in adapting to and succeeding in the online learning environment by being lenient. S1 responded, "Yes, leniency was given. Assignments were shortened or extended time given." S8 wrote, "Most [instructors] showed understanding with late assignments." S9 also described leniency with late assignments: "Yes they did. They would be understanding and forgiving if I missed an assignment just because, for me personally, I had never taken an online class and was still struggling to get a grip on Canvas." S18 responded that some assignments were removed from the syllabus: "I think yes for the most part. Some instructors took out assignments or made them optional." S21 reported

that instructors gave students extra preparation for exams: "They gave exam blueprints and study guides." However, five participants provided discrepant data indicating that instructors were not lenient. For example, S11 wrote, "I felt their leniency did not change. If there was a deadline, there were no exceptions." S15 corroborated S11's response, stating, "Not sure there was any leniency that occurred. We were expected to complete the work just the same." S25 stated, "No, deadlines stayed the same." Students therefore associated instructor leniency with deadline extensions, cutting assignments from the syllabus, and extra test preparation, and all students who experienced any form of leniency described it as a valued form of instructor support.

Research Question Five

RQ5: What modality of courses did returning students prefer to take when they returned for the fall 2020 semester? The theme that emerged during data analysis to address this question was:

Theme 1: Most Students Preferred In-Person/Hybrid Modalities.

A large majority of student participants expressed a preference either for onground (n=13) or hybrid (n=6) modalities. Student participants were asked on the student questionnaire to select in a closed-ended item which modality they preferred, and then to explain in an open-ended follow-up item why they preferred that modality. The two response categories "on-ground" and "hybrid" were often indistinguishable in the open-ended responses, so those two response categories have been combined in this discussion. The response counts have been carried over from the close-ended item results, which were also reported in Table 2 in this chapter. S1 stated why they preferred a class with an in-person element, "I honestly feel like I pay better attention and am much more engaged

in an in-person class. I also build better relationships with my professors and my peers." S2 described the on-ground classroom as an easier forum in which to maintain concentration: "Much easier for me to stay focused with less distractions in the classroom than at home online." S4 preferred hybrid learning with in-person instruction and online assignments: "I like the in-person instruction and ability to get to know your professor and classmates. Then with the online assignments helped me keep a good road map throughout the course." S8 liked the instantaneous response time associated with inperson learning: "Teacher is present and able to answer questions instantly; lectures help to introduce the information. I'd rather listen live than on a computer." S12 also liked the rapid response and back-and-forth associated with in-person learning: "I am able to discuss questions I have about the topic more in-depth and at that point in time rather than waiting for an email." S22 agreed with S8 and S12, responding, "I find it easier to ask questions from the teacher as the class is being taught, rather than in online classes where I have to email the teacher and await a response." S16 found it harder to stay engaged in an online setting: "I would rather have been in person versus online. Online it was harder to be engaged and properly learn everything I needed to." S18 found it easier to keep themselves engaged and accountable in an in-person class: "I need and like the accountability of going to class. It helps me stay on track with class assignments." Thus, for participants who preferred on-ground or hybrid learning, the preference for an inperson component was associated with a desire for increased engagement with the instructor and classmates, instantaneous turnaround on student questions, and freedom from the distractions associated with learning from home.

Theme 2: Most Students Preferred Online Modalities.

Six participants provided discrepant data expressing a preference for learning online. S5 liked the scheduling flexibility associated with online learning:

I prefer online learning because of the flexibility that comes with it. To an extent,

you can work on things at your own pace and for me, it was important that I was employed. Completing class online allowed me to maintain a full-time job.

S10 also enjoyed the scheduling flexibility of online learning: "Online works great for me. It allows me to still work and works with my kids' schedules." S11 liked not having to commute to the campus: "I live in [redacted], MO, which is 50 minutes away from campus. Online classes helped with a lot of gas money." Unlike other participants who found in-person learning more engaging and learning from home more distracting, S13 had the opposite experience: "[In online learning] I can do the work on my own time and have an easier time focusing by myself instead of in a classroom." S20 considered attendance in an on-ground classroom gratuitous for certain classes: "For prerequisites I liked doing online classes because I was tired of going to class to be read a PowerPoint when I could read it at home alone. All the work was done online at home anyway."

Thus, students who preferred the online modality enjoyed the scheduling flexibility, the freedom to learn at their own pace from home, and the freedom from an unnecessary

Summary

commute to campus.

Five research questions were used to guide this study. RQ1 was: What are faculty opinions regarding their ability to adapt to an online learning environment from an onground or hybrid modality? The theme that emerged during data analysis to address this

question was most faculty felt adequately prepared to adapt. Seven of the faculty interview participants contributed data to this theme. The remaining faculty interview participants provided partially discrepant data. The finding indicated that almost all faculty interview participants felt adequately prepared to adapt their classes from onground or hybrid formats to an online learning environment. The participants indicated that they felt prepared because they received professional development (PD) to prepare them to adapt their classes.

RQ2 was: What are the opinions of faculty regarding their ability to adapt to the online learning environment to ensure student success? The theme that emerged during data analysis to address this question was: faculty were able to promote student success effectively by monitoring grades and maintaining personal communications. All eight faculty interview participants contributed data to this theme. The finding indicated that one of the ways in which faculty were able to promote student success effectively was by monitoring student grades and test scores. Some participants further indicated that they were lenient in their grading during the shutdown. When participants observed that a student was not participating in class, was chronically absent, or was underperforming in their assessments, they would reach out to that student personally via *Zoom*, phone, or email to check in. This individualized outreach was a further practice for ensuring student success.

RQ3 was: What are the opinions of students regarding the move from on-ground and hybrid modality to online learning? The theme that emerged during data analysis to address this question was: most students felt comfortable with the switch to online learning and supported by their instructors. Most student participants reported that they

felt comfortable with the move from on-ground and hybrid modalities to online learning, although some students provided discrepant data on this point. Students indicated that they felt comfortable in part because they felt supported by their instructors, because their instructors communicated well, and because their instructors provided an organized online learning environment, although a small minority of student participants provided discrepant data on each of these points.

RQ4 was: What are the opinions of students regarding their success in the online learning environment? The theme that emerged during data analysis to address this question was: most students were able to maintain or improve their grades in the online learning environment. A large majority of the student participants reported that their grades stayed the same after the move from an on-ground or hybrid modality to an online learning environment. Only a small minority of the student participants reported that their grades declined. A majority of the student participants indicated that their instructors were lenient in grading and provided flexibility in deadlines during and after the move to online, although a minority of student participants provided discrepant data indicating that they did not experience leniency from their instructors.

RQ5 was: What modality of courses did returning students prefer to take when they returned for the fall 2020 semester? The theme that emerged during data analysis to address this question was: most students preferred in-person or hybrid modalities. A large majority of student participants expressed a preference either for on-ground or hybrid modalities. About a third of student participants provided discrepant data indicating a preference for the online learning environment. Chapter Five includes detailed

discussion, interpretations, and conclusions based on these findings, as well as implications and recommendations.

Chapter Five: Conclusions and Implications

This research added to the existing research regarding the way teachers attributed the COVID-19 outbreak to instructional disruptions and declining student participation, substantially affecting education. Nevertheless, various teaching strategies were implemented to include student involvement. Because of the coronavirus outbreak, remote instructional learning became a necessity. It was challenging for teachers to provide students a continuous curriculum due to the closure of all non-essential operations, including colleges and universities. Instruction subsequently moved to a remote learning environment of online or hybrid/hyflex instruction. In addition, Chapter Five offers conclusions, proposals for additional research, and recommendations for further research.

Eight research questions for instructors and 15 research questions for students guided this qualitative study. The information gathered from the literature research plus student and instructor surveys and interview responses of instructors have been included in the results. The researcher used a qualitative survey to explore perspectives of students regarding the way they felt comfortable, successful, and supported when they switched from on-ground instruction to online or hybrid instruction. Based on the study's findings, conclusions are offered in this section. Student perspectives of how supported and successful they felt were revealed in the survey. Instructor perspectives of how adaptable they were and ready they were to switch to online or hybrid instruction was revealed in survey and the interview dialogue.

Research Questions

- 1. What are the opinions of faculty regarding their ability to adapt to an online learning environment from an on-ground or hybrid modality?
- 2. What are the opinions of faculty regarding their ability to adapt to the online learning environment to ensure student success?
- 3. What are the opinions of students regarding on-ground and hybrid modality to online learning?
- 4. What are the opinions of students regarding their success in the online learning environment?
- 5. What modality of courses did returning students prefer to take when they returned for the fall 2002 semester?

Findings

Five research questions guided this qualitative study. The results included data from student survey responses, instructor survey responses, instructor's answers to a voluntary interview, and the information presented in the literature review. The researcher examined the feelings of readiness among students at a Mid-Missouri Community College during the transition from in-person courses to online or hybrid learning environments in the spring of 2020. Furthermore, the researcher reviewed student survey data to assess how students felt supported by their instructors during the switch, if instructors communicated clear expectations and built relationships with students. Students were asked to report their success during the Spring 2020 semester, and if their grades improved, they stayed the same or declined. In addition, the researcher surveyed instructors at the Mid-Missouri Community College, and offered an in-person

interview to those willing to participate. The instructor interview questions included topics on professional development training specifically for the switch, preparedness of converting courses from on-ground to online, details of how they specifically converted their course(s), and the personal connections attempted to make with students.

A review of all the findings from the statistical analysis of data should be presented. This should occur in the same sequence as the findings were presented in Chapter Four. This information should be presented factually and in an organized narrative.

Research Question One.

What are the opinions of faculty regarding their ability to adapt to an online learning environment from an on-ground or hybrid modality? The researcher found the theme of faculty opinions were that they felt adequately prepared to adapt. Seven of the eight faculty contributed to the data collected, which provided partially discrepant data. The data revealed that most of the faculty interviewed felt adequately prepared. The participants felt they had received adequate training and professional development to switch from on-ground to online teaching environments. Seven out of eight felt prepared to adapt their classes online, with one feeling like they were not emotionally prepared, yet in the end, they were prepared to make the switch. All of the faculty had experience teaching online, and received PD for teaching online too. Essentially, previous experience and received professional development from the institution prepared the faculty to adapt to online learning environments.

Research Question Two.

What are the opinions of faculty regarding their ability to adapt to the online learning environment to ensure student success? The researcher identified a recurring theme in faculty opinions, indicating their ability to enhance student success through vigilant monitoring of student grades and maintaining personalized communication. All eight of the faculty members participated in contributing data for this question. The data indicated that faculty effectively monitored student success through grade and test score evaluations. Additionally, they promoted student success by directly contacting students who were not performing well or submitting assignments. Furthermore, faculty displayed flexibility in terms of due dates and grading, considering the impact of illnesses, internet connectivity issues, and the emotional stress experienced during the global shelter-in-place period. Faculty participants indicated their effectiveness in ensuring student success by engaging in communication when grades or test scores declined. They employed various communication methods, including emails, phone calls, and videoconferencing.

Research Question Three.

What are the opinions of students regarding on-ground and hybrid modality to online learning? The researcher identified a recurring theme in student opinions, indicating their comfort with switching to online learning and being supported by their instructors. Having implemented a proactive approach, instructors enhanced student success through vigilant monitoring of student grades and maintaining personalized communication. A majority of the student participants reported they felt comfortable with the move from on-ground to online and hybrid learning environments, however some students provided discrepant data on this point. Students reported they felt supported by

their instructors due to the communication efforts of the instructors and the online learning environments were well designed and organized. A small minority of the student participants provided discrepant data on each of these points. Nineteen students indicated they felt comfortable with the switch to the online learning environment. Four participants indicated they did not feel comfortable with the switch, and indicated reasons for the discrepancy included lack of instructor support, preference for on-ground instruction, lack of comfort with technology and no prior experience of online instruction.

Twenty-one students shared they felt supported by their instructors in the online learning environment. Students indicated their instructors were responsive, answered questions and made themselves available when they reached out. Two participants reported they did not feel supported by their instructors, citing they basically had to teach themselves and there was no communication from instructors. Students associated communication, or the lack thereof, with their instructors' support. Eighteen students reported their instructors communicated with them during the switch from on-ground to online. Two participants provided discrepant data and did not perceive their instructors communicated well. Again, students seemed to associate effective instructor communication with frequent communication of expectations, using the online learning environment. Students stated their instructors being available to them was highly important. Twenty-three students shared their instructors provided clear and organized learning environments with clear expectations. One student indicated their instructor's learning environment was not organized at first, but became more organized with time. Students associated an organized learning environment with clear directions, due dates, and instructions.

Research Question Four.

What are the opinions of students regarding their success in the online learning environment? The emergent theme from research question number five, is that most students were able to maintain or improve their grades in the online learning environment. A majority of students reported their grades stayed the same after they switched from the on-ground to online learning environment. A small minority reported their grades declined as a result of the switch. Many students reported their instructors were flexible with due dates and were lenient with grading assignments. Again, a small minority reported they did not experience any leniency. Twenty-two student participants indicated their grades stayed the same or improved after the switch, and attributed this as a success in the online learning environment transition. Two participants provided data that were discrepant, and indicated their grades declined. Most students whose grades declined provided reasons that they did not have the support at home or did not have enough time, due to working.

Eighteen student participants reported their instructors helped them with adapting to the new online learning environment and were successful. Most significantly, assignments were shortened, due dates were extended, and instructors gave leniency to those who were struggling. Some instructors removed assignments or made them optional, which allowed students more flexibility. Five participants reported discrepant data that instructors were not lenient and there were no exceptions. The deadlines were kept the same, and students reported they were to submit assignments on time. Students associated instructor leniency with extensions of due dates, removal of assignments from

the syllabus and any type of leniency from instructors was valued as support from the instructor.

Research Question Five

What modality of courses did returning students prefer to take when they returned for the fall 2020 semester? The theme that surfaced during the analysis of the data in response to this question was most students preferred in-person or hybrid modalities. Thirteen student participants preferred on-ground instruction, six were in favor of hybrid instructions. A significant portion of student participants favored either in-person or hybrid modalities. When answering the open-ended portion of this question, however, the on-ground and hybrid modalities were interchanged and were often indistinguishable. Approximately one-third of the students, however, provided conflicting data by indicating a preference for the online learning environment. Six participants provided discrepant data which included a preference for learning online and the flexibility it provided. Students who preferred the online learning environment appreciated the flexibility and freedom to learn on their own while not having to commute to campus.

Conclusions

This study's conclusions provide insights into faculty and student experiences and preferences during the transition from in-person to online and hybrid learning, shedding light on factors contributing to their success and challenges. The researcher was able to examine the faculty and student participants' experiences through a qualitative methodology. The combined findings from the faculty interviews, student survey, and faculty survey collectively provided valuable insights into the perspectives of both educators and students regarding their learning environments. These insights help in

comprehending the achievements and challenges associated with the shift from in-person to online instruction amidst the global pandemic. Therefore, the structure of this qualitative study was established to investigate six primary research inquiries using surveys and interviews. Chapter One introduced the research problem, a statement, and the rationale for the research. Chapter One included the questions included in the research to be used throughout the study. Lastly, the researcher provided an overview of the research constraints and the terminology employed throughout the qualitative investigation.

In Chapter Two, the researcher introduced a review of literature that included a history of distance education, current practices, and theories of student success and achievement. Furthermore, the study delved into the theoretical framework, examined the influence of COVID-19 on the educational system, and conducted a comprehensive investigation into perceived student success, student engagement, and the quality of instruction within the present blended learning environment.

Chapter Three included an overview of the methodology used in the study. The researcher created a qualitative survey for students enrolled in the Spring of 2020 at a Mid-Missouri Community College and a survey for instructors teaching during the Spring 2020. Additionally, a set of interview questions were created to ask of the instructors who taught during the Spring 2020 semester. The student survey, along with an invitation to partake, was delivered via email to students who were registered in the Spring of 2020 and remained enrolled in the Spring 2023 semester. The investigator sent the student survey, along with an invitation to participate, by email to students who had registered in the Spring of 2020 and were still enrolled in the Spring 2023 semester. The

investigator gave instructors the choice to provide their name and email for potential follow-up interviews. A total of 25 student surveys were received and a total of 31 faculty surveys were collected. Additionally, the researcher collected qualitative data from nine faculty members through an in-person interview.

Chapter Four provided a summary of the data collection process, the tools used, and the classroom observations employed for gathering data. The researcher collected, examined, and structured the outcomes of the survey and classroom observations in accordance with qualitative data analysis principles (Creswell & Creswell, 2018; Hatchet, 2002). The researcher carefully reviewed the survey data multiple times, identifying recurring patterns, shared elements, and distinctions, while also establishing codes and common concepts. Initially, there were twelve codes for faculty, which were then organized into two overarching themes, and 22 initial codes for students, grouped into three overarching themes. These common concepts were formed into the study's five overarching themes. The researcher applied the same methodology to analyze the faculty interview data, following these systematic steps to derive the meaningful themes.

Chapter Five summarized the research and its findings, presenting the conclusion, exploring implications, and putting forth recommendations for future research. Overall, the collection and reviewing of the research data and literature suggests that a majority of students and faculty at a Mid-Missouri Community College felt comfortable and prepared to make the switch from on-ground to online learning environments during the COVID-19 pandemic. Moreover, drawing from the insights derived from this research, students felt supported by their instructors, were able to maintain their grades, and felt comfortable with the switch from on-ground to online learning. In addition, faculty

expressed their readiness to transition their in-person courses to an online or hybrid learning environment, affirming their ability to effectively foster student success by maintaining open communication and vigilant grade monitoring.

Implications for Practice

There are several implications for practice, based on this research regarding online and hybrid learning environments. The first one is that institutions should provide training programs for instructors. By providing ongoing professional development, instructors can adequately acquire the skills needed to effectively teach in the online learning environment. Institutions that invest in such programs will ensure instructors are well prepared.

Another best-practice strategy is to promote effective communication strategies.

Again, providing faculty members with professional development on proper communication strategies to use with online students would help keep communication lines open. Training faculty to require clear expectations, respond promptly to students, and use updates like announcements or emails would enhance the student's learning experience.

A third strategy for best practices is flexible assessment and grading approaches. Students are not on equal playing ground, and neither are their learning styles.

Instructors could consider flexible approaches to grading and acknowledge the unique challenges and circumstances students face daily. The flexibility could be adjusted due dates, alternative assignments, or clear grading criteria.

A fourth strategy for consideration is students' and faculty's wellness and mental health. Institutions that provide resources for their students' well-being and mental health

recognize that there are unique stressors and challenges for students in an online learning environment. Mental health and wellness considerations are of paramount importance in online learning environments, especially in the context of the COVID-19 pandemic. Students in online courses experience increased levels of isolation, loneliness, stress, and anxiety and may experience issues with time management and burnout. By promoting a supportive and inclusive atmosphere, offering resources for stress management and wellbeing, and being attuned to the unique challenges students may encounter, institutions and instructors can contribute to their online learners' overall mental and emotional health. Incorporating these implications into practice can lead to more effective and student-centered online and hybrid learning experiences, benefiting learners and instructors.

Recommendations for Future Research

The findings from the study suggested several areas that would be beneficial for further research. The first area is the need and importance for professional development (PD). While this study found that faculty members who received professional development were better prepared for online learning, further research can delve deeper into the most effective training and support types. Professional development could help institutions tailor their professional development programs to enhance faculty readiness for online teaching. Kelly and Cherkowski (2017) noted professional development communities are useful frameworks for getting teachers to work together more deeply as professionals to develop better teaching techniques.

A second area that would be beneficial to research further is the importance of communication between students and instructors. The importance of instructor

communication in student success was evident in this study. Future research could focus on the specific communication strategies and practices that are most effective in online and hybrid learning environments and how they can be further optimized. Scott (2022) recommends giving students timely feedback on each assignment they were required to complete is essential.

The third research question was not addressed due to limitations, however, a third area that would be beneficial to review is the retention rates of online student learning environments. Further research can investigate the impact of online learning on student retention rates, exploring whether students are more or less likely to persist in online programs compared to in-person ones. According to a study by Diaz (2002), many students discontinue their online courses because they are too busy with work and family obligations to dedicate enough time to their coursework.

The long-term impacts of the pandemic on teachers and students may constitute a fourth research field. This study focused on the transition during the spring of 2020. Further research can examine the long-term effects of the COVID-19 pandemic on higher education, including changes in teaching modalities, faculty and student perceptions, and the evolution of best practices in online and hybrid learning.

Finally, a comparative study among multiple Mid-Missouri Community Colleges or universities would make a suitable study. Comparative studies can be conducted between different institutions or regions to understand variations in faculty and student experiences and preferences regarding online and hybrid learning. These studies can identify institutional and regional factors that influence the transition and its outcomes.

Overall, there are numerous opportunities for further research in online and hybrid learning due to the COVID-19 pandemic. The COVID-19 pandemic has accelerated online and hybrid learning adoption, making it an integral part of the education system. These studies can help institutions refine their approaches to online education and improve the experiences and outcomes for both faculty and students. The data generated from this study could serve as a valuable resource for educational leaders and instructors. Research guides decisions related to curriculum development, technological infrastructure, and investment in faculty training. In the long run, this research can help institutions adapt to the changing educational landscape, improve student retention rates, and provide a more inclusive and flexible learning environment.

Summary

In this qualitative study, five research questions were explored to gain insights into the experiences and perceptions of both faculty and students during the transition from in-person to online and hybrid learning environments in the Spring of 2020.

First, research question one identified that faculty members, for the most part, felt adequately prepared to transition to online learning. The majority of them had prior experience teaching online and had received professional development, which contributed to their readiness for the shift. Research question two acknowledged that faculty demonstrated a solid commitment to enhancing student success through vigilant monitoring of grades, personalized communication, and flexibility in due dates and grading. Students highly valued effective communication, and it played a significant role in their perceived support and success. Research question number three remained unanswered as it was not addressed in the study.

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Research question four documented that most students expressed comfort with the transition to online and hybrid learning environments, attributing their comfort to effective communication by instructors and well-organized online courses. A minority of students, however, felt uncomfortable with the transition, citing factors like a lack of instructor support or a preference for in-person instruction. Research question five inferred that most students reported maintaining or improving their grades during the transition to online learning. They attributed this success to instructor leniency, flexibility with due dates, and clear communication. However, a minority of students did experience grade declines, often due to external factors. Finally, research question six confirmed that most returning students preferred in-person or hybrid modalities for the fall 2020 semester. Some students favored online learning for its flexibility and the freedom to learn independently without commuting to campus.

In conclusion, the findings shed light on the preparedness of faculty and the crucial role they play in promoting student success in online learning environments. They also highlight the importance of effective communication, flexibility, and instructor support in facilitating student success. However, student preferences varied, with some valuing the convenience of online learning while others preferred in-person or hybrid modalities. The study also identified areas that needed to be addressed, emphasizing further research.

References

- Abdelmalak, M. M., & Parra, J. L. (2016). Expanding learning opportunities for graduate students with HyFlex course design. *International Journal of Online Pedagogy* and Course Design (IJOPCD), 6(4), 19-37. doi:10.4018/IJOPCD.2016100102
- Alamri, H.A., Watson, S., Watson, W. (2021). Learning technology models that support personalization within blended learning environments in higher education. *Tech Trends*, 65, 62-78. https://doi.org/10.1007/s11528-020-00530-3
- Aljawarneh, S. A. (2020). Reviewing and exploring innovative ubiquitous learning tools in higher education. *Journal of Computing in Higher Education*, (32), 57-73. https://doi.org/10.1007/s12528-019-09207-0
- Archibald, D. & Worsley, S. (2019). The father of distance learning. *TechTrends*, 63(2), 100-101. doi:10.1007/s11528-019-00373-7
- Aristovnik, A., Kerzic, D., Ravselj, D., Tomazevic, N., & Umek, L. (2020). Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability*, *12*, 2-34. doi: 10.3390/su12208438
- Barrot, J., Llenares, I. I., & del Rosario., L. S. (2021). Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. *Education and Information Technologies*, 26, 7321-7338. https://doi.org/10.1007/s10639-021-10589-x
- Bird, K., Castleman, B. L., & Lohner, G. (2022). Negative impacts from the shift to online learning during the COVID-19 crisis: Evidence from a statewide community college system. *Ed Working Paper No.* 20-299. Annenberg Institute at Brown University: https://doi.org/10.26300/gx68-rq13

- Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2020).

 Mapping research in student engagement and educational technology in higher education: a systematic evidence map. *International Journal of Educational Technology in Higher Education*, 17(2), 1-30. https://doi.org/10.1186/s41239-019-0176-8
- Bouilheres, F., Le, T. V. H., McDonald, S., Nkhoma, C., & Jandug-Montera, L. (2020).

 Defining student learning experience through blended learning. *Education and Information Technologies*, 25, 3049-2069. https://doi.org/10.1007/s10639-020-10100-y
- Brooks, D. C., Grajek, S., & Lang, L. (2020). *Institutional readiness to adopt fully remote learning*. Educ. Rev
- Burkholder, G., Cox, K., Crawford, L., & Hitchcock, J. (2020). Research design and methods: An applied guide for the scholar-practitioner. SAGE Publications.
- CDC. (2021). Colleges, universities, and higher learning.

 https://www.cdc.gov/coronavirus/2019-ncov/community/colleges-universities/index.html
- Cardona, M. (2021). Strategies for using American rescue plan funding to address the impact of lost instructional time. U.S. Department of Education. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2 F%2Fwww2.ed.gov%2Fdocuments%2Fcoronavirus%2Flost-instructional-time.pdf&clen=1782060&chunk=true
- Chiu, T. K. F. (2022). Applying the self-determination theory (SDT) to explain student engagement in online learning during the COVID-19 pandemic. *Journal of*

- Research on Technology in Education, 54,(1), 514-530. https://doi.org/10.1080/15391523.2021.1891998
- Commissiong, M. A. (2020). Student engagement, self-regulation, satisfaction, and success in online learning environments. [Doctoral dissertation, Walden University]. ScholarWorks
- Conklin, S., Trespalacios, J., & Lowenthal, P. (2019). Graduate students' perceptions of interactions in a blended synchronous learning environment. A case study. *The Quarterly Review of Distance Education*, 20(4), 45-59.
- Creating expectations. (n.d.). Lehigh university college of education.

 https://ed.lehigh.edu/center-for-promoting-research-to-practice/resources-for-teachers/class-wide-interventions/expectations
- Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.
- Creswell, J. W. (2013). Qualitative inquiry & research design: Choosing among five approaches (3rd ed). Sage Publications.
- Creswell, J. W. (2015). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed). Pearson Education.
- Diaz, D. P. 2002. Online drop rates revisited. *The Technology Source Archives*,

 May/June. University of North Carolina.

 http://www.technologysource.org/article/online_drop_rates_revisited/
- Driscoll, M. (2002). Blended learning: Let's get beyond the hype. E-Learning, 54, 1-3.

- Engzell, P., Frey, A., & Verhagen, M. D. (2020). Learning loss due to school closures during the COVID-10 pandemic. *PNAS*, *118*(17), 1-7. https://doi.org/10.1073/pnas.2022376118
- Fagan, A. (2020). What is metacognition? How does it help us think? Metacognitive strategies like self-reflection empower students for a lifetime. *Psychology Today*. https://www.psychologytoday.com/us/blog/the-moment-youth/202010/what-is-metacognition-how-does-it-help-us-think
- Flaherty, C. (2023, April 11). *How college students say they learn best*. Inside Higher Ed. https://www.insidehighered.com/news/2023/04/05/survey-how-college-students-say-they-learn-best
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2019). *How to design and evaluate* research in education (10th ed.). McGraw-Hill.
- Garcia & Weiss. (2020). COVID-19 and student performance, equity, and U.S. education policy: Lessons from pre-pandemic research to inform relief, recovery, and rebuiliding. Economic Policy Institute. epi.org/205622
- Garrison, D. R., Anderson, T., & Archer, W. (2009). Critical thinking, cognitive presence, and computer conferencing in distance education. *American Journal of Distance Education*, 15(1), 7-23. doi:10.1080/08923640109527071
- Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking and computer conferencing: A model and tool to assess cognitive presence. *American Journal of Distance Education*, 15(1), 7-23

- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2-3), 87-105.
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *Internet and Higher Education*, *7*, 95–105. https://doi.org/10.1016/j.iheduc.2004.02.001
- Garrison, D. R. (2009). An analysis and evaluation of audio teleconferencing to facilitate education at a distance. *The American Journal of Distance Education*, *4*(3), 13-24. https://doi.org/10.1080/08923649009526713
- Gecer, A., & Dag, F. (2012). A blended learning experience. *Educational Sciences; Theory & Practice*. 12(1), 438-442.
- Ginns, P., & Ellis, R. (2007). Quality in blended learning: Exploring the relationships between on-line and face-to-face teaching and learning. *The Internet and Higher Education* (10)1, 53-64. https://doi.org/10.1016/j.iheduc.2006.10.003
- Glynn, S. M., Taasoobshirazi, G., & Brickman, P. (2009). Science motivation questionnaire: Construct validation with nonscience majors. *Journal of Research in Science Teaching*, 46(2), 127–146. https://doi.org/10.1002/tea.20267
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), 597-607.
- Gonzalez-Ramirez, J., Mulqueen, K., Zealand, R., Silverstein, S., BuShell, S., & Ladda, S. (2021). Emergency online learning: College students' perceptions during the COVID-19 crisis. *College Student Journal*, 55(1), 29-34.
 DOI:10.2139/ssrn.3831526

- Govindarajan, V., & Srivastava, A. (2020). What the shift to virtual learning could mean for the future of higher ed. *Harvard Business Review*.

 https://www.accs.edu/wp-content/uploads/2020/06/What-the-Shift-to-Virtual-Learning-Could-Mean-for-the-Future-of-Higher-Ed.pdf
- Graham, C. R. (2004). Blended learning systems: Definition, current trends and future directions. In C. J. Bonk & C. R. Graham (Eds.), The handbook of blended learning: Global perspectives, local designs (pp. 3–21). Pfeiffer.
- Graham, C. R. (2006). Blended learning systems: Definition, current trends and future directions. In C. J. Bonk & C. R. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs* (pp. 3–21). Pfeiffer.
- Grotan, K., Sund, E. R., & Bjerkeset, O. (2019). Mental health, academic self-efficacy and study progress among college students-The SHoT study, Norway. *Frontiers in Psychology*, 10(45), 1-11. https://doi.org/10.3389/fpsyg.2019.00045
- Haider, A. S., & Al-Salman, S. (2020). COVID-19's impact on the higher education system in Jordan: Advantages, challenges, and suggestions. *Humanities & Social Sciences Reviews*, 8(4), 1418-1428. https://doi.org/10.18510/hssr.2020.84131
- Hancock, G. R., Stapleton, L. M., & Mueller, R. O. (2019). *The reviewer's guide to quantitative methods in social sciences* (2nd ed). Routledge.
- Hatchet, J. A. (2002). Doing qualitative research in education settings. New York Press.
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence Based Nursing*, 3(18), 66-67.

- Hodges, C. B., Moore, S. L., Lockee, B. B., Trust, T., & Bond, M. A. (2020, March 27).

 The difference between emergency remote teaching and online learning.

 EDUCAUSE Review. https://tinyurl.com/rekxcrq
- Holmberg, B. (2005). *Theory and practice of distance education* (2nd ed.). Taylor & Francis.
- Holt, E. A., & Nielson, A. (2019). Learning communities and unlinked sections: A contrast of student backgrounds, student outcomes, and in-class experiences.

 *Research in Higher Education, 60(5), 670-683. https://doi.org/10.1007/s11162-018-9531-1
- Hrastinski, S. (2019). What do we mean by blended learning? *TechTrends*, *63*, 564–569. https://doi.org/10.1007/s11528-019-00375-5
- Huber, S. G., & Helm, C. (2020). COVID-19 and schooling: evaluation, assessment and accountability in times of crises—reacting quickly to explore key issues for policy, practice and research with the school barometer. *Educational Assessment, Evaluation and Accountability, 32*, 237-270. https://doi.org/10.1007/s11092-020-09322-y
- Jaschik, S. (2021). Provosts face the pandemic. *Inside Higher Ed*.

 https://www.insidehighered.com/news/survey/survey-shows-how-provosts-faced-pandemic
- Joosten, T., Weber, N., Baker, M., Schletzbaum, A., & McGuire, A. (2021). Planning for a Blended Future: A Research-Driven Guide for Educators. [Report] Every Learner Everywhere Network.
 - https://www.everylearnereverywhere.org/resources/

- Joubert, S. (2019). *The benefits of active learning in higher education*. Northeastern University. https://graduate.northeastern.edu/resources/active-learning-higher-education/
- Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education*, *38*(5), 758–773. https://doi.org/10.1080/03075079.2011.598505
- Kaufmann, R. & Tatum, N. T. (2018). Examining direct and indirect effects of classroom procedural justice on online students' willingness to talk. Distance Education. 39(3), 373-389. https://doi.org/10.1080/01587919.2018.1476838
- Hodges, C. B., & Fowler, D. J. (2020). The COVID-19 crisis and faculty members in higher education: From emergency remote teaching to better teaching through reflection. *International Journal of Multidisciplinary Perspectives in Higher Education* 5(1), 118-122. https://ojed.org/jimphe
- Kazu, I. Y., & Demirkol, M. (2014). Effect of blended learning environment model on high school students' academic achievement. *The Turkish Online Journal of Educational Technology*, 13(1), 78-88.
 Chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=

https%3A%2F%2Ffiles.eric.ed.gov%2Ffulltext%2FEJ1018177.pdf&clen=275840

- Kay, D., & Pasarica, M. (2019). Using technology to increase student (and faculty satisfaction with) engagement in medical education. *Advances in Physiology Education*, 43, 408–413. doi:10.1152/advan.00033.2019.
- Keegan, D. (1980). On defining distance education. *Distance Education*, 1(1), 13-36. https://doi.org/10.1080/0158791800010102

- Kelly, J. & Cherkowski, S. (2017). Collaboration, collegiality, and collective reflection:A case study of professional development for teachers. *Canadian Journal of Education*, 169, 1-27.
- Klieme, E., Pauli, C., & Reusser, K. (2009). The Pythagoras study: Investigating effects of teaching and learning in Swiss and German mathematics classrooms. https://www.researchgate.net/publication/281754983_The_Pythagoras_Study_Investigating_effects_of_teaching_and_learning_in_Swiss_and_German_mathematics_classrooms
- Krajewski, S. & Khoury, M. (2021). Daring spaces. Creating multi-sensory learning environments. *Learning and Teaching*, *14*(1), 89-113. doi: 10.3167/latiss.2021.140105
- Libbey, H. P. 2004. Measuring student relationships to school: Attachment, bonding, connectedness, and engagement. *Journal of School Health*, 74, 274-283
- Lockee, B. (2021). Online education in the post-COVID era. *Nature Electronics*, 4, 5-6. https://doi.org/10.1038/s41928-020-00534-0
- Macarini, L. A., Cechinel, C., Machado, M. F. B., Ramos, V., & Munoz, R. (2019).
 Predicting students success in blended learning-evaluating different interactions inside learning management systems. *Applied Sciences*, 9(24), 5523 (1-23). doi 10.3390/app9245523
- Martin, F., & Bolliger, D. (2018), Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. *Online Learning Journal*, 22(1), 205-222.

- Masalimova, Alfiya R., Ryazanova, Elena L., Tararina, Larisa I., Sokolova, Ekaterina G.,
 Ikernnikova, Yuliya B., Efimushkina, Svetlana V., & Shulga, Tatiana I. (2021).
 Distance learning hybrid format for university students in post-pandemic perspective: Collaborative technologies aspect. *Cypriot Journal of Educational Sciences*, 16 (1), 389-395.
- Maxwell, J. A. (2013). Qualitative research design: An interactive approach (3rd ed.). Sage Publishing.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Merrill, M. D. (2002). First principles of instruction. *Educational Technology Research*& *Development*, 50(3), pp. 43-59. doi: https://doi.org/10.1007/BF02505024
- Morley, D. A., & Jamil, M.G. (2020). Introduction: Real world learning-Recalibrating the higher education response towards application to lifelong learning and diverse career paths. Applied Pedagogies for Higher Education. Palgrave

 Macmillan. https://doi.org/10.1007/978-3-030-46951-1
- Murphy, L., Eduljee, N. B., Croteau, K., & Parkman, S. (2020). Relationship between personality type and preferred teaching methods for undergraduate college students. *International Journal of Research in Education and Science (IJRES)*, 6(1), 100-109.
- Nisbet, J. & Shucksmith, J. (2017). *Learning strategies*. Taylor & Francis. United Kingdom.
- Norberg, A. (2017). From blended learning to learning onlife: ICTs, time and access in higher education (Doctoral dissertation, Umeå University).

- Novak, M. (2012). Predictions for educational TV in the 1930s. *Smithsonian Magazine*. https://www.smithsonianmag.com/history/predictions-for-educational-tv-in-the-1930s-107574983/
- Panitz, T., & Panitz, P. (1998). Encouraging the **u**se of **c**ollaborative learning in **h**igher **e**ducation. In Forest, J. J. F. (1998). *University teaching: International perspectives* (p. 42). Routledge.
- OECD. (2020). COVID-19: Protecting people and societies. *OECD Policy Responses to Coronavirus (COVID-19)*. OECD Publishing, Paris, https://doi.org/10.1787/e5c9de1a-en.
- Oliver, M., & Trigwell, K. (2005). Can 'blended learning' be redeemed? *E-Learning 2* (1), 17-26. doi: https://doi.org/10.2304/elea.2005.2.1.17
- Ozadowicz, A. (2020). Modified blended learning in engineering higher education during the COVID-19 lockdown- Building automation courses case study. *Education Sciences*, 10, 292. doi: 10.3390/educsci10100292
- Pagán, B. (2006). Positive contributions of constructivism to educational design.

 Europe's Journal of Psychology, 2(1).
- Pappas, C. (2015). The history of blended learning. *eLearning Industry*. https://elearningindustry.com/history-of-blended-learning
- Pregowska, A., Masztalerz, K., Garlińska, M., & Osial, M. (2021). A worldwide journey through distance education-From the post office to virtual, augmented and mixed realities, and education during the COVID-19 pandemic. *Education Sciences*, 11(3), 6-26. Doi: https://doi.org/10.3390/educsci11030118

- Ransdell, S., & Gaillard-Kenney, S. (2009). Blended learning environments, active participation, and student success. *The Internet Journal of Allied Health Sciences and Practice*, 7(1), 1-4. doi: 10.46743/1540-580X/2009.1228
- Reedy, S. (2021). Community-based learning in higher education: A portal for knowledge production in the time of COVID-19, *Journal of Education*. 84, 186-203. doi: http://dx.doi.org/10.17159/2520-9868/i84a10
- Rooney, J. E. (2003). Blending learning opportunities to enhance educational programming and meetings. *Association Management*, 55(5), 26-32.
- Ross, B., & Gage, K. (2006). Global perspectives on blended learning: Insight from WebCT and our customers in higher education. In C. J. Bonk & C. R. Graham (Eds.), *Handbook of blended learning: Global perspectives, local designs* (pp. 155–168). San Francisco: Pfeiffer.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
- Sahni, J. (2019). Does blended learning enhance student engagement? Evidence from higher education. *Journal of e-Learning and Higher Education*, 2019 (2019), 1-14. doi: 10.5171/2019.121518
- Salciccioli, M. (2021). *Understanding and addressing disruptions to learning during the*COVID-19 pandemic. California. CSBA Research and Policy Brief. 1-6.
- Salovey, P., & Mayer, J. D. (1990). *Emotional intelligence. Imagination, cognition and personality*, 9(3), 185-211. doi: 10.2190/DUGG-P24E-52WK-6CDG

- Sandelowski, M. & Barroso, J. (2003). Classifying the findings in qualitative studies.

 Sage Journals, 13(7), 905-923. doi: https://doi.org/10.1177/1049732303253488
- Scott, R. (2022). Why teacher-student communication is so important. College Raptor. https://www.collegeraptor.com/find-colleges/articles/tips-tools-advice/teacher-student-communication-important/
- Shin, M. & Hickey, K. (2021). Needs a little tlc: Examining college students' emergency remote teaching and learning experiences during COVID-19. *Journal of Further and Higher Education*, 45 (7), 973-986. https://doi.org/10.1080/0309877X.2020.1847261
- Simamora, R. M. (2020). The challenges of online learning during the COVID-19 pandemic: An essay analysis of performing arts education students. *Studies in Learning and Teaching*, *1*(2), 86-103. doi: https://doi.org/10.46627/silet
- Siripongdee, K., & Paitoon, P. (2020). A blended learning model with IoT-based technology. *Journal for the Education of Gifted Young Scientists*. doi: 10.17478/jegys.698869
- Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study.

 **Journal of Medical Internet Research*, 22(9). https://doi.org/10.2196/21279
- SFCC at a glance. (2022). Service report. https://www.sfccmo.edu/about/sfcc-at-a-glance/
- Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student leaving. *The Journal of Higher Education*, 59(4), 438-455. https://doi.org/10.2307/1981920

- U.S. Department of Education Office for Civil Rights. (2021). Education in a pandemic: The disparate impacts of COVID-19 on America's students. www2.ed.gov/about/offices/list/ocr/docs/20210608-impacts-of-covid19.pdf
- Valentina, A. T. R. (2020). Student responses to learning using blended learning method:

 Study of political behavior theory subject at the faculty of Social and Political

 Sciences Andalas University. *Advances in Social Science, Education and Humanities Research*, 506, 396-404.
- Vuori, J. (2014). Student engagement: buzzword of fuzzword? *Journal of Higher Education Policy & Management*, 36(5), 509–519. https://doi.org/10.1080/1360080X.2014.936094
- Wang, B., Yukun, L., Qian, J., & Parker, S. K. (2020). Achieving effective remote working during the COVID-19 pandemic: A work design perspective. *Applied Psychology: An International Review*, 0(0), 1-44. doi:10.1111/apps.12290
- Watson, J. (2008). Blended learning: The convergence of online and face-to-face education. Promising Practices in Online Learning. North American Council for Online Learning. https://files.eric.ed.gov/fulltext/ED509636.pdf
- Weil, L. G., Fleming, S. M., Dumontheil, I., Kilford, E. J., Weil, R. S., Rees, G., Dolan, R. J., & Blakemore, S-J. (2013). The development of metacognitive ability in adolescence. *Consciousness and Cognition*, 22, 265-271.
- Weiss, J. (1990). Ideas and inducements in mental health policy. *Journal of Policy Analysis and Management*, (9)2, 178-200. https://doi.org/10.2307/3325411

- Wertsch, J. V. (1979). From social interaction to higher psychological processes: A clarification and application of Vygotsky's theory. *Human Development*, 22(1), 1-22. https://www.jstor.org/stable/26764563
- Zhang, G., Yue, X., Ye, Y., Peng, M.Y-P. (2021). Understanding the impact of the psychological cognitive process on student learning satisfaction: Combination of the social cognitive career theory and SOR model. *Frontiers in Psychology*. doi: 10.3389/fpsyg.2021.712323
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice*, 41(2), 64-70.

Appendix A

Survey Research Information Sheet

You are being asked to participate in a survey conducted by Cara Barth-Fagan under the guidance of Dr. Roger "Mitch" Nasser at Lindenwood University. We are doing this study to provide insight to examine students' levels of success and ease with achieved learning outcomes as related to on-ground and online or virtual learning environments by using a brief survey. It will take about 15 minutes to complete this survey.

Your participation is voluntary. You may choose not to participate or withdraw at any time by simply not completing the survey or closing the browser window.

There are no risks from participating in this project. We will not collect any information that may identify you. There are no direct benefits for you participating in this study.

WHO CAN I CONTACT WITH QUESTIONS?

Dr. Roger "Mitch" Nasser, rnasser@lindenwood.edu

If you have concerns or complaints about this project, please use the following contact information:

Cara Barth-Fagan directly at 660-553-0233 or cb046@lindenwood.edu

If you have any questions about your rights as a participant in this research or concerns about the study, or if you feel under any pressure to enroll or to continue to participate in this study, you may contact the Lindenwood University Institutional Review Board at (636) 949-4155 or irb@lindenwood.edu.

By clicking the link below, I confirm that I have read this form and decided that I will participate in the project described above. I understand the purpose of the study, what I will be required to do, and the risks involved. I understand that I can discontinue participation at any time by closing the survey browser. My consent also indicates that I am at least 18 years of age.

You can withdraw from this study at any time by simply closing the browser window. Please feel free to print a copy of this information sheet.

Appendix B

Survey questions for students

- Overall, how did you feel the switch from semester-long on-ground classes in the spring of 2020 went? Explain further, what stood out to you during the switch, that made you feel this way.
- 2. How did you measure the success, or non-success, of the switch?
- 3. Overall, how do you feel your instructors successfully communicated their expectations with you when the college made the switch from semester-long onground classes in the spring of 2020 to online classes?
- 4. How often did your instructors communicate their expectations with you, and in what way(s)?
- 5. Overall, did you feel supported by your instructors during the switch from onground to online classes? If yes, explain how you felt supported, and give examples. If no, please explain the challenges or frustrations that you encountered.
- 6. Overall, did your instructors demonstrate leniency with assignments as the switch from semester-long on-ground classes in the Spring of 2020 took place? If yes, explain how you felt supported, and give examples. If no, please explain the challenges or frustrations you encountered.
- 7. Overall, did you feel comfortable making the switch from semester-long onground classes in the spring of 2020 to online classes? If yes, explain how you felt supported, and give examples. If no, please explain the challenges or frustrations you encountered.

- 8. Overall, did your instructors provide meaningful learning activities? If yes, explain how you felt supported, and give examples. If no, please explain the challenges or frustrations you encountered.
- 9. Overall, did your instructors provided an organized learning environment in your switched online class? If yes, please explain the ways instructors were organized.
 If no, please explain the challenges or frustrations you encountered.
- 10. Overall, were you provided with a variety of learning tools to keep me engaged in my online class by the instructor? If yes, please explain the ways instructors were engaging. If no, please explain the challenges or frustrations you encountered.
- 11. Overall, did you have instructors who worked to build relationships with students during the switch to online courses? If yes, please explain the ways instructors built relationships with you. If no, please explain the challenges or frustrations you encountered.
- 12. Overall, how did you do for the Spring 2020 semester? Did your grades improve, stay the same or decline? Please explain.
- 13. I chose to take an on-ground class because it was the learning environment I was most successful in.
 - Strongly agree
 - o Agree
 - Neutral
 - o Disagree
 - Strongly disagree
- 14. What modality of class do you prefer to learn in? (or rank)

- o On-ground
- o Online
- o Hybrid/Hy-flex

Why?

Appendix C

Research Information Sheet

You are being asked to participate in a research study. We are doing this study to provide insight to examine students' levels of success and ease with achieved learning outcomes as related to on-ground and online or virtual learning environments. During this study you will complete an online survey. At the end of the survey, you will be asked if you are interested in participating in an additional interview by phone, in person. We will ask a series of eight follow up, open-ended question, which would take an additional 30 minutes to one hour. An audio or visual device will be used to record the session, for transcription purposes. It will take about 15 minutes to complete the survey and 30 minutes to an hour to complete the interview.

Your participation is voluntary. You may choose not to participate or withdraw at any time.

There are no risks from participating in this project. There are no direct benefits for you participating in this study.

We are collecting data that could identify you, such as the type of courses you taught during the Spring 2020 session, or the names of the courses you taught during the Spring 2020 session. Every effort will be made to keep your information secure and confidential. Only members of the research team will be able to see your data. At the end of the survey, you will be asked if you are interested in participating in an additional interview by phone, in person. We will ask a series of eight follow up, open-ended question, which would take an additional 30 minutes to one hour. An audio or visual device will be used to record the session, for transcription purposes.

We will do everything we can to protect your privacy. We do not intend to include information that could identify you in any publication or presentation. Any information we collect will be stored by the researcher in a secure location. The only people who will be able to see your data are members of the research team, qualified staff of Lindenwood University, representatives of state or federal agencies.

Who can I contact with questions?

If you have concerns or complaints about this project, please use the following contact information:

You can contact the researcher, Cara Barth-Fagan directly at 660-553-0233 or cb046@lindenwood.edu. You may also contact Dr. Roger "Mitch" Nasser, rnasser@lindenwood.edu. If you have questions about your rights as a participant or concerns about the project and wish to talk to someone outside the research team, you can contact the LU Institutional Review Board at 636-949-4155 or irb@lindenwood.edu.

Appendix D

Survey Questions for Instructors

- 1. What was your role in the spring 2020 term? (Full time, adjunct/part-time faculty)
- 2. How many courses did you teach during the spring 2020 term?

For the purposes of the next questions, please use the following definitions:

Face-to-face Course: A course where all meetings are in-person, may use a learning management system (LMS) or web pages to post the syllabus and assignments.

Blended / Hybrid Course: A course where sufficient content is delivered online to create a reduction in the number of face-to-face class meetings.

Online Course: A course in which all, or virtually all, delivery of content and teacher / student interaction occurs online. Typically have no face-to-face class meetings (with the possible exception of proctored exams).

- 3. Choose one course to keep in mind when answering the following questions:
 Which of the following modalities did you use at the start of the term in course enrollment in Spring 2020?
 - •Fully online
 - •Hybrid, 1-49% face-to-face instruction
 - •Hybrid, 50-99% face-to-face instruction
 - •Completely in-person, face-to-face instruction
 - •Highly flexible, students choose how they participate, either in person or remotely
 - •Other, please specify:

- 4. How is this course typically delivered (prior to COVID-19)?
 - •Fully online
 - •Hybrid (i.e., a combination of face-to-face and online delivery)
 - •Fully in-person, face-to-face instruction
 - •Not sure / this is my first time teaching this course
- 5. Did you have to adjust the modality of this course after it started?
 - •Yes, I changed modalities
 - •No, I stayed with the modality I started with
- 6. What modality did you change to?
 - •Fully online
 - •Hybrid, 1-49% face-to-face instruction
 - •Hybrid, 50-99% face-to-face instruction
 - •Completely in-person, face-to-face instruction
 - •Highly flexible, students choose how they participate, either in person or remotely
 - •Other, please specify:
- 7. Would you be open to an in-person or video conference interview?

Interview Questions for Instructors

- 1. How prepared did you feel in converting your on-ground classes to online or hybrid?
- 2. How do you know you were, or weren't, prepared to convert your on-ground classes to online or hybrid?
- 3. Were you offered any Professional Development to prepare you for converting your on-ground classes to online or hybrid?
- 4. What specifically did you do to convert your on-ground classes to online or hybrid?
- 5. How successful did you feel students were in your online or hybrid course? Please explain how you measured success.
- 6. What connections do you feel you had with your students due to the delivery of your curriculum? How did you achieve this, or how was this measured?
- 7. Do you feel that you made personal connections with your students in the online or hybrid format? Please explain how and what you did to make the personal connections with students.
- 8. How did you adapt to converting from on-ground to online/hybrid classes? What, specifically, did you do?

Vitae

Cara Suzanne Barth-Fagan was born in St. Charles, Missouri, and grew up in several mid-Missouri communities. She graduated from Savannah High School in 1994. Mrs. Barth-Fagan attended Central Methodist College (now Central Methodist University) and earned a Bachelor of Arts in Psychology in 1998. Cara completed her Master of Education from Central Methodist University in 2012. Mrs. Barth-Fagan taught high school special education for eight years, was a Parent Educator for two years, and then took on the role of Early Childhood Development Program Coordinator at State Fair Community College in 2010. In 2013, she accepted the role of Education Program Coordinator at State Fair Community College and additionally holds the title of Division Chair for the past eight years. Cara resides in Sedalia, MO, with her husband, Brett, and their four boys, Levi, Ziek, Kelton, and Ty. Cara graduated from Lindenwood University with a Doctorate in Higher Education Administration Spring 2024.