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Blended Learning Transitioning to Virtual Learning: Middle School Teacher Perspectives

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Blended Learning Transitioning to Virtual Learning: Middle School Teacher Perspectives

by
Jennifer Henry

A Dissertation Submitted to the
Abraham S. Fischler College of Education
and School of Criminal Justice in Partial
Fulfillment of the Requirements for the
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Approval Page

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Abstract

Blended Learning Transitioning to Virtual Learning: Middle School Teacher Perspectives. Jennifer Henry, 2021: Applied Dissertation Proposal, Nova Southeastern University, Abraham S. Fischler College of Education and School of Criminal Justice. Keywords: blended learning, middle school, virtual learning, pandemic, technology

This study addressed specific factors that influenced the success of blending learning as it transitioned to virtual learning from the perspectives of middle school teachers. The purpose of the qualitative case study was to determine the challenges of blended and virtual learning from a teacher's perspective and the positive outcomes of the integration of blended and virtual learning.

The researcher focused on the transition to virtual teaching during the Coronavirus (COVID-19) Pandemic of 2020 and how blended learning impacted this transition to virtual teaching. The study included middle school teachers from various disciplines who taught at the middle school level. Participants responded to demographic data collection as well as interview questions on blended and virtual learning.

The audience benefitting from the research included parents and teachers and administrators in a k-12 setting using blended and virtual learning. The study included teachers who were new to the profession as well as seasoned teachers who were transitioning to the newer blended and virtual learning models.

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Chapter 1: Introduction

Statement of the Problem

Blended learning is an inventive model that combines elements of traditional classroom teaching and online instruction. In a blended classroom, students attend classes in-person and use technology to complete assignments such as watching videos, lectures, or completing online activities (Lynch, 2017). Smith and Stahl (2016) shared that schools have begun implementing online learning in all 50 states. The trend in districts and states adopting policies on implementing blended learning indicates that an estimated half of all kindergarten-Grade 12 (k-12) students nationwide will be participating in some type of a blended learning or online course. By combining the online and in-person components, educators are creating learning environments that are set to increase student achievement through the blended learning format.

Blended learning has developed into an approach to education that involves programming in which students experience integrated learning from strategies that are both in a structured school setting along with an online format that provides students with a level of control concerning pacing, time, location, and avenue where learning takes place (Horn & Staker, 2015). With advancing technology readily available for students a blended learning format develops that is conducted through the expansion of understanding and training of teachers in order to enable successful learning for students (Baran, 2014).

With blended learning sweeping the nation at the time of the study, much controversy has been generated. There is both support and skepticism for the new learning platform, but critics point out that there is very little evidence that blended learning is effective in a k-12 setting. Schwirzke et al. (2018) noted many factors impact

the effectiveness of blended learning, which indicates that research needs to be done focusing on which specific factors influence the successful implementation of blended learning.

Background and Justification

The educational system was transitioning from traditional teaching methods to a blended learning platform used at all grade levels from k-12. Educational leaders were working to meet the challenges of expanding programming to develop technology in order for students to explore new paths to reach the goals of increased academic achievement for all students. Lalima and Dangwall (2017) added that challenges educational leaders are facing include deficient budgets, lack of facilities, resistance to changing the teacher paradigm, teacher preparation along with the lack of teacher preparedness, and transitioning from the traditional methods of teaching and learning in the classroom.

The approach of student-centered models provided student choice, but classroom management was required to ensure that students maintained adequate time-on-task. Because blended learning created new challenges with classroom management, research and new approaches to classroom management needed to be considered. Croxall (2014) believed that researchers must determine best practices to incorporate blended learning in the classrooms as well as consider the changing technology and the potential disruption which includes tool fatigue when students are bored with using certain programs and devices.

Teachers needed to decide and consider which elements were most effective with face-to-face interaction and which were best done digitally. For example, interactive activities, such as some class discussions, science labs, and experiments would be best

completed in a traditional classroom to have a hands-on learning experience. Lynch (2017) noted that elements such as lectures, readings, and assessments may be better accessible in the online format because students can work at their own pace since they can stop and review when they do not understand the content.

According to Osuagwu (2013), “technology offers teachers digital tools to build a customized online learning system, one that fits their learners in approach, subject content, level, and learning style” (p. 196). In order to meet the individual learning needs of students, teachers are implementing lesson plans and using tools that also impact class management. The results include more effective organization as well as more time and energy for teachers to focus on the learning process. As traditional learning evolves, technology creates a new realm in which to approach learning. Physical space is being converted into virtual space. The customization of education is a result and students are becoming the drivers of their learning. They are making choices to become and stay engaged in the learning process. There is increased flexibility for students and teachers in to collaboratively interact in a fresh learning environment. Personalized learning is the focus and the results may very well impact student achievement.

It is possible that home access for the needed technology may be limited for some and that poses a challenge for educators and students. An increased awareness of the level of access to technology that students have at home is essential so that teachers can still incorporate the blending learning approach by utilizing both digital and traditional learning environments in alternating patterns (Lynch, 2017). Suggested by Belland et al. (2015), classrooms that use the blended and virtual learning approach can provide flexible learning. However, teachers require professional development that includes examples and instructional strategies. These then build connections to student learning

and enable both teachers and students to benefit from teachers learning new approaches that may be used in the blended classroom setting.

Online learning has grown exponentially and educators must rise to the challenge of creating a match between student educational needs and delivery. Some students feel that online learning is impersonal, isolated, or they struggle with getting help from teachers using the online platform. Smith and Stahl (2016) added that it is important for teachers to identify which online materials to use and determine which activities will be online such as readings, interactive activities, and formative assessments and then to utilize the resources to create an effective online learning experience. Creating lessons and new materials takes time and resources to develop.

According to Lynch (2017), technology is a significant resource for reinforcing lesson plans as well as for reaching young students for enhanced learning opportunities as these come together to build higher-order thinking, critical thinking, and reflection to complete assignments. By using technology, there is student interest and live engagement that combine to make the learning experience more meaningful and often successful. A student in a geography course may access interactive maps that bring learning to the student in an exciting, engaging language, such as Google Maps and Google Earth as an approach that is more innovative and interactive than a traditional teacher lecture format.

COVID-19 Pandemic 2020

The COVID-19 virus was identified as a serious global pandemic infecting large numbers of people worldwide. This ongoing health crisis was spreading rapidly in all areas and had become a cause of massive deaths and serious illness. At the time of the study, there was no vaccine in existence yet, these conditions continued to persist. The Center for Disease Control and Prevention (2020) was providing the public with

strategies to implement that may lessen the detrimental effects of the COVID-19 virus. The virus was determined as a pandemic by the World Health Organization on March 11, 2020. Communities, businesses, governments, tribal organizations, and schools were taking precautions to protect against the spread of the virus. The challenge was maintaining some level of education for each school-aged child worldwide and, according to the National Center for Education Statistics (2020), that figure in the US was 57 million k-12 students. The collective action was to attempt switching to online learning and that had been implemented with varying degrees of success throughout the US, including college level education. This challenge was an undertaking in an attempt to provide education under any circumstance to as many students as possible.

Doucet et al. (2020) added that meeting the basic human needs identified by Maslow before the learning levels of Bloom must be the focus in approaching distance learning during this pandemic. Consequently, all of the individuals involved and impacted were attempting to focus on health safety for everyone as education took a slight step back. Once health safety was implemented, online learning and blended learning became the new normal for students and all educators were attempting to adapt as best as possible. The education of all of the students was essential and had a major impact on families as well as communities. Those in charge of online learning programs were developing new strategies and implementations in an attempt to fill this major need in the world right now.

As Greene (2020) shared, the vast majority of people are under extreme pressure and teachers are working on clarifying the focus of what they want students to learn. Teachers are making small and large changes in teaching, communicating with students more than ever before to find out what is and is not working for them, and making further

adjustments based on input. Greene (2020) added that teachers and institutions are in the midst of a global teaching experiment with an improvised emergency response. It was necessary to determine what institutions and individuals were doing well and focusing on what could be learned and taken away from the experience. Teaching effectiveness during the pandemic crisis should not be the focus, but instead an outpouring of ingenuity, risk-taking, adaption, creativity, and love.

Deficiencies in the Evidence

Blended and virtual learning, particularly k-12 blended learning, is a fairly new approach to educating students and the research is narrow. Because of these, the topic and educational realms associated with the digital age are in need of further research (Schwirzke et al., 2018). Because technology enables swift gathering of information, approaches to education have been significantly altered in order to accommodate bridging individual access and needs with methodology and delivery. Theories of learning need to address this increased pace of education formatting. There is a positive correlation between the increase in new technology being integrated into society and the development of new theories on how to use technology as a catalyst for learning. The most prevalent of these new leaps in technology is the use of the Internet in teaching and learning. Online learning environments (or e-learning) have changed the dynamics of the traditional classroom as they provide learning opportunities that go beyond just physical boundaries.

Limitations included time, expertise, knowledge of instructional design, and the ability to create virtual materials or locate resources as variables that impact classroom educators and district leaders from developing materials for effective online learning. Smith and Stahl (2016) added that due to the rapid growth of online learning and these

restraints, schools looked to outside vendors for materials. However, budget restraints continued to impact districts and the successful implementation of blended learning in the classrooms.

Audience

The target audience benefitting from the research included parents and teachers and administrators in k-12 as blended and virtual learning were implemented. The research guided future changes to help support the success of teachers using blended and virtual learning. The study included teachers who were new to the profession as well as seasoned teachers who were transitioning to the newer blended learning model.

Setting of the Study

The setting of the study was a community of educators who were transitioning to blended learning and virtual learning during the COVID-19 Pandemic. These teachers were acquaintances who shared the demographics of teaching a variety of subjects at the middle school level and who were transitioning to blended learning. Participants in this case study were five teachers responding to surveys created by the researcher to obtain information on blended learning implementation negatives and positives.

Researcher's Role

The researcher was employed with a school district in Southern state, but also had experience working in a school district in Indiana. The researcher was concerned with the integration of technology in the schools and specifically how to support teachers to create the most effective learning strategies when implementing blended learning into the classrooms. Based on the researcher's observations and experiences, many teachers felt overwhelmed with the use of technology and were struggling with the transition from the traditional role of the teacher to a new way of teaching. Also, teachers new to the

profession were more tech-savvy, but did not necessarily know how to implement effective teaching strategies. There was a learning curve taking place and teachers were adapting the best they could, based on their capabilities. Schools and administrators were aware of the struggles and supported teachers so that students could benefit from the use of technology. Clark (2012a) advocated that it is the teaching that the teacher does that impacts learning, technology is a way to facilitate learning both in the classroom and online. The researcher was very passionate about supporting teachers through this transition.

Purpose of the Study

The purpose of this study was to determine specific factors that influenced the success of blending learning for a community of middle school teachers. The purpose of the study was to determine the challenges of blended learning from a teacher's perspective and the positive outcomes of the integration of blended learning. The central concepts of the study focused on the implementation of blended learning and which specific factors influenced the success of blended learning, as measured by student achievement and teacher input, and to what extent in the middle school grades, as well as academic achievement. The researcher focused on the transition to virtual teaching during the Coronavirus Pandemic of 2020 and how blended learning impacted the transition to virtual teaching.

Chapter 2: Literature Review

Introduction to Literature Review

This literature review presents research about the positives of blended learning as understood by teachers as well as presents blended learning characteristics, background, design features, and learning outcomes. It also provides the components that are important for blended learning to be successful and addresses the research questions.

A study conducted by Hiatt (2017) determined some variables needed to be analyzed to determine if the instructional method was the only reason for the difference in academic achievement. Considerations and investigations of teacher effectiveness and learning environment needed to be analyzed to determine if they were equal or could have influenced instructional differences in the research. Dziuban et al. (2016) noted the need for more research on the many arenas embedded in blended learning.

Anthony (2019) concluded that there is much research that has attempted to answer the question whether blended learning really works and there needs to be a shift in research to examine the conditions under which blended learning works. The most valuable findings will determine the factors that correlate with student academic success and blended learning. Therefore, there is a need for additional research that examines the factors that impact student success in blended learning.

Anthony (2019) added that blended learning is often viewed as an innovation that disrupts and completely transforms traditional forms of learning and education as it is known. However, researchers indicate how similar traditional teaching and blended learning have become. Anthony (2019) noted high-growth blended learning and low-growth blended learning are as distinctive as strategies in traditional settings. Anthony (2019) acknowledged that further research should examine teacher practices on a broader

scale involving more classrooms and more researchers. Bias is controlled by relying on trained researchers. Archambault (2018) found that teachers in online and blended settings require distinct skills of which teaching strategies from traditional classrooms apply to blended settings as well.

Kwon et al. (2019) determined that even though teachers believed that 1:1 technology enhances student learning outcomes through more student-centered learning, teachers were more inclined to incorporate mobile technology if they perceived it easy to utilize. Based on teacher input, technical skills were not a significant factor in using technology as it was the perceived easiness of the program. Teachers believed programs would benefit their teaching when they felt they had the understanding and support to implement the programs. Blau et al. (2016) added that to be able to effectively integrate technology into the classrooms, it is necessary to empower teachers and enhance the learning process.

With the implementation of blended learning in schools, the school districts needed literature that helped them to better understand what models of learning were effective for different academic subjects and student populations. It was a struggle and quite challenging to conduct a study in which the results pertained to the whole of the United States public school system. Therefore, in order to obtain in-depth literature on studies related to the research topic, a variety of geographic locations, demographics, and grade levels contributed to the literature with a fresh approach. Studies provided evidence that blended learning increases student engagement and participation, thus promoting learning effectiveness. Dziuban et al. (2016) found that research is limited on the effectiveness of blended learning.

Fazal and Bryant (2019) conducted a study of student groups that consisted of two

dependent measures that were collected for each student participant including the Grade 6 State of Texas Assessments of Academic Readiness math scores and the growth shown on the Grade 6 Measure of Academic Progress math assessment. These researchers reported the findings of their study are similar to studies from other states that provided evidence that students from blended learning experiences score higher than students from a traditional class setting on the Measure of Academic Progress that measures of growth (Mackey, 2015). This same study provided evidence that students from blended learning experiences score higher than students from a traditional class setting on state and district norm reference tests. In contrast, Fazal and Bryan (2019) showed the Mackey report on the State of Texas Assessments of Academic Readiness assessment indicated higher achievement for those students instructed in a fully face-to-face, nonblended teaching and learning environment.

Fazal and Bryant (2019) added that one possible explanation for the difference in achievement on the two tests is the nature of the assessments. The State of Texas Assessments of Academic Readiness is a criterion-referenced test that measures student performance based on curriculum standards for a content area and grade level. In contrast, Measure of Progress is a norm-referenced measure of student growth over time. Cronin (2016) revealed that those students behind academically may not be able to meet grade-level criterion targets thus, above-average growth is necessary for them to work to achieve these goals. The reasonable growth target for students who are not performing at grade level is usually 1 and 1.5 years in one school year. In order to reach the achievement level goals, these students may take a lengthy amount of time and possibly never achieve the learning goals. In this study, even though fewer students in the blended learning group met the criterion on the State of Texas Assessments of Academic Readiness

ness assessment than in the face-to-face group, more students showed increased growth on the Measure of Progress assessment, which is also considered a significant achievement for students who are academically behind their grade level cohort. Because this study only reported findings from one school-year data, more research with data over multiple years needs to be conducted to test this hypothesis.

Fazal and Bryant (2019) determined that blended learning enabled students to become direct consumers of content and students advance through learning curriculum at their individualized pace because the online digital content can adapt to student learning needs which creates differentiated learning opportunities for each student. Fazal and Bryant (2019) added that middle school leaders should use the results of implemented blending learning data in order to better understand the effect of differentiated instruction. Another important variable is using mastery data as a foundation to develop online math content in accordance with standards in order for students to advance at their individual rates to meet their individual learning needs. Long term studies should focus on overall learning growth instead of just grade-level content criteria. Because blended learning is still evolving, empirical studies are needed to determine whether or not blended learning works, under what conditions, and for which students.

Filali-Marzouki et al. (2017) supported that technology integration in learning and teaching processes must be implemented with a pedagogical basis, and guidelines are needed for blended learning teaching strategies and instructional methods. Also, blended learning and the use of technology and mobile devices should not replace traditional education but rather help students and teachers by providing services that facilitate teaching and learning. Filali-Marzouki et al. (2017) noted that mobile technology is essential as a resource in blended learning coupled with developing appropriate lessons

and teaching strategies in order for learning experiences to be successful. Filali-Marzouki et al. (2017) recommended further studies on how mobile resources contribute positively to the depth and breadth of the learning experiences for students in blended learning classes and he noted that such factors increase how students share, interact, and develop self-direction. Positive results are produced through learning that is centered on the learner. Filali-Marzouki et al. (2017) shared the importance of supporting teachers who may be apprehensive about the potential and positives of blended learning. Generational divides between those who embrace learning with technology and those who are still working on developing support and strategies are essential to address in order to effectively implement meaningful learning for students through blended strategies.

Chaney (2016) found that there is an ongoing lack of research that compares the effectiveness of traditional learning, blended learning, and fully online learning in the k-12 framework. Research has failed to keep pace with the fast growing online and blended learning formats in k-12 settings. Research is necessary in order to determine the effectiveness of the new online formatting for learning as evidenced in achievement benchmarks. Further research will contribute to teaching strategies that may impact achievement as well as identify the role blended learning serves in increasing student achievement.

Chaney (2016) suggested that the data collected on blended learning should be qualitative so that a clear explanation could be gathered from analyzing these data. Chaney (2016) revealed the results of the 2014 State of Texas Assessments of Academic Readiness scores of 1797-2298 students. This study gathered evidence from one charter group that focused on (a) students in a blended learning environment, (b) students who received traditional classroom instruction, and (c) students who used fully online

learning. The group means were examined through an analysis of variance as well as posthoc data with the resulting data not showing a statistical connection between the traditional, blended, and fully online students and math scores. There was also no statistical connection between traditional and blended learning students with their reading scores. Chaney (2016) did determine that the statistical connection between full-time online students was strong as demonstrated through student higher reading scores. Chaney (2016) noted that the data on two groups in the study resulted in limited student progress for 2013 to 2014 reading scores while one group did show improvement in reading scores. The analysis of these data did not provide clear understanding of the why these results occurred in the study and Chaney (2016) recommended further study of the phenomenon so that educators could design effective teaching strategies for these types of groups. He also suggested adding subgroups to these studies that include gender, gifted and talented students, socio-economic variables, special education data, and English language learners among other categories because populations have distinct data as well as providing varying levels of generalizations. Chaney also suggested additional areas in which to complete further study include teaching practices, learning influences, and types of variances in teaching and learning practices that may or may not increase student achievement. There are numerous influences on these factors within the arena of blended learning that should be understood and possibly developed into standards to follow in order to impact positive increases in student learning. The varieties of blended learning deliveries need to be better understood in order to address how to best increase learning for students.

Researchers foresaw the potential positive impact of educational technology, but

more research was needed to design and implement technology and effective practices in schools. Jwaifell (2018) identified instructional communication scholars have collected best practices approaches to blended learning that contribute to the improvement of learning as teachers and students develop better communication. Akyürek (2019) suggested technology has a different impact on teachers and students with teachers believing better communication resulted from using technology; whereas, student input indicated that communication was not stronger. Students did concur that technology assisted them in connecting and integrating understanding through these lessons and the acknowledged being satisfied with their work as well as increased support from teachers and an increase in their participation. The study results were indicative that students increased their learning through the use of technology. According to Fiksl et al. (2017), different studies determined different results. Akyürek (2019) pointed out that the results could not be generalized to other populations and a larger sample should be used to get a clearer profile of the data. The researchers show that even though the technology is available for both teachers and students, it does not guarantee that students will be successful with it for increased learning. As demonstrated in this study, it is equally important to provide an environment that encourages utilizing technology to increase learning for students.

Communication Theory

The study conducted by Akyürek (2019) revealed that the importance of building connections between students' and teachers in order to increase learning for students. Spector (2008) pointed out that because new research is continually evolving in behavior, emotion, and cognitive processes, instructional models must also continue to change and develop. The communications theory addressed that communication is essential in the

learning process because it is through the sharing of language that individuals give meaning to something. This research also showed that even though school districts have decided to implement technology, there is still more that needs to be done to improve learning and practices, and therefore teachers need wider access to technology resources for teachers and students to communicate and for the technology to integrate into lessons. Spector (2008) added that instructional design and development must consist of activities that facilitate and support learning and achievement. It must also distinguish instructional design from psychology research, which indicates that use of an instructional strategy allows a learner to achieve the desired learning, assuming certain conditions exist.

Backward Design

Even though instructors may see the use of digital technology as a challenge, others view it as an opportunity to review traditional teaching framework because the use of digital tools can enhance meaningful learning in educational settings. There are challenges to using a framework to implement technology into curriculums and difficult to find the best fit for teachers and students. A study conducted by Hicks and Bose (2019) determined the need for implementing backward design to principles in previously created syllabi that embed technology as well as models of theory and pedagogy guide teachers in their strategies to use mobile technology. There are few research studies on courses designed to integrate mobile technology, teacher preparation programs, and learning outcomes. Hicks and Bose (2019) added that the importance of applying backward design principles to technology integrations increases learner application and transfer of content. The application of these principles includes transferring information via hands-on learning and integrating learning through technology that enhances metacognition with the intent to create a collaborative language embedded in learning as

well as class interaction, student assessments, and higher-order learning as students are encouraged students to be independent, self-regulated learners.

Clark (2012a) and Clark (2012b) argued that careful analysis of existing research on the influence that different types of media have on learning indicates there is no evidence that any particular type of media is better than the other in terms of its impact on learning. Clark (2012a) insisted that there is no need to continue researching the impact of media on student achievement when there is a substantial body of literature that has established “all current reviews of media comparison studies suggest that we will not find learning differences that can be unambiguously attributed to any medium of instruction” (p. 10). Clark (2012a) urged researchers to focus on examining variables such as instructional methods which seem to be better indicators for understanding increases in learning. An important contribution of Clark’s research is an attempt to redirect researchers and educators in the field of instructional technology to focus on moving past the question of causation between types of media and learning. Clark (2012b) urged educators to frankly consider the benefits and advantages of technologies, such as computers, in the educational process but to avoid making the association that they are responsible for better academic outcomes.

Kozma (2012b) presented a counter-argument that set the arguments apart that involved conflicting positions on the relationship between media and method. Essentially, Clark (2012b) and Kozma (2012b) agreed on how students learn and that supporting that learning process is critical to enhancing education. However, where they disagreed is in how they label that support. Clark (2012b) labeled it as method and Kozma (2012b) labeled it as media. Ross (1994) argued that the Clark and Kozma debate felt more like a forum. Ross (1994) noted that there is no debate between Clark and Kozma because

their arguments address two different questions rather than the same one. From a positivist point of view, Clark (2012b) addressed how media studies have not focused on which instructional strategies produce achievement gains. From an applied point of view, Kozma (2012b) addressed how media delivery systems can be systematically used to enhance learning through the appropriate selection and combination of effective strategies. Ultimately, both perspectives, their arguments and approaches, contribute to the field of educational technology (Ross, 1994).

In sum, the research regarding blended learning was limited, divided, and vague. The majority of the research pertained to higher education, which limited the generalizability to k-12 education. The results of the blended learning research had not had consistent results regarding effectiveness. The research did not present a clear definition of what type of blended learning was being researched. Hliett (2017) agreed that the research does not present a clear picture of the effectiveness of blended learning, especially at the k-12 level.

Theoretical Perspectives

The theories of socio-cultural constructivism, transactional distance, cognitive theory of multimedia learning, activity theory, social constructivism, and situated learning may all be successfully implemented through technology. Wick (2018) added that through further research and studies, determinations will be made on how to best successfully integrate changes into online learning environments.

As schools are integrating technology into their schools, traditional teaching pedagogies as well as haphazard implementation of technologies create difficulty with the learning process. Many educators continue to use the behaviorist methods of teacher-centered teaching and knowledge acquisition through lectures, presentations, and

exercises that become focused on memorization and repetition. These generally lack personal involvement and do not promote social interaction, problem-solving, and critical thinking skills. Filali-Marzouki et al. (2017) shared that as teachers and students transition to blended learning many have transitioned to implementing the more interactive learning environments based on technology and the constructive methods that increase practical problem-solving skills where the learner is not a passive receiver of information but an active participant in creating learning opportunities.

Social Constructivism

Filali-Marzouki et al. (2017) added that since the late 1990s, blended learning has been the subject of many research projects and different technologies. With the implementation of technology and independent learning, there has been more of a transition to the constructivist environments. Social constructivism is one of the most adapted approaches because the environment promotes collaboration, social interaction, and learner-centered activities where learners first construct understanding. Social constructivism is characterized by learners making sense of and constructing personal understanding through active learning activities that are learner-centered while the learner is actively interpreting processes of sense-making rather than fact memorization. Constructivists pedagogy complements the blended learning model through the use of digital devices that augment learning with student-constructed purpose and meaning. Emphasis on student-centered learning is a key factor in connecting teaching to constructivist pedagogy. Prawat (1992) believed significant change in education is needed to enable teachers to create and focus on student-centered learning as an effective strategy.

Teachers should caution that this learning theory has some deficiencies that impact student learning. Because students lack experience and knowledge success requires teacher guidance and direction (Marzano, 2011). Roblyer et al. (1997) reported that student-centered learning is most conducive when connected to discovery learning that introduces students to appropriate background knowledge. Students need to be given ample guidance for background knowledge and skills needed with which to engage in the activity.

The theories and methodologies addressed have been part of the Clark and Kozma debate regarding media's influences on learning. Filali-Marzouki et al. (2017) shared that social constructivism emphasizes that knowledge is constructed through interactive social exchange with peers and teachers during learning tasks. Even with all of the mobile devices and blended learning classrooms the teacher is still an integral component to student success and learning. Filali-Marzouki et al. (2017) noted that blended learning use of technology is beneficial and recommended researching topics that utilize a variety of learning strategies including:

What is the effect of using social constructivist mobile learning on learners' knowledge acquisition and learning achievements?

Why do some environments fail while others succeed?

What are the contexts and educational activities to advocate for a successful implementation of blended learning in a social constructivist environment. (p. 21)

More research on effective learning theories continues to evolve as new advances, technologies, and practices are developed. Theories are being expanded by researchers to develop a deeper understanding of student learning and student achievement as well as

effective practices in the instructional technology and distance education profession that result in higher achievement.

Changes as a Result of COVID-19 Pandemic 2020

Online education including teaching and learning had been studied for decades. Numerous research studies, theories, models, standards, and evaluation criteria focused on quality online learning, online teaching, and online course design. Hodges et al. (2020) added that effective online learning results from careful instructional design and planning which have an impact on instruction. There was more to just identifying the content to cover but also determining how to support different interactions which recognized that learning was a social and cognitive process, not just information transmission.

Hodges et al. (2020) shared that the primary objective of online learning is to create an arena for learning that is accessible for learning that is supported by strategies that are consistent and readily available. There is a contrast between creating effective traditional course outlines and implementation with a fast, easy implementation of online coursework. Emergency remote teaching (ERT) requires that teachers take more control of the course design, development, and implementation process while developing skills to work and teach in an online environment. Schools must rethink the way instructional support units do their work, particularly during the worldwide health crisis.

The universal design for learning principles focuses on the design of learning environments that are flexible, inclusive, and student-centered in order to ensure that all students can access and learn from the course materials, activities, and assignments. Evaluations of the ERT efforts should be examined. Educators and schools need to determine the essential components that should be in this evaluation. Lockee, Moore, and

Burton (2001) added that it is important that evaluators do not conduct a media comparison study because they provide no real value. Traditional teaching methods have been the target of researchers in search of a fresh approach to teaching and learning. These researchers are searching for validation and justification for online classes as a forum to increase achievement by emphasizing content, the responsibility of the learner for learning, and the essential component of designing the instruction to best meet the needs of the students. Researchers have determined through these studies that multiple and varied learning environments create successful implementation methods. To credit or blame the delivery medium for learning ignores the effectiveness of the instructional design choices because many factors work together to create an effective instructional event and also to consider the type of learning including cognitive, affective, or psychomotor. The interactions of all these elements may contribute to more effective experiences. Hodges et al. (2020) concluded that the evaluation of ERT should be more focused on the context, input, and process elements than the product (learning). Once the stressful situation is over, institutions will have opportunities to evaluate the implementation of ERT. It is important to avoid the temptation to equate ERT with online learning during those evaluations. With careful planning, officials at every institution can evaluate their efforts, allowing those involved to highlight strengths and identify weaknesses to be better prepared for future needs.

Netolicky (2020) addressed that “effective professional learning is targeted, ongoing, differentiated, carefully planned and has a balance of high support and high challenge” (p. 32). Because of reluctance to value these new teaching approaches and support teachers, it is necessary to provide support for the individuals responsible for implementing new techniques and forums for learning. Teachers have to adapt quickly to

these new components as new courses are designed for online learning. Even though professional learning is available teachers are learning on-the-job strategies that need to be developed with an urgency. Collaboration functions as a system of support as well as personal daily experiences on the job during the global pandemic health crisis.

Historical Context

The debate between Clark and Kozma regarding whether or not media influences learning has been a hot topic in the field of instructional technology, distance learning, and education in general. Clark first presented his statement in 1983, that media does not influence learning under any conditions. Kozma responded 7 years later (1990) with research that media does impact learning. Kozma challenged Clark and suggested that media forms do affect learning which can complement learner capabilities and produce a unique learning experience. Both Clark and Kozma have valid arguments in the field of pedagogy. There are so many benefits to using technology, but technology cannot replace effective, engaging, differentiated teaching to meet individual needs by the classroom teacher. According to Clark (2012a), “It is what the teacher does, the teaching that influences learning” (p. 9). Clark’s position is so important because it supports the development of instruction by focusing on teaching, not media. Kozma (2012a) suggested that Clark implies that there is no connection between media and learning. Research suggests that some students will learn regardless of the delivery method. Kozma (2012a) noted, however, that others can take advantage of the media to help construct knowledge.

Clark (2012c) stressed that the type of media being used to carry an instructional message makes little to no difference when it comes to whether the learner will absorb the material and the overall level of student achievement. Clark (2012c) argued that many

factors combine to improve student outcomes, and that pointing only to one factor, such as the media and technology being used to deliver instruction, is irresponsible. Clark (2012c) focused on one of the utmost important components in the field that included instructional design, instructional technology, and distance education, all of which seek to facilitate learning through a carefully constructed plan of instruction. It is believed that the type of media used is essentially doing the teaching for teachers. It is then debatable what value actual instructors hold. Clark (2012d) supported careful examination of meta-analyses and research of the literature in the field. Clark (2012d) found that there were many inconsistencies and flawed research design within the literature, especially when it came to intervening variables that had not been accounted for when claiming strong correlations between the type of media used and the level of learning achieved. In his research, Clark (2012e) wondered if the studies claiming a strong relationship between the two were influenced by the large societal push at the time to work more closely with computers and whether the marketing departments of these computer companies had somehow influenced findings.

Kozma (2012b) viewed Clark's studies (2012c, 2012d, 2012e) as a certain intellectual stubbornness, noting that media can never influence learning under any condition whatsoever. Kozma (2012b) believed Clark's stance is an inflexible position on the issue of media in learning. As far as the pedagogical theory of how students achieve learning and the processes that enhance this experience, both Clark and Kozma seem to agree on instructional approaches and the various ways an instructor and designer supports these. Kozma (2012a) argued,

If we move from 'Do media influence learning?' to 'In what ways can we use the capabilities of media to influence learning for particular students, tasks, and

situations?' advancements and the development in the field will contribute to the improvement of teaching and learning.

Technology and media give more opportunities to discover potential relationships between teaching processes and learning environments. The type of learner engagement with the media will determine how much the media influences the learning. Just as some students will find themselves able to learn regardless of the way the instruction is delivered, other students will be more apt to integrate more knowledge by being especially attuned to a certain type of media. Kozma (2012a) believed that using the right media or technology could have a major impact on students' cognitive learning. Kozma (2012a) suggested that using medium and method can enhance students' process of learning, which taps into students' prior knowledge and allows students to understand complex concepts. A more visual learner may need media components, such as pictures added to the text, to help them visualize processes that may be available to a different student through audio cues.

As Morrison (2012) summarized the distinction between Clark and Kozma as being two researchers who are essentially asking substantially different questions: while Clark asked if media do influence learning, Kozma asked if media will influence learning. Therefore, while Clark viewed it as a dichotomy of yes or no, Kozma wanted to know to what degree media will be able to influence learning processes, depending on the learner.

Dunwill (2016) added that media and technology are not going to replace teachers. However, teachers need to be open to the entire model of education and redesigning to become student-centered. Also, there was a time when media was a vehicle for the delivery of information, but as the changes in education and technology

continue to advance, the usefulness of media is recognized as an enhancement of education. The focus needs to shift from whether or not media influences education to how can courses be designed so that media becomes a more interactive element for students. Kozma (1994) shared that the media provides access to powerful new tools that educational designers can use to construct their design. If educators are looking for a future that is innovative and creative and prepares students for the demands of the 21st Century, there is urgency in Kozma's argument that there is a need to believe in the capabilities of media to influence learning to see that future come to fruition. New media, innovations, and sharing learning resources across the world between diverse demographics are valuable but require sound instructional design and methodology. It is important to understand the work and effort necessary to develop meaningful content that provides valuable learning experiences to students.

Technology has entered academia as an attractive addition to or replacement for face-to-face learning experiences. As the use of technology has emerged, the choices are made because technology has a clear place in the process of achieving desired learning outcomes utilizing tools that can help faculty design flexible learning environments that incorporate appropriate technologies to meet individuals' needs and course or curriculum goals. Wiggins and McTighe (2008) believed effective professionals must have a solid working knowledge of their field and due to the rapid growth, especially in technology, the need for on-demand learning is increasing. Even as technology emerges there is a need for rapid, iterative, and progressive developmental learning opportunities to keep up with the changing technologies. Wiggins and McTighe (2008) noted it is important that professional developments are appropriate to the changing technology and these support

teachers who teach distance learning classes as well as blended learning classrooms while providing direct instruction, facilitating learning, and providing coaching.

Classrooms were full of students with multiple ability levels, which made teaching very difficult because all students were not on an equal playing field. Combining classroom learning with online learning utilizing the supplemental digital curriculum, which was implemented with fidelity, had the potential to completely transform teaching and learning. These learning opportunities supported students' critical thinking and research abilities.

The resources utilized for this literature review included books and peer-reviewed journal articles that were written by professionals in the field and published in well-known and highly regarded journals and sites. Before searching the literature for work about blended learning, the researcher determined the criteria for inclusion in the analysis. The work had to be empirical. Some nonempirical literature studies were reviewed but not included in the analysis. The research began with reviewing prior research about the use of media in the classrooms and the infamous Clark and Kozma debate regarding media. The review and integration of research literature began with the identification of the literature using a wide variety of computerized databases which include but are not limited to the Educational Resources Information Center (ERIC) catalog, Sherman Library catalog of Nova Southeastern, SAGE Journals, Google Scholar, and EBSCO host platform.

Next, the researcher created a search criterion that included journal articles within the past 20 years. This time frame was chosen to understand the perspective of teachers and students and gain information about their mindsets on the use of technology in the learning environments. Even though the use of technology in the classroom seems

to have evolved in the past 10 years, it was still important to get perspectives and information from up to 20 years ago. The keyword search began with blended learning in k-12 schools and then was expanded with keywords to include: teacher pedagogy in online teaching, hybrid learning environment, student motivation, instructional technology, teacher preparation, teacher communication, student communication, self-efficacy blended learning, blended learning case studies, mobile learning, mobile learning experiments/studies, learning theories, social constructivism, and computer-assisted learning. The researcher evaluated the articles by reading the abstracts to determine if the information in the article applied to the research needs. If the article seemed applicable, the researcher scanned the sections and then also reviewed the reference list to look for additional sources that could contribute to the research on this topic. Resources found in articles were researched independently and some were selected for use in the literature review. The selected sources were used for the literature review of blended learning environments in K-12 classrooms.

Research Questions

These research questions guided the study focus:

Research Question 1. What are the challenges teachers face in the classroom when implementing blending learning?

Research Question 2. What initiatives would teachers like the schools to take to support technology integration and teaching?

Research Question 3. What factors have influenced the transition of teachers to virtual teaching during the 2020 Corona Virus pandemic?

Chapter 3: Methodology

Aim of the Study

The overall purpose of this study was to examine the impact that blended learning had in a community of middle school teachers through the lens of three teachers at various stages in their teaching careers. This study, based in the constructivist paradigm, used a case study approach to gain a better understanding of teachers' perceptions of blended learning and how students were impacted as well as the transition to virtual teaching during the COVID-19 pandemic of 2020. The researcher was searching for an understanding of how information specific to blended learning and virtual teaching and learning could be disseminated to teachers from supervisors and other experts in the field. Chapter 3 consists of information related to research design, participants, setting, and data collection methods.

Qualitative Research Approach

Qualitative research focuses on interpreting data retrieved from natural settings that construes the meaning of phenomena from the perspectives of the people in the study (Denzin & Lincoln, 2000). Over decades, qualitative research has served the purpose of gathering data for use in and application of information as applied to field of education (Prasade, 2005). Researchers provide educators with erudition on components immersed in educational strategies and interpretation of results as understandings are sought through research studies (Stake, 1995).

The researcher selected the qualitative case study because this design worked with a small number of participants who provided first-hand, informal collection of data to interpret. For this study, the researcher was investigating the use of technology in a blended learning platform and how teachers were transitioning to the virtual teaching

platform during the COVID 19 Pandemic of 2020. The purpose of the study was to increase the effectiveness of strategies used by teachers in virtual learning environment in order to deliver quality online instruction to assist students in their learning. A qualitative approach was most appropriate for this study because it fostered a better understanding of the lived experiences of the middle school educator participants and their own understandings of how they implemented technology in a blended or virtual learning platform. This study allowed participants the opportunity to articulate the ways they implemented technology and analyzed their needs, the needs of the students, and the success of implementation.

Stake (1995) explained that case studies serve as a method of inquiry for the researcher to examine individuals, events, and phenomena while seeking understanding through collected data. These data are collected over a sustained time through an array of methods that provide evidence to be interpreted and analyzed in order to inform researchers and their audience through results from the study. For this study, the investigation included teacher perceptions of using a blended learning platform and the transition to virtual teaching during the COVID 19 Pandemic of 2020. The case study involved teachers in a middle school setting in the Southwest. The researcher collected detailed information using a variety of data collection procedures over a sustained period of time. For this study, the researcher collected data through a Blended Learning Demographic Survey (see Appendix A) and a Blended Learning Narrative Survey (see Appendix B) collected from individual teachers participating in the study.

The following section provides background and descriptive information related to the methods for developing this study and methods used for data collection. Through the

implementation of a qualitative exploratory case study design, the following research questions guided this inquiry:

Research Question 1. What are the challenges teachers face in the classroom when implementing blending learning?

Research Question 2. What initiatives would teachers like the schools to take to support technology integration and teaching?

Research Question 3. What factors have influenced the transition of teachers to virtual teaching during the 2020 Corona Virus pandemic?

Rationale

Case study research, according to Creswell (2009), is an approach which explores an individual case or multiple cases over time and through detailed data collection from multiple sources of information such as observations, interviews, documentation, and reports. Creswell (2009) added that all methods of data collection can be used in a case study analysis. McLeod (2019) explained case study procedures where the researcher presents results of methods associated with interviews and observations detailing the lived experiences of participants in the study. Numbers of participants are usually small and may include individuals or groups with specific characteristics from whom interview and observation data are collected that provide insights and understandings of the phenomena being studied. These participants may be from classrooms and other types of social groups. McLeod (2019) added that this approach tends to include qualitative data, investigating individuals in a personal and detailed way that includes case study, interviews, reports, observations, and personal documents. Interpretivism is also a guiding research perspective that will allow the researcher to interact and learn from data collection. Interpretivism is derived from hermeneutics that provide guidelines from

which to interpret data and content from a scholarly perspective (Crotty, 2010). Because this is an opportunity to develop a deeper understanding of actions and intentions through observations and meaningful interactions, researchers can develop an understanding and discover meanings that would have otherwise been impossible (Crotty, 2010).

A case study is an intensive study of a specific individual, specific event, or a particular phenomenon. Historically, researchers have utilized the results of case studies to develop foundational theories, as in the case of Freud who based his case study results on his development of the theory of psychoanalysis. Analysis and interpretation of case study results also provided Piaget with theories on how children develop and how to identify the stages of these developments. Interviewing teachers via a qualitative, multi-site case study will allow the researcher to gain understanding of the teacher perspectives in different classrooms within the same school. Case study interview findings broaden the understanding of teacher perspectives when using blended learning in the classroom. Trochim (2020) noted there is no single way to conduct a case study. Possible approaches to the case study can include a combination of methods such as unstructured interviewing and direct observation.

Participants

The researcher sought middle school teacher perceptions of their experiences in a blended-learning environment. The blended learning environment was not extensively researched, particularly given the transitioning to virtual learning during the time of a worldwide health pandemic. This study added to the knowledge analyzing teacher perceptions and the impact of blended learning on middle school students. The findings added to the professional development inquiry about blended learning and virtual teaching for middle school teachers during the COVID 19 Pandemic of 2020.

Using convenience sampling, also known as a purposive sample, was an expeditious method for selecting participants for focus groups. This method provided the opportunity for the participants who shared the most relevant information because they were key members of the population and environment being studied. Each teacher participating in the study had various years of teaching experience and each had a different level of technological experience, yet they were members of a common community in blended learning and they were all sharing in the transition to virtual teaching.

The teachers participating in this study were from a community group of teachers within the same school district. An email requesting participation was sent to teachers who had expressed interest in participating in the anonymous study and a participation letter was attached to the email.

Data Collection and Instruments

The surveys provided insight into technology use for instructional purposes and how technology enhances blended learning as teaching transitions to a virtual learning forum. Selection of participants was based on convenience and common characteristics shared as teachers in blended learning environments who were transitioning to virtual learning in the time of a pandemic. Gay et al. (2006) indicated that a survey is used in qualitative research to collect a large amount of data from participants over a short time. Gay et al. (2006) noted research surveys provide data from self-reporting questions that are answered by a specific group of respondents who are participating in the research study.

To gain a detailed understanding from the lens of teachers who were implementing blended learning in their classroom and to learn the positives that the

blended learning provided to students and teachers, the following pieces of data were collected:

1. Blended Learning Demographic Survey: Demographic data from three middle school teachers was collected. Each teacher participating in the study had various years of teaching experience and had a different level of technological experience.

2. Blended Learning Narrative Survey: An opened-ended question survey was given to provide participant narrative on Blended Learning in order to give teachers the opportunity to expand on their perceptions of the blended learning and virtual teaching experiences.

The researcher interviewed the participants after the participants completed the surveys. Each interview was semistructured with guiding questions but allowed for participant input and feedback. Protocol questions for the interview were developed based on Survey responses and data collection.

Procedures

The research questions provided the foundation of the goals of the study. The study procedures were based on the research questions by collecting data based on participant responses to a demographic survey and an open-ended narrative survey as well as an interview.

Research Question 1. What are the challenges teachers face in the classroom when implementing blending learning?

Research Question 2. What initiatives would teachers like the schools to take to support technology integration and teaching?

Research Question 3. What factors have influenced the transition of teachers to virtual teaching during the 2020 Corona Virus pandemic?

Once university review board approval was obtained, each participant was contacted by email to explain the study and gain confirmation of participation. The participants were acquaintances who were teachers in a middle school level. The researcher shared the purpose and goals of the study and the data collection commenced with the Blended Learning Demographic Survey. These data were used to add dimensions and understanding of the participants and how their responses to the open-ended narrative survey may be connected with specific demographics. The participants completed the Blended Learning Narrative Survey that provided extensive data for the case study. The researcher followed up the surveys with phone conversations that clarified participant responses and to answer any questions the participants had. Upon completion of data collection, the researcher triangulated the data and interpreted data for trends and themes. Participant identities were coded and anonymous throughout the study in order to protect their confidential responses and collected data.

The overall purpose of this study was to examine the impact that blended learning had on middle school learning through the lens of three teachers at various stages in their teaching careers. This study, based in the constructivist paradigm, used a case study approach to gain a better understanding of teachers' perceptions of blended learning implementation and how learning was impacted, as well as the transition to virtual teaching during the COVID-19 pandemic of 2020. The researcher was searching for an understanding of how information specific to blended learning and virtual teaching and learning could be disseminated to teachers from experts in the field. Chapter 3 consisted of information related to research design, participants, setting, data analysis, and data collection methods.

Data Analysis

The data were coded for each participant and data from the surveys were organized by themes that may or may not correlate to the demographic data. No specific software was used to organize the data other than Word Documents of collected narratives that were organized by Participant number and compiled into transcripts using Word. These were organized by themes that may have resulted. Each research question was answered by the results of the data. As a case study, the research questions served as a series of propositions that were answered through the interpretation of the resulting themes. By coding the data in initial codes then expanded codes followed by rationalized codes, the data were analyzed then final propositions were concluded. The rational database approach assisted in the data analysis with the aid of theoretical analysis. By processing the data, appropriate conclusions were reached. Using descriptive data enabled the process of the coding so that themes were identified and a definitive collection of findings were presented for discussion. In this process, the data were transcribed from participant narrative responses and demographic data then organized by anonymous participant response number in direct correlation to each research question.

Ethical Considerations

To ensure the study was conducted in an ethical manner, several conditions were implemented including the confidential and secure collection of data, data analysis, interpretation, and reporting. Merriam (1998) suggested focusing on the conceptualization of the study so that confidentiality will be maintained. Validity was increased when triangulation was utilized that collected data from more than one source. These multiple sources provided multiple types of data in order to gain a more comprehensive understanding of the phenomena being studied. Merriam (1998) noted

that credibility is a key component for research studies and that is closely connected to internal validity. Without one it is unlikely that the other is present in the study. These together are a picture of what is real from the results of the study. Using a case study methodology provided the real lived experiences of the participants as a format for collection of data. These data were evidence of reality of the subjects, situation, and phenomena being studied. Merriam (1998) explained interviews serve as data collection instruments to gain the personal views of the participants then the data analysis from the instruments provides interpretations of these lived experiences of participants as a primary source for the data. This method resulted in a close view of the reality of the participants as their responses answered the study research questions and provided the researcher with understanding into the phenomena being studied. As Merriam (1998) noted, internal validity is strengthened by using the interpreted realities of the participants through the method of qualitative data collection.

Ethical consideration for all participants was important to gain truthful input and for the integrity of the study. The privacy of each participant was respected by using a coded pseudonym and keeping all identifiable information in a secure location for the duration of the study and then will be destroyed 3 years after completion of the study. A statement of confidentiality was included with each interview to convey an ethical commitment to not release any information that could identify the participants or their responses as their own. Participants needed to feel comfortable and safe so that they could also share their true feelings without fear of repercussions for sharing their opinions.

An ethical approach to research is the appropriate focus. Because qualitative research is not just numbers but often the lived experiences of the participants, there is a

need for an emphasis on the ethics of the research methodologies in order to provide participants with confidentiality and validity. Arifin (2018) noted that ethical research protects the participants and provides less risk with stronger benefits and lucid results.

Trustworthiness

When conducting research, triangulation includes measures taken to enhance the researcher's credibility with the use of multiple data sources that provide in-depth and various understandings of the results of the study (Creswell, 2009). There is value in qualitative research in that it measures trends and other variables instead of just numbers. Data trustworthiness has four key components: credibility, transferability, dependability, and confirmability (Devault, 2019).

In this dissertation study, the triangulated findings were from various sources which included surveys, interviews, and researcher reflections. Gay et al. (2006) identified triangulation as an effective collection of data because multiple sources of data are more thorough. Validity is strengthened with triangulation. According to White (2005), triangulation requires diversity of ideas, experiences, and perspectives. Data collection methods will include a personal questionnaire, personal interview, and review of artifacts. Triangulation was used in this case study to ensure the validity of the data collected and to provide readers with reliable results. To increase transferability and eliminate bias or personal influence participants were provided with a copy of the transcribed data to review upon completion of each interview. Once the participants approved their responses and verified that the words were accurate as well as the intended meanings, data were used to continue the study.

Potential Research Bias

Although the researcher was an educator and technology specialist, every effort to

control bias and remain focused on goals of the study were followed with preunderstanding as Coghlan and Brannick (2014) recommended. The researcher had dual roles that included an educator and action researcher role. Ambiguities and conflicts between these did not arise and the researcher attempted to reconcile these without bias. It was important to keep a balance between potential dilemmas. Controlling bias included being transparent and working with volunteer participants. It was important for the researcher to remain objective and unbiased and to record data as factual without personal opinion. The researcher avoided personal input and opinions until later when doing a reflection for the completion of the dissertation. Survey and interview questions were worded in a way that did not sway the interviewee in one direction or the other.

Chapter 4: Findings

Introduction

This chapter will present the findings through the three research questions and the research approach, as well as each finding from each participant answering Interview Questions 1-9. These responses were compiled into themes and these addressed each research question through the data analysis.

Research Questions and Research Approach

These research questions guided the study focus:

Research Question 1. What are the challenges teachers face in the classroom when implementing blending learning?

Research Question 2. What initiatives would teachers like the schools to take to support technology integration and teaching?

Research Question 3. What factors have influenced the transition of teachers to virtual teaching during the 2020 Corona Virus pandemic?

The research approach of this study was to examine the impact that blended learning had on middle school learning through the lens of three teachers at various stages in their teaching careers. The constructivist paradigm was used in this case study approach in order to gain a better understanding of teachers' perceptions of blended learning implementation and how learning was impacted, as well as the transition to virtual teaching during the COVID-19 pandemic of 2020. The researcher was searching for an understanding of how information specific to blended learning and virtual teaching and learning could be disseminated to teachers from experts in the field. The data were coded for each participant and data from the surveys were organized by themes that may or may not correlate to the demographic data. No specific software was used to organize

the data other than Word Documents of collected narratives that were organized by Participant number and compiled into transcripts using Word. These were organized by themes and addressed each research question. In this process, the data were transcribed from participant narrative responses and demographic data then organized by anonymous participant response number in direct correlation to each research question. The teachers participating in this study were from a community group of teachers within the same school district and their participation in the study was anonymous.

The data were collected from nine Interview Questions:

Interview Question 1: What are the expectations of your school district for using a blended learning platform and technology in your classroom?

Interview Question 2: Please describe the challenges with implementing blended learning.

Interview Question 3: Do you feel that there is enough professional development to support the use of technology in the blended learning platform?

Interview Question 4: What are your positive experiences with using technology and the blended platform?

Interview Question 5: With the transition to the virtual learning platform due to Corona Virus Pandemic of 2020, did you feel prepared to teach virtually since you transitioned from a traditional teaching strategy to using a blended learning platform?

Interview Question 6: What were the biggest challenges of teaching virtually?

Interview Question 7: Based on your experience, how did students respond to virtual learning?

Interview Question 8: What were your positive experiences while teaching virtually during the Corona Virus Pandemic of 2020?

Interview Question 9: As you reflect on the 4th quarter of school during the Corona Virus Pandemic 2020, what could you have done differently? What could the school district/principal have done differently to support both teachers and students during virtual teaching?

Findings

The findings from the Interview Question data are as follows:

Interview Question 1 P1, P2, and P3 Responses

In response to Interview Question 1: What are the expectations of your school district for using a blended learning platform and technology in your classroom?

P1 responded that the expectations of the school district were:

To offer an education that is closely comparable to that of in school instruction and it was essential that students make the equivalent effort. It was difficult to implement a new program that the students and teachers had never used before. The expectation was that all teachers were going to use this new program for a grade. I had a crash course on how to use the teacher resources but definitely not enough time and training.

P2 responded that the expectations of the school district were:

We are expected to teach both face-to-face and virtually, through zoom, simultaneously.

When asked about during the 4th quarter of 2020 when the schools closed due to the COVID pandemic, P2 responded:

I was referring to teaching during the 20/21 school year. Prior to Covid when we began teaching virtually, the district required all teachers to digitally submit grades, communicate with parents using various platforms, submit lesson plans

and integrate technology into all facets of instruction. Specific programs were mandated to be used, however not all schools used the same programs, that is until the schools closed and we started teaching virtually. A new program was required to be used that no one was familiar with. We were force fed the program and it was difficult to learn all of the components of it in such a short time. This was a district created program that all schools were required to use.

P3 responded that the expectations of the school district were:

The use of technology in my school district is very important. At times it feels a little overwhelming because we're constantly getting new programs to use. Students have a certain amount of assignments that need to be completed on the Chrome book. Teachers are expected to use technology for everything from in putting grades to lesson plans seating charts and teaching lessons using a smart board and a lot of different teaching tools that are available to us. However, it seems as if the district does not take into account all of the work that we have to do just to be a teacher and then to have to learn how to use all of these different technological platforms and learn programs on the computer that we just don't have time to do it all. Which I feel impacts my ability to be a good teacher because I'm so focused on learning new technology.

Interview Question 2 P1, P2, and P3 Responses

In response to Interview Question 2: Please describe the challenges with implementing blended learning, Participant 1 responded:

Poor Internet, lack of parental participation.

When asked what the challenges were in your classroom and about student interactions, Participant 1 responded:

There are countless tools and programs available to educators for presenting new ways to deliver, enhance, and assess content. It is difficult to determine between supporting and replacing teachers. The challenge is finding a way to delicately infuse technology into classroom instruction in a way that is not just convenient, but truly enhances the quality of students' learning experiences. A blended learning approach, where students learn from a mix of computerized and in-person instruction can be effective but for myself and other teachers it is a complete transformation of the flow and function of the classroom and requires classroom redesign.

Participant 2 responded to Interview Question 2:

This hybrid style of teaching proves to be majorly challenging. It is difficult to concentrate on the students in the room, address classroom behaviors and still devote your attention to students online. I feel as though my attention is divided. Additionally, it is difficult to keep the students online motivated and on task. Students tend to not work as hard and do not devote as much time and energy into their work.

When asked to share more about blended learning, students' engagement, and how it looks in your class, Participant 2 responded:

I'm sorry, in my answer I am referring to the 20/21 school year – post Covid. I utilize my resources to create fun and engaging lessons that are individualized to meet all the students' needs. Students are often on other sites and off task and require constant monitoring of their activity which is just one more thing that has to be done while trying to teach a lesson. There are many sites that are blocked, but students manage to find ways around the blocks. I like to have

small group instruction and so I combine technology and paper and pencil activities. Technology can be advantageous in many ways, but when students cannot compute simple problems and they use the calculator on the computer, it is not supporting their ability to master math.

Participant 3 responded to Interview Question 2:

The challenge with implementing blended learning in the classroom is the use of technology for teachers and for students. As I mentioned earlier, it does seem a bit overwhelming at times to learn new programs and technology and then to plan interactive engaging lessons that are differentiated to meet all the students' needs. Also, students are distracted and are constantly going on to other sites instead of doing the work that is assigned. We do have a program that allows us to monitor student activity on the Chromebooks however that again is just another task that teachers have to do while also trying to teach lessons.

When asked what would be suggested as a way to address these issues, Participant 3 responded:

I am not sure how to stop the distractions that students face when on their computers.

Interview Question 3 P1, P2, and P3 Responses

Participant 1 responded to Interview Question 3, "Do you feel that there is enough professional development to support the use of technology in the blended learning platform?" and when asked to "Please share more, did you meet regularly with your school leaders, department? Were there designated personnel to assist you with issues? Can you think of a time you needed support?" the response included:

There was support for myself and I assisted other teachers to make the transition to the virtual platform. I struggled with the implementation of the new program mandated by the district but I spent time navigating and learning the program that I was able to utilize the tools within the program.

Participant 2 responded:

I believe there is a good amount of professional development available. I believe there should have been more at the very beginning of the school year. I think as the year has progressed most teachers have found methods that work for them.

When asked “How often do you have professional development for technology? Is there anything that you feel needs to be addressed so that teachers and students can be more successful?” P2 responded:

There was a new program that was mandatory for students and teachers to use. Teachers received a 3-day crash course. The district laid out a calendar of assignments to be completed. This was great that the district provided this program, but it was difficult since teachers and students were new to it.

Participant 3 responded to Interview Question 3, “Do you feel that there is enough professional development to support the use of technology in the blended learning platform?”

I do not feel that there is enough professional development to support the use of technology and the blended learning classroom. I was taught using paper and pencil blackboards chalkboards whiteboards and now everything has transitioned to using computers and different technology programs that going to a quick overview training is not enough to provide what I need so that I can feel confident in using the equipment and or the programs. I feel so much of it

is learning by trial and error. They can be very frustrating and even though the school has department heads and other leaders in the school who can help me it's just that there's not enough hours in the day to become technology proficient with the devices and the programs I do not know what the answer is but I just know that it is a very overwhelming feeling and partially frustrating because if I knew the programs better and the technology better I could utilize it in a more effective way to support student learning

Interview Question 4 P1, P2, and P3 Responses

Question 4. What are your positive experiences with using technology and the blended platform? P1 responded:

I'm tutoring Lee Home Connect students after school. The students I have tutored are sweet and hard working.

Can you explain what Lee Home Connect is and how does tutoring virtually work?

Lee Home Connect is an option for students to be assigned to a classroom and work with the class simultaneously as the face-to-face class. This is something new that was offered at the beginning of the 20/21 school year. This allows for students to interact with teacher and students.

P2 responded:

I personally feel as though I have become a more well-rounded and capable teacher. I am able to adapt to challenges with ease and I know that I will put in the extra effort to make sure that all of my students are getting the help and the education that they need.

Can you share a positive experience with a student, group of students, or class when you connected and supported the students to get the best education possible?

P3 responded:

Technology can assist with providing accommodations for students. Blended learning is important because it breaks down the traditional walls of teaching, ones that do not work for all students and now with access to present-day technologies and resources we can tailor the learning experience for each student. Blended learning also offers flexible time frames that can be personalized to each person, offering them the ability to learn at their own pace. Blended learning enables the student to access the materials from anywhere at any time while enjoying the benefits of face-to-face support and instruction. Students can also learn through a variety of activities that apply to many different learning styles. All students no matter their age learn differently and teaching methods should reflect this, by designing teaching programs in a way that reaches visual, auditory, and kinetic learners alike. With the heavy integration of technologies, we'll be able to improve teaching, information retention, engagement, responsibility, and enjoyment.

Interview Question 5 P1, P2, and P3 Responses

Interview Question 5: With the transition to the virtual learning platform due to Corona Virus Pandemic of 2020, did you feel prepared to teach virtually since you transitioned from a traditional teaching strategy to using a blended learning platform?

P1 responded:

I have been offered efficient training to do so if needed.

What was a typical day like for you? P2 responded:

I felt somewhat prepared to teach virtually. It had its own set of challenges. It became a learning experience for both me and my students.

Please share more about the challenges and learning experiences

Teachers are prepared to learn new strategies primarily for the brick and mortar classroom. The development of instructional knowledge and strategies needs to be integrated with virtual learning as a pedagogical approach—one in which the classroom walls come down and pathways to virtual teaching are expanded and explored. In a time of relative social instability and unique social-emotional needs—it is important to emphasize student well-being, engagement, and autonomy as you work with them in remote teaching and learning.

P3 responded:

When the pandemic hit in March and we started teaching completely virtually it actually went smoother than I thought it would. The district was amazing and very communitive even though this was uncharted territory the district came together and communicated to the teachers and what to do and how to do it. My job was to create engaging lessons and become very efficient using Zoom. So, I believe that by having all of the online programs using a blended learning platform prior to the pandemic definitely supported teachers and students to make the transition to completely virtual. I had the technology skills and knowledge of the programs but had never had to teach virtually. All of the programs were used in addition to the face-to-face interaction and I viewed the programs as support for students to work at their own pace and for differentiation of instruction. I could handle the technological part of the transition but struggled with the actual teaching and engagement of students.

Interview Question 6 P1, P2, and P3 Responses

Interview Question 6. What were the biggest challenges of teaching virtually?

P1 responded:

Keeping students interested.

How did you attempt to keep students interested?

Give students voice and choice in what and how they learn and demonstrate learning. This applies to lessons you've created for students to do either together or apart. Allowing students to work on their own because they want to—is another way to empower students. I used videos and some interactive games just to get students interacting and showing up for class.

P2 responded:

The biggest challenge is not being able to interact with my students directly. I have no way to hold them accountable for their work. It is hard to keep them motivated and on task. I feel as though some of my students online are not listening to me and engaging with me the same way they would in a classroom.

What strategies did you use to keep the students engaged and on task? What seemed to work?

I provided games that were interactive and focused on real life examples that require critical thinking and adaptability which will be important for success in the future. I do worry that the hasty transition to online may have hindered student growth, but this was a learning opportunity for all teachers, students, and parents and I see online learning as a part of the new normal of the future. I did not offer a reward system like I would in the face-to-face classroom. So, it was hard to motivate students to complete their work. Many were not logging in or doing their work, but calling, email and texting to make connections helped to get students on board with learning and completing their work.

My challenges as well as the challenges that learners face was the learners have trouble being self-directed enough to make good use of the technology, and other challenges focused on my own circumstances including not enough knowledge about technology to take full advantage of its affordances, not having enough planning time, and other challenges had to do with access issues to Wi-Fi, hardware, or software.

P3 responded:

Students had Internet issues, it was difficult to get in touch with them: phone numbers were wrong, disconnected email addresses were not up-to-date so the challenges of teaching virtually really had to do with the students not logging in and interacting. We already had academic programs that students were familiar with so that was not a challenge it was just getting the students to engage without having a teacher or paraprofessional to assist them.

Were you able to connect with students and families individually? Share about that.

I had one student in particular that was completely overwhelmed and shutting down. We met every day 1:1 and he was able to successfully complete 8th grade with my assistance. He was completely at a loss and needed a lot of support with organization and self-advocacy. Once he trusted me and felt comfortable, he became more responsive and successful. It did not matter that he had 10 math lessons he had to do, he accomplished 2 per day each week. It gave him the sense of accomplishment and the ability to take a breath because he was not so overwhelmed. Teachers have to be the advocate for their students. I communicated with his other teachers, we modified some assignments and together we turned this student's experience around. He took away some valuable

organizational skills and self-advocacy skills.

Interview Question 7 P1, P2, and P3 Responses

Interview Question 7. Based on your experience, how did students respond to virtual learning? P1 responded:

From what I know, poorly.

Poorly, please share more – did they attend Zoom sessions, advocate for themselves, complete work, etc?

Most of my students are lower level learners and require a lot of support in the classroom from redirecting them to focus on the activity to organization and social-emotional needs. One student told me that he missed going to school: their friends, teachers, sports, extracurricular activities, even the loud and crazy lunchroom.

P2 responded:

I believe students initially responded positively. I think the idea of virtual learning was novel and exciting for the first month or so. As time has gone on and now it has been over a year, I think the novelty of virtual learning has worn off. The majority of my students have returned to the classroom setting for the 20/21 school year.

What was a typical day like when you were teaching virtually?

The district required teachers to have Zoom office hours for 3 hours and be available as needed for students. I attempted to teach lessons, I provided interactive videos and a lot of interactive practice activities. I realize that course content is critical to student engagement, but ongoing communication is also crucial. I spent many hours making phone calls, sending emails to parents and

students, posting in the google classroom, creating videos, and fun lessons. Students need to easily connect with instructors, advisers and classmates otherwise they can feel isolated, which reduces overall engagement. Students were disengaged and as the novel idea of virtual learning wore off, less and less of my students engaged in the lessons, logged into zoom, or contacted me.

P3 responded:

My higher achieving students responded very well to virtual learning they were engaged they were logged in on time and also kept in communication with myself. My struggling learners, most of them had IEPs, were very challenging because many did not log in, most did not complete the work and very few inquired on getting support. Unfortunately, most of the struggling students require added support which was difficult for these students to initiate asking for help and completing tasks without accommodations. My higher achieving students tend to be more intrinsically motivated therefore they were asking questions, completing tasks and do what they need to do. Also, another challenge was that some students did not have Internet and or phones so it made getting in touch with them very difficult. Social workers were involved, the school administrators were involved so that we could not only make sure that they were OK, but then you also provide teaching with accommodations so that they could be successful in my class.

Interview Question 8 P1, P2, and P3 Responses

Interview Question 8. What were your positive experiences while teaching virtually during the Corona Virus Pandemic of 2020? P1 responded:

I liked the one-on-one tutoring.

How did that happen? Did you schedule tutoring sessions?

I was available all day and evening. I wanted to make sure that students who had circumstances such as siblings using their Chromebook to be able to reach me at any time. Once I was able to connect with students, I was able to schedule times to work together. They seemed to like the one-on-one interaction. I believe students missed that interaction with teachers and often times we discussed life and I checked on them to make sure they were ok. Sometimes I even helped them with other courses. It was very evident that many students do not know how to organize themselves so I provided support to help them get on track to complete all work in their classes. One of my students has a single mother who works cleaning; the girl goes along and often joins the class from her mother's smartphone. Because of barriers such as these, I had to make adjustments to accommodate students. Although attendance on her daily Zooms was high, many assignments were incomplete. Another student shared with me that she did not realize that she took her routine and school day for granted until now. Her online school day consisted of waking up at 10 am instead of 6 am, working on a laptop in bed instead of a classroom. She missed walking down the hallways with friends. She missed sitting in a classroom with a teacher and other students, having discussions and asking questions. She would do anything to go back to my school. But a few students have discovered that they enjoy getting to work at their own pace, set their own schedule and be free from “the stressful environment of school.” It was surprising that some of my students excelled and seemed to enjoy the virtual platform. They had parents that were supportive and completely involved which made this transition easier for them.

P2 responded:

I thought I grew as a teacher. I had to step up to the plate and learn how to deliver information to my students in a new way. I felt I was able to bring them some sort of normalcy in their lives during the time that was so uncertain.

What worked well for you while teaching virtually? How did you connect with your students using a virtual platform?

Make connections with students, build a bond because kids are more easily distracted. To get the full benefit of online learning, there needs to be a concerted effort to provide structure and go beyond replicating a physical class/lecture through video capabilities, instead, using a range of collaboration tools and engagement methods that promote inclusion, personalization and intelligence. I spent time working with my students 1:1 as I was able to make connections with them and get them to agree to working 1:1. Most responded well to the attention. Children extensively use their senses to learn, making learning fun and effective through use of technology is crucial. It is important to have clever integration of games for students to have higher engagement and increased motivation towards learning.

P3 responded:

I started out feeling like a failure. I had been recognized as a Teacher of Excellence and highly effective but through Zoom I felt like I really struggled to connect with my students. Students were not able to interact, I could not see body language, half the class was not logged in. What once was joy turned into emptiness. I found myself seeking guidance from my principal. I felt defeated, but in a unique way, which made me feel like even more of a failure. I felt like I

couldn't be the teacher I had worked so hard to become. My principal was reassuring and reminded me that my paradigm needed to shift because the world has changed so drastically. How do I shift my paradigm? Lower my expectations? Do I overhaul everything for the sake of adjusting to the pandemic? I was advised to keep my expectations high in magnitude and low in rigidity. Look at the bigger picture and strive toward the high expectations my students deserve and choose the paths that guide my decisions for my students at this time. It took some time but, I realized this advice has transformed my students and me into agents of optimal learning. I had broadened my scope to provide meaningful and fun instruction. For the longest time, I viewed distance learning as limiting my quality of instruction. I thought, "Well, I won't be able to do this because it just won't be the same through Google Hangouts or Zoom." It turns out I was right. It won't be the same. But I had a choice and I chose to embrace the potential and leverage my creativity to create promising outcomes and not let limitations stand in my way. Is everything perfect? Absolutely not. And there's a long way to go. There were lots of magical moments and wins, with lots of failure. But I'll fail with the intention of finding a different path to follow.

Interview Question 9 P1, P2, and P3 Responses

Interview Question 9. As you reflect on the 4th quarter of school during the Corona Virus Pandemic 2020, what could you have done differently? What could the school district/principal have done differently to support both teachers and students during virtual teaching? P1 responded:

Have enough teachers to teach online so there are no blended classes. There were no blended classes during 4th quarter of 2020. Right, I am referring to this school

year, 20/21. It is difficult to teach face-to-face and virtually at the same time. As far as 4th quarter of 2020, it was a whirlwind and the focus was to teach but to also make sure that every student was having their needs met. I spent many hours reaching out to families and students, as well as collaborating with colleagues. I felt supported by my principal and the school district. I think everyone did the best they could under the circumstances. We were all scared and felt so vulnerable to a terrible disease that was killing many people.

Please provide any other comments and information about your experience of teaching using blended learning prior to the Corona Virus Pandemic of 2020, and while teaching virtually during the quarantine. Anything else you want to share? Any advice or suggestions for those teaching virtually? Suggestions for students or parents?

Set a schedule, teach students how to get organized. Teach students how to self-advocate. Teach students how to communicate with teachers and students. Also, remember that when creating lessons to address the multiple intelligences because students learn in different ways. One student shared with me I also find it very hard to find an 'escape' from school. Since it all takes place at my home, destressing has become more difficult because I feel like school is there with me the entire day. I really hope, in the near future, we will be returning to our school since I am not receiving the best education at home. As teachers we need to be cognizant of student struggles and give support in all areas for students. Make sure that student's social emotional needs are being met and then focus on the academics.

P2 responded:

I think I would have presented my material in a different way. I think I would've

made short videos and clips of myself solving the problems. Just something more direct since they couldn't be with me in person. I feel as though my principal could've given us a little more guidance. I know this was an unprecedented time for all. So, overall, I believe everyone did the best they could.

Please provide any other comments and information about your experience of teaching using blended learning prior to the Corona Virus Pandemic of 2020, and while teaching virtually during the quarantine.

I have never taught virtually before the Corona Virus Pandemic. I do believe this style of teaching has changed the way people will go to school from this point forward. I believe that more students will choose the virtual path and we will have to accommodate them for years to come.

What advice do you have for teachers, parents, and students who choose the virtual path for teaching and learning?

Parents need to hold students accountable, check focus, attendance. Students need to hold to high standard and make a schedule for themselves and focus on what needs to be accomplished. Get organized, use a planner, write it down, and set small goals. Students are struggling with self-advocacy skills and need to set small attainable goals that can be met each day. Otherwise, it can get overwhelming and students then tend to shut down.

P3 responded:

I panicked. I thought that I was going to just assign busy work to students rather than engaging learning activities. But then I realized with time and guidance that the Zoom sessions should be as engaging as the classroom experience or the students are going to suffer. Along the way, I learned that students were feeling so

overwhelmed and unable to organize themselves. This was a huge wake-up call that students need support with self-advocacy skills, and independent functioning skills such as organization. I also wish that social emotional learning was implemented for students to have the additional support that so many need. Students were struggling as much as the teachers and together we managed to get through it. The world needed time to adjust. Therefore, providing small manageable, achievable goals to work on each week, listen to feedback, and communication frequently and one on one with students does make a difference.

What advice would you give teachers teaching virtually?

Provide small manageable, achievable goals to work on each week, listen to feedback, and communication frequently and one-on-one with students does make a difference. Make sure to be connected with students so that they know you care. Once you create that trust and show them that you are invested in them, students will be more successful.

What advice would you give students and parents who are taking virtual learning classes?

Be present, log in, know what the expectations are and what the assignments are. Get organized and each day to break the assignments into smaller, manageable chunks that can be completed on time. Do not put off assignments because it can easily become overwhelming. ADVOCATE! If you need help, reach out to your teacher. Be honest, if you are struggling with personal issues that are impacting your ability to do your work, share that with your teacher and work together.

Teachers are on your side and want students to be successful.

Please provide any other comments and information about your experience of teaching using blended learning prior to the Coronavirus Pandemic of 2020, and while teaching

virtually during the quarantine.

The hardest part of teaching remotely was the loss of regular contact with students. I became a teacher to build relationships with my students and that one-on-one, face-to-face interaction, is what I missed the most at first until I was able to start connecting with my students. It's that personal connection that I have with my students helps kids stay focused when it's time to learn, but more important than that, many students experience trauma at home including poverty, food insecurity, abuse, and neighborhood violence so school is their safe space. I am committed to a continuity of learning, but first and foremost committed to having whole young people. And that means checking in. And that means phone calls. It means letting these students know that even though we are in different spaces, that I am here for them and will do anything to support them in all areas of their lives. These were suggestions I followed to create an interactive and connected class: Break learning into smaller chunks. Be clear about expectations for online participation. Provide immediate (or at least frequent) feedback through online knowledge checks, comments on collaborative documents and chat to keep students motivated and moving forward. Include virtual meetings, live chats or video tutorials to maintain a human connection.

Data Analyses

By coding the data in initial codes then expanded codes followed by rationalized codes, the data were analyzed then final propositions were concluded. The rational database approach assisted in the data analysis with the aid of theoretical analysis. By processing the data, appropriate conclusions were reached. Using descriptive data enabled the process of the coding so that themes were identified and a definitive

collection of findings were presented for discussion.

Demographic Data

For the data analysis of the demographic data, the ethnicities of the three participants were 100% Caucasian and the genders were 100% female. For numbers of years teaching, one participant (33.3%) had 1-5 years of experience and two participants (66.7%) had 10-15 years of experience. The highest degree obtained was one participant (33.3%) with a bachelor's degree and two participants (66.7%) with master's degrees. One participant (33.3%) was a Reading-ELA teacher and two participants (66.7%) were Math teachers. These data do not appear to be relevant to the analysis of the overall findings other than to contribute to a profile of the participants. With 100% female Caucasians there were not enough variations to analyze the significance of the findings other than to say these responses and findings were received from these types of participants.

Themes for Research Question 1

Research Question 1. What are the challenges teachers face in the classroom when implementing blending learning?

The main theme for responses that provided answers to Research Question 1 included the challenge of not enough time. The issues of time response were given by all participants. Expectations to use new programing was another theme. The participants noted that they were basically forced to adapt to a whole new approach to teaching and this was done through hasty implementations of the new format. They all did not feel they had enough preparation for the change in format and proclaimed that it was difficult to learn the new virtual program. One participant noted that they had completed previous work digitally, but it only included submitting grades electronically and parent

communications.

Internet connections and quality of virtual access were a unanimous theme from all participants. Many students had weak or limited Internet services. One student had siblings using their Chromebook and they had to wait their turn to be able to reach the teacher and classroom formatting.

All three participants noted that students missed interaction with teachers and missed discussing life in a more intimate setting. Students were not able to interact, the teacher could not see body language, half the class was not logged in. What once was joy turned into emptiness.

One participant noted lack of parental participation as a challenge. Parents played a key role in holding students accountable, checking on their focus, and ensuring student attendance. Another participant shared concerns with students experiencing trauma at home including poverty, food insecurity, abuse, and neighborhood violence so school had been their safe space. Without establishing a more personal connection with students through the virtual format, continuity of learning could not take place. Students felt isolated and that reduced overall engagement. Students were disengaged and as the novel idea of virtual learning wore off, fewer and fewer students engaged in the lessons, logged into zoom, or contacted teachers. More efforts had to be established to check in with students and use more time connecting by phone with both students and parents. The majority of the participants cited the challenge of spending more time to attempt to build quality learning through different learning formats.

Student distractions were a common theme in the challenges for teachers. Students had (a) divided attentions during virtual class time, (b) difficulty logging in or not logging in at all, (c) challenges staying motivated, (d) difficulty initiating student self-

direction, and (e) off task behaviors that included being on other sites during lessons and using the of calculator on the computer instead of the methods presented by the teacher. In order to accomplish the full benefit of online learning, one participant recommended that there needs to be a concerted effort to provide structure and go beyond replicating a physical class and lectures through video capabilities, as well as using a range of collaboration tools and engagement methods that promote inclusion, personalization, and intelligence.

Themes for Research Question 2

Research Question 2. What initiatives would teachers like the schools to take to support technology integration and teaching?

Similar to the themes in response to Research Question 1, the issues related to Internet and WiFi access and capabilities as well as hardware needs should be adequately addressed by the schools. Additional student needs should be addressed by the schools that include (a) arranging virtual paraprofessionals with whom students could interact, (b) the need for more professional development, (c) address the lack of time for preparation and adjusting teaching methods, (d) address how to better assist lower-level students who struggle with the new format for learning, and (e) ways to address missed social interactions. Schools need to develop ways to meet the students' needs for support with building student self-advocacy skills.

Themes for Research Question 3

Research Question 3. What factors have influenced the transition of teachers to virtual teaching during the 2020 Corona Virus pandemic?

Participants noted it was a complete transformation in their teaching style. Everything was new. They explained that their teaching had to become more adaptive.

Traditional walls were broken down and an entire new pedagogy was developed. One participant noted, “We were all scared and felt so vulnerable to a terrible disease that was killing many people.” Another noted, she “spent many hours making phone calls, sending emails to parents and students, posting in the google classroom, creating videos, and fun lessons.” One participant proclaimed, “Well, I won’t be able to do this because it just won’t be the same through Google Hangouts or Zoom.” This teacher noted that eventually she grew as a teacher.

All participants addressed the need to increase interactive games to keep up interest and to make modifications that could save students. All noted that teacher communication with other teachers increased. They were forced to be more flexible but that also increased the ability to meet different learning styles and support individual learning needs.

Higher achieving students responded very well to virtual learning they were engaged, they were logged in on time, and they kept up on communications while being intrinsically motivated. It was a theme that there was a need to create lessons to address the multiple intelligences, in particular lower-level students, because students learn in different ways.

Student self-advocacy was a theme in multiple categories connected to (a) teaching students how to communicate with teachers and students; (b) students need to hold to high standards and make a schedule for themselves and focus on what needs to be accomplished; (c) students need to get organized, use a planner, write it down, and set small goals. Students struggling with self-advocacy skills need to set small, attainable goals that can be met each day and to break the assignments into smaller, manageable chunks that can be completed on time.

Even though adjustments in teaching, learning, delivery, knowledge levels, and rising to challenges had to be established, the overall participant responses indicated that virtual teaching and learning could be a positive experience. As one participant shared, I panicked. I thought that I was going to just assign busy work to students rather than engaging learning activities. But then I realized with time and guidance that the Zoom sessions should be as engaging as the classroom experience or the students are going to suffer. Along the way, I learned that students were feeling so overwhelmed and unable to organize themselves. This was a huge wake-up call that students need support with self-advocacy skills, and independent functioning skills such as organization. I also wish that social emotional learning was implemented for students to have the additional support that so many needed. Students were struggling as much as the teachers and together we managed to get through it. The world needed time to adjust.

All participants acknowledged that virtual learning has become the new normal for schools and society.

Chapter 5: Discussion

Interpretations of Findings

The purpose of this study was to examine teachers' perceptions of blended learning implementation and how learning was impacted, as well as the transition to virtual teaching during the COVID-19 pandemic of 2020. The researcher was searching for an understanding of how implementing specific models of blended learning and virtual teaching models were being facilitated by the participants. Preconceptions were that the participants in this study would respond positively concerning adjusting to virtual learning as they switched from blended and traditional teaching due to the COVID-19 pandemic. It was also anticipated that students would adjust accordingly, or at least somewhat enthusiastically because they would be given the freedom to learn from home. It was anticipated that teachers would adjust accordingly, as everyone made an effort to rally in responding to the needs of educators and schools during a serious global health crisis that was permeating every part of society and school functions. It was not anticipated that availability of the Internet and devices would be demonstrated as a significant drawback to online learning. Many researchers, including Toguero (2020), emphasized the serious and far-reaching impact of inequitable access to the tools needed to participate in online learning, such as slow, unreliable, or actual lack of access to the necessary technology to learn. Toguero shared concerns on costs to students and teachers; familiarity versus phobia on use of the devices needed to learn; and insufficient preparation for teachers and students to adapt educationally as well as socially. These expectations before the research began then lead to a deeper and broader understanding of the complexities associated with changing delivery forums from traditional methods to new, advanced virtual modes of teaching and learning.

Discussion of Research Question 1 Findings

Research Question 1. What are the challenges teachers face in the classroom when implementing blending learning?

To begin, the most honest, but horrifying, factors in the responses from the participants were their overwhelming feelings of being unprepared for the adjustments required to continue to educate their students in a totally different learning environment. Participants noted it was a complete transformation in their teaching style. Everything was new. Sreehari (2020) also supported the impact of the forced shift to digital learning format due to the pandemic by referring to it as “bewildering” and disorienting to teachers, but that most of them have risen to the challenge to make the most of it and succeed for their students. The teachers in this dissertation study explained that their teaching had to become more adaptive. Traditional walls were broken down and an entire new pedagogy was developed. One participant noted, “We were all scared and felt so vulnerable to a terrible disease that was killing many people.” Another noted, she “spent many hours making phone calls, sending emails to parents and students, posting in the google classroom, creating videos, and fun lessons.” One participant proclaimed, “Well, I won’t be able to do this because it just won’t be the same through Google Hangouts or Zoom.” This teacher noted that eventually she grew as a teacher. Olasile and Soykan (2020) supported these findings by noting transformations required of teachers as they alter their instruction to a totally digital foundation, as a result of the pandemic, should take multiple years of developing teaching strategies and administrative support. The hastily implemented changes to virtual teaching due to the pandemic are easily labeled disruptive in a newly minted format for public education as society and educators responded to the pandemic.

As one participant shared, “I started out feeling like a failure. I had been recognized as a Teacher of Excellence and highly effective but through Zoom I felt like I really struggled to connect with my students.” She worried that students were not able to interact and she could not see body language. She described that what once was joy turned into emptiness and feeling defeated. In trying to figure out how to balance her teaching she noted that she was advised to keep her expectations high in magnitude and low in rigidity. She eventually adapted by broadening her scope and providing meaningful and fun instruction. She made the choice to embrace the potential and leveraged her creativity.

In addition to adequate teacher and strategic preparation in the switch to virtual teaching, Olasile and Soykan (2020) also recommended the need to establish trust both among staff and administration as well as among teachers, students, and families. The study findings indicated that much of this transition to the new format required more from social structures instead of just educational structures. These social structures also had a global foundation and impact as the world changes to accommodate or adjust to COVID-19 and its demands.

Among the themes found in responses that addressed Research Question 1 were the participants’ concern about lack of time to quickly and adequately meet the learning needs of their students. The participants were unanimous in their responses about not having enough time to adjust and implement virtual learning. Another theme expressed with concern from the participants was the difficulties of inadequate or limited Internet access for students. This is a variable that would need to be addressed by school systems as well as social services in order to ensure equal, quality, immediate, and enduring access for all students in order for them to fully partake in the new learning format.

There was no indication from the responses in this study that parental needs had been addressed. The pandemic certainly created conditions that placed higher expectations and demands on parents as education shifted to the home environment instead of full-time onsite schooling. The participants in the study did address the concerns that included students experiencing trauma at home including poverty, food insecurity, abuse, and neighborhood violence so school had been their safe space. Without establishing a more personal connection with students through the virtual format, they believed continuity of learning could not take place. Students felt isolated and that reduced overall engagement. Parents felt overwhelmed with multiple duties and demands and very few support systems were in place to assist them.

In addition to these demanding adjustments, inadequacies, and deep concerns, student engagement in the learning process was impacted by the switch to virtual learning due to the pandemic. Students had (a) divided attentions during virtual class time, (b) difficulty logging in or not logging in at all, (c) challenges staying motivated, (d) difficulty initiating student self-direction, and (e) off task behaviors that included being on other sites during lessons and using the of calculator on the computer instead of the methods presented by the teacher. Sreehari (2020) also noted that students became more passive in their learning as well as disinterested in remaining engaged through the technology associated with the teaching. Sreehari agreed that because teachers were not as able to provide close supervision and in-person encouragement, student learning was challenging. In order to accomplish the full benefit of online learning, one participant in the study recommended that there needed to be a concerted effort to provide structure and go beyond replicating a physical class and lectures through video capabilities, as well as

using a range of collaboration tools and engagement methods that promote inclusion, personalization, and intelligence.

Discussion of Research Question 2 Findings

Research Question 2. What initiatives would teachers like the schools to take to support technology integration and teaching?

Olasile and Soykan (2020) shared areas that should be addressed when implementing online learning that include factors associated with (a) change and how to support teachers, students, parents, and administrators in this change; (b) pace that is essential in any educational format, but especially in online learning; (c) technology needs and adaptations for everyone associated with the learning; (d) competencies associated with teaching strategies as well as teachers and students; and (e) financial needs and concerns that must be addressed district-wide. For example, in the study it was pointed out that students no longer had the support of paraprofessionals and this was an essential variable that should be addressed in order to meet the learning needs of all learners. Time for teachers to prepare and learn, as well as essential professional development were revealed by the participants to be key components for successful implementation of virtual teaching. One participant did make a point of declaring that her administrator was extremely supportive and provided important resources and encouragement as she made adjustments in her teaching style and approach to learning. Sreehari (2020) recommended post-pandemic measures should include in-depth teacher training and preparation resources as well as addressing the bandwidth and accessibility of the Internet. Sreehari suggested the new format of online learning may result in improved learning when all of the associated issues are resolved and data supported that increases in learning growth were established at 25-60% while traditional learning data

were 8-10% sustained growth. This was contributed to individual pacing and the opportunities for re-reading materials as needed plus accelerating lessons to focus on the most essential materials. The study responses did not address the specific variable of learning growth but, overall, participant responses noted that their teaching had to become more individualized and focused on key learning strategies.

Discussion of Research Question 3 Findings

Research Question 3. What factors have influenced the transition of teachers to virtual teaching during the 2020 Corona Virus pandemic?

Participants noted it was a complete transformation in their teaching style. Everything was new. They explained that their teaching had to become more adaptive. Traditional walls were broken down and an entire new pedagogy was developed. One participant noted, “We were all scared and felt so vulnerable to a terrible disease that was killing many people.” Another noted, she “spent many hours making phone calls, sending emails to parents and students, posting in the google classroom, creating videos, and fun lessons.” One participant proclaimed, “Well, I won’t be able to do this because it just won’t be the same through Google Hangouts or Zoom.” This teacher noted that eventually she grew as a teacher. Ali (2020) determined that 92% of teachers making the shift to full online teaching lacked the confidence to immediately embrace this new format. With this alarming statistic comes the need to increase professional development, time, and resources available to teachers as they make these transitions to online teaching. It is more than just a paradigm shift in education, it is learning to embrace a new social and emotional threshold necessary to adjust to a global pandemic health crisis.

In addition to the paradigm shift and social redevelopment, discovering and implementing effective teaching strategies to keep students engaged are essential

components, as indicated by the participant responses. All participants addressed the need to increase interactive games to keep up interest and to make modifications that could save students. All noted that teacher communication with other teachers increased. Despite the challenges of the new teaching format and potential negative results, the participants admitted to being forced to be more flexible, but that also increased the ability to meet different learning styles and support individual learning needs.

Participants noted that higher achieving students responded very well to virtual learning they were engaged they were logged in on time and also kept up on communications while being intrinsically motivated. It was a theme that there was a need to create lessons to address the multiple intelligences because students learn in different ways. Another concern expressed by a participant was the need “to be cognizant of student struggles and give support in all areas for students. Make sure that students’ social emotional needs are being met and then focus on the academics.”

Meanings and Understandings

The literature that has resulted from the pandemic associated with COVID-19 supports the findings of this study. Ali (2020) discussed the value of the learning environment shift from teacher-centered to student-centered with students having a stronger investment in what and how they learn as well as their responses to this new self-control related to learning. Toquero (2020) emphasized the widespread global scale of how COVID-19 is impacting all levels and areas of teaching strategies and student learning. Additional benefits included students having access to updated information connected to learning, were able to share important content with each other and with teachers, and increased communication on many essential levels. One unique, unexpected benefit was students and teachers interacting on a global level with a wide variety of

people and institutions that elevated their learning to wider range of cultures, events, resources, and understandings.

Toquero (2020) noted that even though the global pandemic was sometimes viewed as an impediment to student learning due to the major shifts in delivery, expectations, teaching lesson effectiveness, and social impact, the alternative of closing schools permanently as the world learned how to best combat this disease would result in too much loss of learning for students. Toquero (2020) equated this loss with severe economic issues and losses along with relevant negative impact on human capital.

As the new and ongoing research indicated, in conjunction with the research findings, there has been a significant shift in culture related to teaching and learning. Teachers, students, parents, and administrators are in the process of adapting to these cultural changes. Efforts need to continue through building knowledge, understanding, actions, and beliefs. All objectives center on maintaining an informed, flexible, and effective learning environment conducive to maximized learning and teaching strategies. Because much of the changes resulting from the pandemic's impact on educational practices have been emergency-based and quickly adapted actions, policy makers need to catch up with the demands for how to improve and maintain the positives of these changes. Effectiveness and growth must be maintained through valued developments and foundations centered on new learning modes in order for schools to remain as successful learning venues and environments.

Implications of the Study

Relevance of the Demographic Data

For the data analysis of the demographic data, the ethnicities of the three participants were 100% Caucasian and the genders were 100% female. For numbers of

years teaching, one participant (33.3%) had 1-5 years of experience and two participants (66.7%) had 10-15 years of experience. The highest degree obtained was one participant (33.3%) with a bachelor's degree and two participants (66.7%) with master's degrees. One participant (33.3%) was a Reading-ELA teacher and two participants (66.7%) were Math teachers.

These data do not appear to be relevant to the analysis of the overall findings other than to contribute to a profile of the participants. With 100% female Caucasians there were not enough variations to analyze the significance of the findings other than to say these responses and findings were received from these types of participants. These limited data would present a recommendation for increasing the scope of the study to include a larger variety of participant profiles with other genders, ethnicities, ages, experiences, areas of teaching, and college degrees. These variables would provide further insights and understandings of the purpose and findings of the study. Another variable would be increasing the overall number of participants to seek the responses to the design of the study.

Relevance of the Response Data

This study added to the knowledge analyzing teacher perceptions and the impact of implementing the new format of virtual teaching on middle school teachers and students. The findings added to the professional development inquiry about virtual teaching for middle school teachers during the COVID 19 pandemic of 2020. Using convenience sampling, also known as a purposive sample, was an expeditious method for selecting participants for the focus groups. This method provided the opportunity for the participants who shared the most relevant information because they were key members of the population and environment being studied. Each teacher participating in the study had

various years of teaching experience and each had a different level of technological experience, yet they were members of a common community in blended learning and they were all sharing in the transition to virtual teaching. McLeod (2019) noted the interviews investigated individuals in a personal and detailed way through this qualitative case study. This methodology allowed for insights that included participants sharing key concerns:

Students had Internet issues, it was difficult to get in touch with them: phone numbers were wrong, disconnected email addresses were not up-to-date so the challenges of teaching virtually really had to do with the students not logging in and interacting. I think the novelty of virtual learning has worn off.

Interpretivism applied to the data guided the research perspectives allowing the researcher to interact and learn from the participants' data. As participants noted:

The biggest challenge is not being able to interact with my students directly. I have no way to hold them accountable for their work. It is hard to keep them motivated and on task. I feel as though some of my students online are not listening to me and engaging with me the same way they would in a classroom.

These insights were meaningful and important contributing to the significance of the data. The interpretation of these data was influenced by interpretivism derived from hermeneutics that provided guidelines from which to interpret data and content from a scholarly perspective (Crotty, 2010). These research guidelines and opportunity assisted in developing a deeper understanding of participant actions and intentions through meaningful interactions and the researcher was able to develop an understanding and discover meanings that would have otherwise been impossible (Crotty, 2010). Lived experiences are real and true to the participant. When active virtual teachers share

concerns, these are important to process and the goal is to adjust as needed. For example, one participant noted, “Technology can be advantageous in many ways, but when students cannot compute simple problems and they use the calculator on the computer, it is not supporting their ability to master math.” This is a tangible alarm in need of being addressed by educators worldwide. Attention needs to be paid to the participants’ concerns that resulted from them sharing their perceptions and perspectives:

[Virtual teaching] is a complete transformation of the flow and function of the classroom and requires classroom redesign . . . it is difficult to keep the students online motivated and on task. Students tend to not work as hard and do not devote as much time and energy into their work. There are many sites that are blocked, but students manage to find ways around the blocks.

These are relevant data collected first-hand from practicing professionals during the COVID 19 pandemic of 2020 and these provide important factors to address for solutions to learning for students in virtual learning environments. Gathering and interpreting these data enable all educators to gain key insights into creating and developing enhancements for successful virtual learning to take place for students.

Importance and Significance to Education

Student self-advocacy was a theme in multiple categories connected to (a) teaching students how to communicate with teachers and students; (b) students need to hold to high standards and make a schedule for themselves and focus on what needs to be accomplished; and (c) students need to get organized, use a planner, write it down, and set small goals. Students struggling with self-advocacy skills need to set small, attainable goals that can be met each day and to break the assignments into smaller, manageable chunks that can be completed on time. Participant recommendations included:

Give student voice and choice in what and how they learn and demonstrate learning. This applies to lessons you've created for students to do either together or apart. Allowing students to work on their own because they want to—is another way to empower students. Use videos and interactive games to get students interacting and showing up for class.

It was important for teachers, students, and parents to build understanding that there are adjustments on all levels with the implementation of virtual learning. As one student expressed, destressing from school was more difficult at home because it was also school. This student had used home as an escape from school and that was no longer available. Participants in the study shared that they learned students were feeling overwhelmed and unable to organize themselves and students needed support with self-advocacy skills, independent functioning skills including organization, as well as social-emotional support as they all adjusted to new forums and formatting.

As noted, a case study is an intensive study of a specific individual, specific event, or a particular phenomenon. Historically, researchers have utilized the results of case studies to develop foundational theories, as in the case of Freud who based his case study results on his development of the theory of psychoanalysis. Analysis and interpretation of case study results also provided Piaget with theories on how children develop and how to identify the stages of these developments. Interviewing teachers via a qualitative, multi-site case study will allow the researcher to gain understanding of the teacher perspectives in different classrooms within the same school. Case study interview findings broaden the understanding of teacher perspectives when using blended and virtual teaching strategies. All participants in this case study acknowledged that virtual learning has become the new normal for schools and society as

each participant was striving to adapt to this new normal and adequately, effectively educate their students.

Limitations

The limitations in this study included participant attitudes toward the implementation of technology and using a blended and virtual teaching approach to enable student learning. The number of participants was small, three Caucasian females, but Creswell (2009) noted that all methods of data collection can be used in a case study analysis. Numbers of participants are usually small in case studies and may include individuals or groups with specific characteristics from whom interview data are collected that provide insights and understandings of the phenomena being studied. Participants were from a common group sharing similar characteristics. Participation in this study was voluntary and protected for anonymity of participant identities. An additional limitation to the study could be the data collection process. Because information obtained during an interview is largely dependent on the interviewee and what each individual is comfortable sharing, the nature of their information was limited to each individual's own perspective and lived experiences. Perceptual data were in the eye of the beholder. However, this study's data verified results and helped to support the accuracy of the data collection. McLeod (2019) explained case study procedures where the researcher presents results of methods associated with interviews detail the lived experiences of participants in the study. These participants were from common classroom experiences and common types of social groups with similar work and education experiences. Their responses were similar as well. Because of these similarities and commonalities the data may represent limitations of perspectives and perceptions.

Responses and conclusions may not have represented the entire population of teachers on a global level and their findings may not be generalizable locally as well as globally.

Recommendations for Future Research

Because the COVID-19 pandemic is a new global condition impacting all of society and education and because required changes in delivery of education are in flux during these adjustments to the global health crisis, there is an existing paucity of research on all factors associated with the urgent and comprehensive shifts to online learning. Future research should thoroughly explore the benefits for teachers and students from the initiation of huge change in delivery as well as scope of the online learning process. Factors to further explore include the swiftness of this initiation, the significantly large scale associated with changes in format and possible learning impact, and the long-term impacts developing from these new initiatives. Future studies should include precautions necessary in the implementations of online learning as well as what has been learned from successes and failures in these implementations. One of the important findings in this study was a better understanding of what was needed by teachers and students in the forms of preparation and planning as the new educational delivery and formatting evolved. Contextual understandings on all arenas associated with online teaching and learning should be further explored including political responses and policy designs and implementations. Above all else, teacher support and professional development for online teaching should be a key topic for further research along with the social impact on students' personal and learning profiles. A larger participant group might provide further understandings to the issues as well as a more diverse participant group. Expanded student input would be valuable, as would parent perspectives and administrators' perceptions and recommendations. Blended and virtual learning plus

teacher strategies and implementations are very complex and multi-faceted. There are many associated dimensions, aspects, and factors that warrant further study. These are fresh, newly developing phenomena on a large and global scale with a large, global impact; each developing facet would reap valuable data and understanding.

Conclusion

Sreehari (2020) studied the impact of online learning for students as they adjusted to this new learning format due to the COVID-19 pandemic and determined that there should be informed decision making and policy implementation from administrators and teachers as they strive to build this type of program. Sreehari also noted that even though students expressed that they preferred learning at their own pace, they also firmly believed that this type of learning was not as effective as more traditional approaches. The students cited lack of engaging lessons along with difficult and unequal Internet issues as key variables that contributed to a lesser quality of learning experience for them. The data revealed that students preferred 30% online and 70% face-to-face learning. Sreehari (2020) suggested that the overwhelming impact of the global pandemic on education and social functions contributed to the negative feedback from teachers and students. Among the data presented, Sreehari noted that before the pandemic there were 10 million users of Zoom and that figure increased as the pandemic spread to over 300 million by April 2020. Related and unrelated cyber security through Zoom have been concerns among educators worldwide. The global and local impacts of advanced, widespread technology on learning are significant as change continues to occur in the educational arenas worldwide.

The results indicated the need for more effective organization of students and schools as well as the need for more time and resources for teachers to focus on the

learning process. As traditional learning evolves, technology creates a new realm in which to approach learning. Physical space is being converted into virtual space. The customization of education is a result and students are becoming the drivers of their learning. They are making choices to become and stay engaged in the learning process. There is increased flexibility for students and teachers to collaboratively interact in a fresh learning environment. Personalized learning is the focus and the results may very well influence higher student achievement. The results of the study indicate that these changes are ultimately for the better as teachers and students adjust and increase their understandings of the tremendous potential for positive virtual instruction and learning outcomes.

Toquero (2020) noted benefits to using technology in the implementation of remote instruction that includes student engagement, access to the latest information, sharing of content, and communication. Besides these, teachers and learners can interact with other people in different institutions across the globe. The initial and ongoing impact of all repercussions associated with changes in education and learning due to COVID-19 provide potential global and local solutions to implementing and maintaining quality educational experiences for teachers and students. Despite the necessity for speedy, crisis-oriented implementations, success is possible, as indicated from participant data, “Teachers received a 3-day crash course. The district laid out a calendar of assignments to be completed. This was great that the district provided this program, but it was difficult since teachers and students were new to it.” Overall, participants were enthusiastically willing to embrace altering how their teaching was and will be delivered. The world of online teaching has many levels of complexities, difficulties, and benefits. As this study revealed, online teaching is not a simple transition with simple results. According to the

World Bank (2020), other researchers, and this study, online teaching and learning involve equity issues, potential positive and negative impact on student achievement, alignments between objectives and outcomes, solutions to bandwidth and availability of devices, serious measures developed to support and guide students and teachers, negotiations for free or affordable access to the Internet, and increased, as well as informed, communications between teachers, students, parents, school officials, and policy makers. The “new normal” phrase has a key word in it: normal.

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to the COVID-19 pandemic to enable distance education and online learning.

Appendix A

Blended Learning Demographic Survey

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Please select all that apply.

Gender

Female

Male

Years of teaching experience

1-5 years

5-10 years

10-15 years

more than 15 years

What subject are you currently teaching?

Reading/ELA

Math

Science

History

Highest degree of education completed

Bachelors

Masters

Doctorate

Ethnicity

Hispanic, Latino, or Spanish

Black or African American

White

Asian

Other - prefer to self-describe

Appendix B

Blended Learning Narrative Survey

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Please explain how comfortable you are using blending learning:

1. What are the expectations of your school district for using a blended learning platform and technology in your classroom?
2. Please describe the challenges with implementing blended learning.
3. Do you feel that there is enough professional development to support the use of technology in the blended learning platform?
4. What are your positive experiences with using technology and the blended platform?
5. With the transition to the virtual learning platform due to Corona Virus Pandemic of 2020, did you feel prepared to teach virtually since you transitioned from a traditional teaching strategy to using a blended learning platform?
6. What were the biggest challenges of teaching virtually?
7. Based on your experience, how did students respond to virtual learning?
8. What were your positive experiences while teaching virtually during the Corona Virus Pandemic of 2020?
9. As you reflect on the 4th quarter of school during the Corona Virus Pandemic 2020, what could you have done differently? What could the school district/principal have done differently to support both teachers and students during virtual teaching?
10. Please provide any other comments and information about your experience of teaching using blended learning prior to the Corona Virus Pandemic of 2020, and while teaching virtually during the quarantine.