The Virtual Education Setting in Grades 9-12: How the Practices for Online Teacher and Learning Impact Student Achievement

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The Virtual Education Setting in Grades 9-12: How the Practices for Online Teacher and Learning Impact Student Achievement

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Educational Leadership Doctoral Program

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of the Requirements of
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ABSTRACT

Countless virtual school options are in operation all around the world. A growing number of teachers and students throughout the nation, continent, and world are working and learning online. With virtual learning steadily increasing, it is critical for educators to establish and implement the best online teaching and learning practices. The purpose of my study was to identify and explore the practices of effective teachers in the virtual school setting and how those practices impacted student achievement outcomes. The context of this inquiry was full-time national virtual public high school charter schools operating under the umbrella of the same national education management organization (EMO). I used a mixed methodology research design. I used extant data to identify teachers with high course completion rates. For my study, I defined completion rates as the number of students who completed each lesson in a semester course and had a final passing score. I surveyed and interviewed teachers with high course completion rates to determine the practices they used in their teaching. Based on my research and data collection, I identified best practices for virtual teaching and learning that lead to increased student completion rates. As a result, I recommended a policy that all virtual teachers participate in a professional development series to learn and implement the identified best practices.
PREFACE

My heart lies in virtual education. I have been serving virtual schools for the past 12 years, and I remain passionate about advocating for virtual schools. I started my career as a virtual elementary teacher in 2010. I loved the work that I was doing in the virtual setting so much that I pursued my administrative license to serve my virtual school in a more impactful way. I was searching to make a more significant impact by driving change from the whole school perspective. The work that I do now as a virtual school leader brings me so much joy.

Much like an elephant march, I lead my school at the front with my progressive forward-thinking and from the back to ensure that no individual, whether student or school official, is left behind. As a school leader, I keep the vision of the school in mind as I make both operational and strategic decisions that affect how the school functions and operates daily. Therefore, I had a strong desire to identify online best practices for teaching and learning. My aim was to provide teachers with quality professional development that help them implement practices that generated high student completion rates, course completion and pass rates.

I learned two leadership lessons through this study: 1) there is power in listening; and 2) professional development must be intentional. Throughout my research, I listened to the participants in this study. I listened closely to their responses during surveys and interviews, which ultimately led to my findings. Teachers are experts in instructional delivery, building small communities of learners, analyzing student performance data, and much more. I believe in the power of listening to the expertise of teachers.
It was evident throughout my research that teachers value quality professional development, and it energizes them. This observation made me realize how important it is to offer quality professional development to teachers. One way to ensure that the professional development sessions are of quality is to be intentional with the content and the design. Quality professional development requires an intentional plan that resonates with the audience and drives positive change.

Leaders can learn a great deal by analyzing the elephants’ leadership style and their interactions with one another. Like how elephants guide their young in a forward march, I plan to guide teachers in forward-thinking by providing them with research-based evidence that best supports student academic growth in the virtual setting. My hope is that the findings from this research will do just that.
ACKNOWLEDGEMENTS

In thinking about all the supports provided to me through National Louis University, several individuals stand out. These individuals provided me with endless support to ensure that I felt empowered and confident in the process of my evaluation and research.

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- Dr. Christine McMullen, thank you for expanding my knowledge and challenging me throughout my evaluation and research process.

- My TA013 cohort members, thank you for joining me on the journey of earning our doctorate in educational leadership. My journey was enriched by the community and connectedness that we built as doctoral candidates.
DEDICATION

I dedicate my work to the participants in my study and to all current and future virtual educators. This study is for you. I hope that this study enlightens and adds to your knowledge of virtual teaching and learning. I hope this study makes you think about the quality of service we are providing our digital learners. I hope it challenges your thinking and current processes to provide effective online teaching and learning practices. Lastly, I hope this study generates further thought and questions to bring change to virtual education to improve the teaching and learning process.
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CHAPTER ONE: Introduction

For a growing number of teachers and students throughout the nation, continent, and world, the act of going to school has taken on a whole fresh look. Going to school looks, feels, and sounds much differently for them because it no longer consists of a brick-and-mortar building with single rows of desks and face-to-face interactions with others. These teachers and students have chosen to practice and learn online. The act of going to school may look like a computer desk in the corner of the bedroom or a laptop on the sofa in the family room. It may sound like a quiet room where the student sits alone, reading lessons online, and where the only sound heard is the sound of the student typing on the keypad. It may feel less stressful without the pressures of social norms or less rushed since there is no need to wake up early to catch the bus or get to school before the bell rings.

There are innumerable virtual school options available for students globally. I focused on full-time virtual schools in this study that operated under the umbrella of a national education management organization (EMO) (citation withheld to protect confidentiality). All schools in this organization operated as public charter schools, located in various states, throughout the United States. Each school was required to meet the criteria set by state statute for the state where it operated. The organization under study established its first virtual school in 2002. At the time of this study, there were 36 full-time virtual schools and 22 schools under development in the organization (citation withheld to protect confidentiality).

Each school was structured differently depending on variables such as the school's authorizer, community partnerships, state funding, state statutes, and virtual learners'
needs. As defined by the organization under study, two variables remained the same across all schools: 1) 100% of enrolled students received their education 100% online, and 2) all schools aimed to provide quality personalized instruction (citation withheld to protect confidentiality).

**Purpose of the Program Evaluation**

The act of teaching and learning online is not easy. A virtual teacher’s and student’s role shifts slightly from that compared to the roles of a teacher and student in a brick-and-mortar school setting. Being a virtual educator is a journey that leads to a profound understanding of how students learn, how the delivery of instruction, and how relationships with all stakeholders can look, feel, and sound different from that of a teacher in a brick-and-mortar building. Being a virtual learner is also a journey filled with new student responsibilities and expectations, a better understanding of how one learns, and endless opportunities to build connections with others virtually. Virtual teaching and learning come with different sets of challenges and goals than face-to-face teaching and learning due to the competencies, conditions, culture, and context of the learning environment (Wagner et al., 2006). As virtual school options continue to populate across the nation, it is critical to establish and implement the best online teaching and learning practices.

Eleven years ago, while finishing my master’s degree, I noticed that the university I attended started to offer courses on virtual education. This was because the state began to change its statutes to allow virtual schools to open and operate, which the state had not previously authorized. I was intrigued by the thought of this new educational reform, so I researched online K-12 schools. I stayed informed about the virtual schools that planned
to open in my state. A year later, I applied to the virtual school that I felt I could serve the best. The principal hired me as an elementary teacher during the school’s pilot year. Since then, I have served as a teacher, master teacher, assistant principal, and principal in virtual schools.

During the last ten years, all of my professional experience has been in two fully online schools. I experienced a surge in enrollment at these fully virtual learning schools in this context. The first virtual school I served opened its "doors" in 2010. By the second school year, the school population had grown by 500%. This growth partially resulted from expanding service from grades 1-8 during the first year to opening the enrollment to include grades 9-12 the following school year. Across the nation, the enrollment in virtual schools by high schoolers increased at a much higher rate than the enrollment at the K-8 grade levels. Higher enrollment at the high school level was partly due to high school students being at an age where they were more technology savvy and more capable of self-regulating their emotions and behaviors, so they were more likely to work independently successfully (Miron et al., 2018).

The second virtual school I served opened its “doors” in the 2018-19 school year. The school opened enrollment for 1,500 students during the 2018-19 school year; however, the enrollment capacity for the next year (2019-20) grew to 4,000. That was a 166% growth increase from year one to year two. These two schools were both virtual public charter schools that operated under the same EMO.

As a virtual education pioneer, I had opportunities to establish many processes and procedures for the virtual schools I have served. I am dedicated to furthering the enrichment available in the virtual educational experience for educators and students. I can do this by bringing practical solutions to improving online instruction and the online
learning process and providing my instructional expertise in student data analysis, classroom management, and leadership.

From my experience, I know there is a need to have research-based best practices in place for the teaching and learning process in general and, specifically, for a virtual environment. Implementing best practices of virtual teaching will help set the expectation for effective virtual learning. More and more teachers across the nation have been challenged to be virtual educators; most often, these teachers have served in traditional brick-and-mortar settings for many years. However, through my experience, no amount of experience in the brick-and-mortar setting prepares teachers to become effective virtual teachers. By researching and identifying effective virtual teaching practices, virtual schools will have the research-based evidence-based practice to set the bar of excellence for the virtual learning environment teacher to establish highly effective instruction in the virtual setting.

The purpose of this evaluation and research was to identify and explore the practices of effective teachers in the virtual school setting and to identify how those practices affected student achievement outcomes. I analyzed the practices that virtual teachers implemented that correlated with high student completion rates. The organization under study based completion rates on the successful completion of each online course. Students must complete each lesson in the semester course and have a final passing score of at least 60% (D-) or higher to complete the course successfully. As established by the International Association for K-12 Online Learning (iNACOL) New Learning Models, I aimed in this evaluation “to assist educators in transforming each child’s educational journey into a more personalized, engaging learning experience in order to improve student outcomes” (2013, p. 2).
Rationale

As educators, we are always thinking about how to serve our students better. Thinking about serving students better brings about education reform. Education reform stems from a desire, a motivation, or a need to change how we educate our youth. Due to the ongoing COVID19 pandemic, and even before, perhaps, the most talked-about educational reform observed and practiced worldwide is virtual education due to brick-and-mortar schools temporarily closing their doors. Virtual education has grown tremendously, becoming one of our time's fastest-growing educational reform movements (Miron et al., 2018). Virtual learning is steadily increasing around the world, and it continues to grow for assorted reasons including, but not limited to, 1) schedule flexibility; 2) credit deficiency; 3) academic enrichment; 4) mental health issues; and 5) bullying (The Foundation for Blended and Online Learning, 2017).

According to the research of Miron et al., 2018, enrollment has increased exponentially since the year 2000 (See Figure 1). One can make an observation by looking at the data trends is that enrollment growth has increased progressively year after year. Experts in virtual education expect enrollment growth to continue over the coming years.
With this type of growth happening within virtual schools, further research into the best practices of virtual teaching effectiveness should occur to ensure that teachers in virtual education settings are effective. I experienced professional trials in both teacher and school leader roles during my ten years of experience working in a full-time online school environment. I wanted to couple my experience with current research and contribute to the research base by identifying effective virtual practices that yield positive student learning outcomes.

School leaders across the nation must become equipped with knowing how to implement effective best teaching and learning practices in the virtual school environment to serve students successfully. Without the implementation of effective teaching and learning practices, schools can experience an increase in student failures, resulting in overall deficient performance ratings in virtual schools (Molnar et al., 2019).
According to the research of Molnar et al., 2019, less than 50% of virtual schools received acceptable ratings (See Figure 2).

**Figure 2**

*Percentage of Virtual Schools with Acceptable School Performance Ratings, 2017-2018*

<table>
<thead>
<tr>
<th></th>
<th>Acceptable</th>
<th>Unacceptable</th>
<th>Not Rated (or No Rating Reported)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Percent of Schools with Ratings</td>
<td>N</td>
</tr>
<tr>
<td>Full-Time Virtual</td>
<td>67</td>
<td>48.5%</td>
<td>71</td>
</tr>
<tr>
<td>Independent</td>
<td>48</td>
<td>59.3%</td>
<td>33</td>
</tr>
<tr>
<td>Nonprofit</td>
<td>5</td>
<td>50.0%</td>
<td>5</td>
</tr>
<tr>
<td>For-Profit</td>
<td>14</td>
<td>29.8%</td>
<td>33</td>
</tr>
<tr>
<td>Charter</td>
<td>29</td>
<td>40.8%</td>
<td>42</td>
</tr>
<tr>
<td>District</td>
<td>38</td>
<td>56.7%</td>
<td>29</td>
</tr>
</tbody>
</table>

*Note.* Molnar et al., 2019

Low or deficient performance could lead to potential school closings, which is not in the community's best interest or the interest of the stakeholders serving the virtual school. In the event of a school closing, students lose a school choice option, and school officials lose their jobs and an opportunity to serve a portion of the students in that community. Therefore, educators need to identify effective virtual practices to provide a set of best practices for virtual teachers to optimize student achievement outcomes.

**Goals**

The goal of this project was to identify and implement effective virtual teaching and learning practices to optimize student learning outcomes. I identified the effective virtual teaching and learning practices that have a positive impact on student learning outcomes. Through my research, I identified best practices for effective virtual teaching and learning to aid the student learning process for optimal learning gains. By identifying
the practices used by effective teachers that resulted in high student completion rates, I
developed a professional development program. The program, implemented to train other
teachers in practices and strategies, would allow for replication of the success of the
teachers in this study. As a result of implementing effective virtual teaching and learning
practices, students, our digital natives, will become credible virtual learners who follow
virtual honor codes. Examples of these honor codes include: 1) practicing academic
honesty, 2) using quality online resources, or 3) acting responsibly when it comes to
sharing photos and documents through the use of technology.

“Some teachers will thrive using the new tool set offered online and others will
struggle” (Watson et al., 2012, p. 50). There is no additional licensure needed to teach
online in most states. Teachers are transitioning to a virtual learning setting not equipped
with best practices, resulting in under-performing teachers and students. Any licensed
teacher can teach in the virtual setting with the understanding that teachers have a solid
grasp of their content and pedagogy from their brick-and-mortar experience (Heafner et
al., 2015). As depicted by Heafner et al., “although many of the elements of effective
teaching are the same online as in face-to-face classrooms, online instruction requires
certain skills and dispositions that are unique to the online environment” (Heafner et al.,
2015, p. 46).

Definition of Terms

1. Completion rates were based on the “percentage of enrolled students who
   complete” each online course (Jordan, 2015, p. 341). Only students who
   completed each lesson in the semester course and had a final passing score
   were included in the calculation of the completion rate in the organization.
2. For this study, *consistently high student pass rates* for teachers in the organization under study was defined as two years (4 semesters), with at least 90% of students passing the course (citation withheld to protect confidentiality).

3. *Synchronous contacts* are contacts students and teachers conduct in real-time, such as on the phone, face to face, or live instructional sessions using an online platform (Darby & Lang, 2019).

4. *Asynchronous contacts* are contacts students and teachers conduct in lag time, such as via email or text (Darby & Lang, 2019).

5. *Full-time virtual schools* provide their curriculum and instruction entirely online with students and teachers who learn and work remotely (Miron et al., 2018).

6. *School authorizers* are educational agencies such as school districts, universities, or any state-level authorizing entity that puts into place school accountability (Watson et al., 2011).

7. *Educational Management System (EMS) or Learning Management System* is a learning platform system designed to monitor teacher and student performance. (Heafner et al., 2015).
Research Questions

Specific questions that required a deep dive into virtual teachers’ teaching and learning practices to support student learning guided my research.

1. What effective practices should high school teachers use in virtual classrooms?
   - How does the role of a teacher support virtual learners?
   - What do teachers need to know about serving students in the virtual setting?

2. How do the effective practices impact student achievement?
   - What characteristics or habits do teachers possess and practice?
   - What other variables impact student achievement?
   - What quality professional development on effective virtual teaching and learning practices are provided for teachers?

Determining the effectiveness of the identified teaching and learning practices acquired by teachers in the virtual learning environment propelled my evaluation. Answering these evaluative questions clarified how virtual school educators can assess the impact that their virtual practices have on their student academic outcomes. Thus my research provided evidence of the best virtual teaching and learning practices.

Conclusion

Supported by the research of Miron et al., 2018, enrollment growth in virtual education was increasing each school year. As a result, school officials must be equipped with effective best teaching and learning practices in the virtual school environment to
serve students successfully. In the next chapter, I shared the main topics and themes that surfaced in my review of scholarly literature.
CHAPTER TWO: Review of the Literature

For educators to achieve optimal student learning gains, the student learning experience must be productive and engaging. As the International Association for K-12 Online Learning’s (iNACOL) mission stated, virtual school officials need “to ensure all students have access to a world-class education and quality online learning opportunities that prepare them for a lifetime of success” (2011, p. 3). A review of the literature revealed the following themes around leading an effective virtual school with action: 1) empowering teachers; 2) understanding the student/customer approach; 3) developing and managing virtual teachers; 4) time management; 5) engaging the disengaged student; 6) creating virtual teams for continuous school improvement; 7) implementing a robust response to intervention process, and 8) implementing best practices for teaching online. Implementation of these eight actions helps establish teaching and learning practices that supports student academic growth in the virtual setting.

Multiple research resources were examined and analyzed using the EBSCOhost research platform and books about online education written from 1959 to 2021. I searched scholarly articles using the following subheadings: empowering virtual teachers, understanding the student/customer approach, developing, and managing virtual teachers, time management in the virtual setting, engaging the disengaged virtual student, creating virtual teams, response to intervention in the virtual environment, and virtual discipline. I studied highly rated books in the field of online education to examine the role that each subheading played in the virtual setting of education. Through this research, I discovered that researchers have directly tied effective online teaching to these themes.
Empowering Teachers

Empowering virtual teachers in virtual settings requires providing teachers with new tools and strategies to fully equip them to serve their students (Beck & Maranto, 2014). The act of empowering virtual teachers can take many forms, but it starts with establishing a high performing school culture and climate. Kent D. Peterson defined school culture as a “set of norms, values and beliefs, rituals and ceremonies, symbols and stories that make up the ‘persona’ of the school” (Cromwell 2002 as cited in Muhammad, 2018, para. 1). Empowered in high performing school cultures, teachers collaborate to make decisions and solve educational issues surrounding curricular and instructional matters. Professional collaboration, affiliative and collegial relationships, and efficacy and self-determination are three cultural domains to examine when evaluating school culture (Wagner, 2006). School leaders who involve teachers in the decision-making process for classroom instruction, school schedules, and student behaviors create a school culture where teachers feel empowered to develop professionally. Christopher Wagner conducted a survey called “School Culture Triage Survey,” which included several cultural behavior statements under each cultural domain of 1) Professional Collaboration; 2) Affiliative Collegiality; and 3) Self-Determination/Efficacy (2006, p. 43). The purpose of the survey was to evaluate the culture of a school to determine its level of effectiveness for continued school improvement efforts. One of the critical considerations in the survey was determining whether or not the school culture empowered teachers.

Whereas school culture depicted the behaviors of school officials, school climate depicted the feelings of school officials (Gruenert & Whitaker, 2015 as cited in Muhammad, 2018, para. 1). According to Loukas, school climate consisted of “the
feelings and attitudes that are elicited by a school’s environment” (2007, p. 1). School leaders who value school climate show an interest in the individual perceptions of staff and students in regards to the school environment. School leaders empower teachers to improve school climate by encouraging involvement in aspects of the school environment such as school safety, relationship/team building, or student engagement. Empowered teachers work to establish a school culture in which students feel connected, cared about, and treated with fairness. School officials can use a school climate survey to assess how staff and students feel about the school environment. There are several searchable school climate surveys; for example, Office of Special Education Programs (OSEP) Technical Assistance Center on Positive Behavioral Interventions and Supports created four school climate surveys aimed at the elementary level, middle/high school level, school personnel, and families (La Salle, McIntosh, & Eliason, 2018). A high-quality school climate survey should address the physical, social, and academic dimensions of a school (Loukas, 2007).

Another form of empowering virtual teachers is through the process of creating and implementing the school’s vision and mission statements. The intent of creating school vision and mission statements is to 1) hold school officials accountable; and 2) drive school improvement efforts. In high performing school cultures, leaders should make school-based decisions with the vision and mission in mind (Lassiter, 2012). School leaders have an opportunity to empower teachers by 1) involving teachers in the process of creating the vision and mission statements, and 2) having teachers create the actions and strategies needed to implement the vision and mission statements. Creating teacher involvement gives teachers ownership over the accountability measures
associated with the school improvement efforts. According to Patton (2008), whenever people are involved in evaluations, plans, or creating new ideas, strategies, or initiatives, they have a sense of ownership.

**Understanding the Student-Customer Approach**

Several virtual schools are led by for-profit organizations and as a result, tend to operate using a business model. A question that stems from the use of business models in education is if the term student is synonymous with the term customers. Are they students, or are they customers? Depending on the research, there is conflicting evidence to support both stances. For example, research by Groccia (1997) indicated that students are both customers and learners. Groccia claimed that students are customers because:

They have engaged in an economic agreement, a contract for good and services and opportunity to learn in an organization that is in the business of selling opportunities to learn. As a result, students should be given an opportunity to voice their needs, desires, and satisfaction with their learning environment and their voices should be heard. (1997, p. 31)

Yet, Groccia also claimed that students are learners because students attend school to take part in the learning growth process. Being a learner means that students participate in the growth process, which brings about a certain level of productive struggle depending on the student's prior knowledge. "Learning is a direct result of the student's efforts rather than a service that the student purchases" (1997, p. 32). Groccia considered them learners because the effort they use to gain knowledge and skills. He considered them customers because school officials provide them with services that they may find unsatisfactory. As a result, virtual students may not return to their virtual
school, as many virtual schools are considered a school of choice.

“The mission of the Office of K-12 School Choice is to support quality public and private educational choice programs by providing information and assistance to promote successful outcomes for students, families, institutions and communities” ([State Name Withheld for Anonymity] Department of Education, 2021). Since 1998, families have had the choice to attend public, private, or charter schools, customer service is becoming increasingly important (Chambers, 1998). There has been a big push for school officials to think about the student experience because families have a choice in the education market. More schooling options are available to families, which gives families more opportunities to research and evaluate which school options will best meet the needs of their student(s) and family. As a consumer, people know what excellent customer service is when they experience it. However, as a consumer, people are even more likely to recognize poor customer service. When people experience poor customer service, they are likely to avoid establishments, instead choosing to do business where the staff members are kind and helpful. Excellent customer service increases the likelihood of repeat business.

In today's market, school leaders must think more like business leaders, especially leaders of schools of choice. School officials of charter schools, including virtual schools, are expected to market their schools to increase enrollment. Virtual charter school leaders are expected to lead marketing informational sessions to promote their schools. School leaders must focus on retaining the customer, which means more than just offering quality education. It means being responsive to a concerned parent. It means providing flexibility to the student who has a unique situation or schedule.
According to Miron et al., (2018) enrollment growth related to virtual schools increased progressively year after year, and experts in virtual education expect the enrollment growth to continue. More virtual school options are available to students and families across the nation each year. With the increase of virtual schools and other schools of choice schools, school officials serving in traditional public schools, magnet public schools, private schools, and even home schools are having to compete with one another to retain students (Hanushek, 2006). School leaders and researchers designed school choice to “improve educational productivity” (Lawton, 2001, p. 2). School choice provides parents with access to different school options and the means to change schools across the state, which creates a degree of competitive pressure for all school leaders across all school types.

Working under the assumption that families will stay with the school environment which serves their children the best, school officials need to examine and evaluate the customer service approach currently being used within their schools. In that way, providing top-notch customer service alongside a comprehensive and rich curriculum becomes an excellent way to educate children and retain students from year to year. It becomes the best way to market a school because it is more effective and cost-efficient to retain students than it is to attract new students (Bejou, 2005). With all of the school competition in today’s environment of school choice, school officials need to maintain a balance of treating students as learners and as customers.
Developing and Coaching Virtual Teachers

According to the Digital Learning Collaborative (2018, p. 1), “Digital learning requires effective teachers in order to be successful”; they explained:

That statement is not an opinion. It is based on the simple fact that in 18 years of reviewing K-12 online and blended learning, we have found no examples of successful and scalable digital learning programs that did not use teachers. (2018, p. 1)

The above statement indicated that a relationship between the role of a virtual educator and student learning outcomes exists. Therefore, like in the more traditional school setting, teachers in the K-12 virtual setting need to capitalize on relationship building to create a thriving virtual school environment where the impact and effort matrix yields positive student learning outcomes.

According to the International Association for K-12 Online Learning (iNACOL) New Learning Models, virtual school leaders need “to assist educators in transforming each child’s educational journey into a more personalized, engaging learning experience in order to improve student outcomes” (2013, p. 2). School leaders need to know, identify, and teach the competency expectations of effective virtual teaching and learning to impose a high standard of teacher accountability measures. Having solid expectations in place for effective teaching and learning will aid to the student learning process for optimal learning gains. Teacher preparation to teach online is paramount in the virtual learning environment to create learning conditions that will generate success (Heafner et al., 2015). “Some teachers will thrive using the new toolset offered online, and others will struggle” (Watson et al., 2012, p. 50). School leaders cannot assume or operate under the
idea that any licensed teacher is qualified and equipped to teach online.

The purpose of school evaluations is not to evaluate but to develop (Bambrick-Santoyo, 2018). Leaders need to coach virtual teachers in the online teaching and learning process. Virtual school leaders need to foster an environment in which a coaching model is practiced. The coaching model provides teachers with online teaching techniques and best practices. Virtual teachers “need constant instructions, encouragement, and coaching to progress” (Darby & Lang, 2019, p. 1). Coaching involves an approach to reflective teaching, whereas managing consists of evaluating the performance of teacher effectiveness. According to Reeves (2013), there are two types of coaching models: 1) a coaching approach that provides emotional support when needed; and 2) a coaching approach that provides support toward professional performance. By providing both types of coaching models, virtual schools can create a working climate that lends itself to a place where teachers feel supported and valued.

Virtual educators must strengthen their verbal and written communication into their daily instruction because they lose the means to communicate face to face with students (Boettcher & Conrad, 2016). With limited opportunities to communicate with body language in the online setting, both students and teachers may experience a level of frustration during synchronized interactions. For example, students may find it challenging to perform a science experiment without a hands-on science demonstration by the teacher. Teachers may have difficulty gauging the engagement level of the class or their level of understanding because of the lack of body language cues. Mastering these nuances is vital to the art of virtual teaching. Using tools like emoticons can “help to express what body language and facial expressions do in face-to-face settings” (Boettcher
Another component of developing virtual teachers is to build self-sufficiency. “Self-sufficiency is an individual’s perception of his/her ability and skills to overcome various possible situations.” (Var, 2018, p. 246). Building self-sufficiency has many forms. Three possible ways school leaders can instill self-sufficiency is by 1) having teachers create accountability measures for goals; 2) creating a culture where taking academic risks is supported to achieve higher levels of performance; and 3) providing teachers with the autonomy to make decisions (Var, 2018). The common theme in these three forms of self-sufficiency is the process of problem-solving. Wagner (2014) identified problem solving as a necessary survival skill in the workplace. The ability to problem solve and find solutions to issues opens opportunities for teachers to build upon being self-sufficient.

**Time Management**

In a brick-and-mortar school, a teacher spends almost every minute of the day with students. Most teachers have a preparation period each day and a short lunch break, but that comprises around 75 minutes to use as the teacher chooses. The remainder of the day is spent either in front of the students or moving between workgroups. When the brick-and-mortar teacher tries to envision what a virtual teacher does all day, it may be easy to suspect a great deal of free time. In reality, the lack of structured classroom time is a mixed blessing for the virtual teacher. There are many duties to fill up that time, and strong time management skills are required to make it work. Virtual teachers have to learn how to structure their time appropriately; otherwise, teachers can find themselves working at all hours as students can learn and work all hours of the day. Virtual teachers
must protect their time and learn to respond to students in a reasonable amount of time in email, discussion forms, grading, and phones instead of working around the clock (Darby & Lang, 2019).

To manage time appropriately, virtual teachers need to implement one of the best practices for online teaching and learning, the development of a set of explicit workload and communication expectations, as identified by Boettcher and Conrad (2016). Virtual teachers can spend time analyzing student learning data and using that analysis to plan upcoming lessons. Teachers also have to spend a great deal of time reaching out to students individually or in small groups. Student contact takes up the largest portion of the virtual teacher's time. Another portion of teacher time goes to grading and providing constructive feedback on assignments. Virtual teachers have to be extremely careful not to let grading dictate their working day; otherwise, teachers can experience burnout due to assignments being turned in at all hours (Palloff & Pratt, 2013). Teachers need to connect with each student by sharing teacher feedback to the work students submit to personalize the learning and help students progress through their coursework. Leaving comments for students allows teachers an opportunity to have a voice. Teachers should use their words professionally and make their words count when leaving feedback so students know exactly what they did successfully or what they need to do to improve.

Engaging the Disengaged Student

In any organization, engaging personnel comes with challenges. Engaging virtual learners certainly can be complex, especially when students appear to be disengaged. It is easy to tell when a student is disengaged virtually. Disengaged students are hard to contact, do not participate in online discussions, and do not or rarely submit assignments
For virtual teachers to engage disengaged students, it is important to know what the students want from their online learning experience. Tony Wagner (2014) suggested that it is important to know the customers, the students, and the families that schools serve. Some virtual schools provide enrolled families with a parent satisfaction survey to gain information about their experiences to drive change to student engagement efforts. “Students want teachers who are strict but fair, nice and respectful, and who take the time to explain the lessons to them clearly and effectively.” (Wilson & Corgett, 2001 as cited in Muhammad, 2018, para 1). Students “want teachers who believe in them and teach them in ways that they learned best.” (Muhammad, 2018, para. 1). The characteristics mentioned by students are the foundation to creating a healthy school culture (Muhammad, 2018). Optimal student learning gains require that the student’s learning experience must be productive and engaging.

Creating a cultural team within a virtual school is an essential component to engaging the disengaged students. Cultural teams work together as a committee to ensure the school culture – “the assumptions, beliefs, expectations, and habits that constitute the norm” of the school – remains positive and healthy (Muhammad, 2018, para. 1). Cultural teams can implement school initiatives to help motivate students such as student satisfaction surveys. Student satisfaction surveys are surveys provided to students throughout the year to receive feedback on student likes, dislikes, or suggestions for change that motivate students. According to Boettcher and Conrad (2016), providing students with surveys to receive feedback is the sixth out of 14 best practices for online teaching and learning. Student satisfaction and early engagement, such as feedback from student pulse surveys, are critical to address student likes, dislikes, and suggestions for
change sooner than later in the school year.

Another essential component to engaging the disengaged students is communicating with students more frequently and with intention (Cernigilia, 2011). Communicating with students often and with intention aids in making strong connections with students. Virtual teachers must be more intentional with non-verbal communication tools, when communicating with students, such as emails. Emails in the virtual setting are important because emails are the primary communication tool used with students virtually. Teachers should return communication to students promptly; thus, having frequent contact with virtual students expresses the teacher’s care and concern for their learning (Boettcher & Conrad, 2016). Teachers should be reaching out to students daily. Teachers should be making calls during the day to conduct any number of student center calls that include any of the following: instructional calls, welcome calls, academic integrity calls, end-of-year calls, state standard testing confirmation calls, etc.

Creating Virtual Teams

Virtual teams are needed in the online learning environment to promote a positive and healthy school culture; such teams may include data teams, professional learning communities (PLCs), and cultural teams. Dufour et al. (2016) reported that teachers learn best from other teachers; therefore, virtual professional learning communities are essential. Virtual teams usually consist of teachers and administrators. Teams can be created and divided by grade level or subject area, depending on the school’s needs.

The intended purpose of implementing data teams is to systematically collect and analyze data for continued school improvement (Love et al., 2008). A data team function is to advance a school's growth. Data are integral parts of school improvement and
student learning. Utilizing a data team to analyze, plan for, and monitor a school's progress is a reliable way to ensure collaboration, shared expectations, and increased performance across an entire school. One of the critical aspects of developing a data team is to have the ability to interpret, analyze, and sort data like a data expert. Building a data team begins with a school’s unique make-up, and virtual schools certainly are unique by design. Each school's data team make-up will be different and should be different. For example, instead of a data wall in most brick-and-mortar schools, a data team in the virtual setting has a distinctive structure in that meetings occur online using virtual tools to create a gallery of data. A data gallery includes aggregated and disaggregated data points such as demographic, enrollment, and student performance data (Love et al., 2008).

School leaders design PLCs to create an environment where teachers collaborate about the teaching and learning process to make meaningful changes in instruction to serve better students' academic needs (DuFour et al., 2016). Teachers need to be a part of an ongoing community where educators work collaboratively on a consistent and regular basis to collect data, analyze data, and implement change that will better support student learning. In a PLC, teachers should be working under a shared vision or mission to discuss student orientated goals (DuFour & Eaker, 1998 as cited in Muhammad, 2018). Teachers should be discussing the student learning and best practices that result in better student mastery of state standards and lesson objectives.

Leaders create cultural teams to ensure school decisions, actions, and beliefs are focused on student success and aligned with the vision and mission of the school (Myer, 2012). Critically analyzing a school’s culture is the most crucial part of beginning a
cultural school team. When virtual school educators implement a cultural team, they must consider the following elements: 1) Safety, so staff members feel safe and secure; 2) share vulnerability so staff members feel empowered to take risks; and 3) establish purpose so that staff all target a specific goal (Matsudaira, 2019). Cultural teams also establish school-based norms. Examples of possible school-based norms are: 1) Staff members will use specific vocabulary when articulating matters regarding student expectations and classroom methods; 2) Staff members will engage in positive conversations and universally shun complaints, and 3) Staff members will exhibit a high level of efficiency where the school mission and purpose are concerned. A focus on learning, institutionalized celebration, and new teacher development are excellent for cultural teams to begin their quest for improved school culture (Muhammad, 2018).

**Data Usage**

Data and accountability are a teacher’s critical friends (Lassiter, 2012). Lassiter identified three critical criteria for data usage: 1) What distinguishes high performing and low performing schools is the use of data; 2) Data teams with the support of the school leadership have the goal of improving student learning, and 3) A few strategies and vital behaviors are more likely to turn a school around than too many strategies. Effective data collecting and sharing is essential in any learning environment, especially in the online learning setting where data is readily available at teachers’ fingertips (Love et al., 2008). As a school leader, guiding teachers on which data points are pertinent will be an essential component of a virtual teacher’s performance in improving student achievement outcomes. One critical way virtual teachers collect student achievement data is through learning objectives. Virtual teachers need to identify the learning objectives of each
lesson and “measure students’ achievement of those objectives to determine whether they attained them” (Darby & Lang, 2019, para. 1).

Virtual teachers use a mix of aggregated, disaggregated, strand, item level, and student work data when analyzing student performance data. Teachers use the aggregated data to analyze student proficiency scores from state assessments or school and district formative assessments to show how the school compared to the state and district’s closest competitor’s data from the last three years (Love et al., 2008). The purpose of analyzing aggregated data is to distinguish how a school was performing and measuring up compared to that of the state and district or closest competitor school.

Virtual teachers can use disaggregated data to analyze student proficiency scores. Teachers will analyze scores from state testing and school or district formative assessments by race, gender, economic status, educational status, and language data from the last three years (Love et al., 2008). The purpose of analyzing disaggregated data is to drill down and identify achievement gaps among specific student populations from the school’s demographic data when analyzing student performance on the state tests and school or district formative assessments.

Strand data help analyze student proficiency scores from state testing and school or district formative assessments by strand data from the last three years (Love et al., 2008). All summative and formative assessments used should provide a school with strand data. Strand data shows how students performed on various parts of the assessment. The purpose of analyzing strand data is to identify common trends or patterns of how students performed on the different strands of the assessments from year to year and drill down to identify the strands in which students performed the lowest.
Item level data were helpful in identifying which curriculum assessments assess the strand data in which students performed the lowest (Love et al., 2008). Thus, teachers can analyze student performance on specific questions from common assessments in the course curriculum that align to the strand data identified as an area where students performed the lowest. The purpose of analyzing item-level data is to drill down to pinpoint what concepts, skills, standards, or learning objectives students are struggling with within the strand data previously identified. Finally, student work data illustrates how students responded to the specific questions from common assessments (Love et al., 2008). The purpose of analyzing student work data is to take the specific questions previously identified in the item level data and analyze how students responded to the questions.

Teachers and school leaders use the process of collecting and analyzing aggregated, disaggregated, strand, item level, and student work data to identify student learning problems that exist within the school (Love et al., 2008). Identifying student learning problems help with moving forward with finding solutions to close achievement gaps and address academic concerns. Specific and measurable student achievement goals are created as a means to address the student learning problems.

**Developing Virtual Learners**

Developing digital natives to have growth mindsets will empower students to practice learning habits that are successful. Learning happens by making mistakes. It is vital to encourage and empower students to take initiatives to improve their knowledge through developing growth mindsets (Dweck, 2016). The online environment lends itself to allowing students to work at their own pace, within the perimeters of the course end
date, to review the course curriculum and analyze their work (The Foundation for Blended and Online Learning, 2017). The online experience provides students with more opportunities to relearn course material to improve their understanding and mastery of the content (The Foundation for Blended and Online Learning, 2017).

“Time Management is a set of habits or learnable behaviors that may be acquired through increased knowledge, training, or deliberate practice.” (MacCann et al., 2012 as cited in Dovorak & Jia, 2016, p. 319). The ability to effectively use time management is one of the determining factors on whether a student will be successful in the online learning environment. Students are more likely to be successful in a virtual setting if they are self-motivated and self-disciplined to complete work due to the lack of supervision of a teacher (Palloff & Pratt, 2013).

“Academic achievement is not just a function of intellect but also a function of discipline and good time management” (Dovorak & Jia, 2016, p. 328). Dovorak and Jia found that students who do not procrastinate and complete assignments early earn higher grades than students who complete assignments later.

College students take at least one online course in their college careers. Research revealed that college students who take online courses obtain a degree at a faster pace than students who attend most, if not all, courses face to face (Shea & Bidjerano, 2018). K-12 online students are being prepared for college the moment they enter a learning management system (LMS). LMSs are the virtual software platforms used to store the course curriculum, instructional content, assignments, student data, and student interactions with the coursework and peers. Even though each school may use a different LMS, virtual learners have the experience and expertise needed to navigate nearly any
Developing growth mindsets among students is a critical component of the teaching and learning process. The purpose of building a growth mindset among students is to get students to see effort as a path to mastery. The role of a virtual teacher in developing growth mindsets among virtual learners is to get students to see effort as a necessary means to grow and master useful skills and knowledge (Brock & Hundley, 2016). Students who believe their talents can be developed (through hard work, good strategies, and input from others) have a growth mindset. It is critical that all teachers have the essential belief that by developing growth mindsets among students will improve the effort level of students during moments of productive struggle and deliberate practice to instill in the student that they can change their intelligence levels by transforming the way they think. Research conducted by Dweck (2016) is illustrated in Figure 3.
**Figure 3**

*Research Highlighting the Essential Elements of Students Praised Effort Vs Ability*

<table>
<thead>
<tr>
<th>Students Praised for Effort</th>
<th>Students Praised for Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ninety percent of students ask for new challenging tasks and <strong>persevere</strong> in solving them.</td>
<td>• Reject the opportunity for a challenge in <strong>fear</strong> they will not be able to perform as expected. These students are also more likely to <strong>lie</strong> about their performance when they do not feel they have succeeded on a task.</td>
</tr>
<tr>
<td>• View challenges as a way of learning and <strong>embraces</strong> them.</td>
<td>• Are less likely to take risks in their learning. They <strong>shut down</strong> because they no longer feel smart when answers don’t come easily.</td>
</tr>
<tr>
<td>• May find it hard to understand why another student would not want to challenge him- or herself and learn.</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Dweck, 2016

The benefits of having a growth mindset for students are: 1) students tend to do well in school; 2) students tend to have better physical and emotional health; and 3) students tend to have more position social relationships (Duckworth, 2016).

**Response to Intervention**

There has been an increase in enrollment of students needing academic interventions. This is partly due to online learning programs promoting student educational improvements with their high-quality online curriculum and instruction (Kuo, 2014). Public virtual schools, like all public schools, are required to abide by mandates to implement a Response to Intervention model under the Individuals with Disability Act (IDEA).

Online learning environments could personalize instruction for students by making modifications to curricular content that best meets the academic needs of students. Online learning environments can provide students with a prescribed curriculum, also known as
a “canned curriculum.” High-quality online learning environments modify the prescribed curriculum or coursework accordingly to meet individual students' academic needs, resulting in personalized instruction (Darby & Lang, 2019). As online learning continues to grow and better digital tools and platforms are created, more changes will likely occur to the delivery of instruction in the online setting (Palloff & Pratt, 2013).

Virtual teachers should implement interventions for students as needed for academic growth and success, as indicated in Standards D, F, and I in the National Standards for Quality Online Teaching (iNACOL, 2011). To ensure students receive quality interventions and make adequate progress toward learning, virtual teachers should implement an individual learning plan (ILP) for each student needing interventions as instructional supports. ILPs are a student-centered planning process where all stakeholders, including the student, take an active role in ensuring the student achieves their academic, career, and personal goals (Fox, 2014). ILPs vary based on the content (format of instruction), process (learning activities), and product (summative assessment) of differentiated instruction; however, stakeholders should base the ILPs on the student’s learning style, interests, and prior academic knowledge (Milman, 2014). In addition, ILPs should outline various aspects of the learning process for each student such as 1) student learning problem(s); 2) previous interventions used and the outcomes; 3) student behaviors; 4) levels of performance on course content and formative/summative assessments; 5) learning targets; 6) recommended interventions; 7) reinforcers; 8) critical supports; and 9) evaluation of the interventions and supports put into place.

Best Practices for Teaching Online

Boettcher and Conrad (2016) identified 14 best practices for teaching online.
“Instructors who follow these practices increase the probability of an effective, efficient, and satisfying teaching learning experience for themselves and their students. (Boettcher & Conrad, 2016, p. 43). Results of the research conducted by Boettcher and Conrad (2016) is illustrated in Figure 4.

**Figure 4**

*Research Highlighting the Fourteen Best Online Teaching and Learning Practices*

<table>
<thead>
<tr>
<th>Best Practice</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be Present at Your Course</td>
<td>Teachers show that they care about students’ questions and concerns by communicating often and by showing their presence socially, cognitively, and by teaching.</td>
</tr>
<tr>
<td>Create A Supportive Online Course Community</td>
<td>Teachers implement diverse and balanced dialogue between students to teachers, students to students, and students to resources.</td>
</tr>
<tr>
<td>Develop a Set of Explicit Workload and Communication Expectations for Your Learners and for Yourself</td>
<td>Teachers implement good work habits to obtain a good work-life balance through setting explicit expectations.</td>
</tr>
<tr>
<td>Use a Variety of Large Group, Small Group, and Individual Work Experiences</td>
<td>Teachers implement a variety of learning experiences that provide students options to apply their skills and abilities.</td>
</tr>
<tr>
<td>Use Synchronous and Asynchronous Activities</td>
<td>Teachers implement a balance of asynchronous (videos, recordings, discussion boards) and synchronous (real time discussions and live instruction) activities.</td>
</tr>
<tr>
<td>Ask for Informal Feedback Early in the Term</td>
<td>Teachers implement opportunities for students to provide input on what is working well and not so well within the course.</td>
</tr>
<tr>
<td>Prepare Discussion Posts That Invite Responses, Questions, Discussions, and Reflections</td>
<td>Teachers implement discussion boards that generate critical thinking, reflections, creative thinking, etc.</td>
</tr>
<tr>
<td>Think Digital for All Course Content</td>
<td>Teachers implement course content that is accessible from any technology device at any time.</td>
</tr>
<tr>
<td>Combine Core Concept Learning with Customized and Personalized Learning</td>
<td>Teachers implement learning options that support students’ personal and professional goals.</td>
</tr>
</tbody>
</table>
Plan a Good Closing and Wrap Activity for the Course

Assess as You Go by Gathering Evidences of Learning

Rigorously Connect Content to Core Concepts and Learning Outcomes

Develop and Use a Content Frame for the Course

Design Experiences to Help Learners Make Progress on Their Novice-to-Expert Journey

Teachers implement end-of-course projects to determine what students are taking away from the course.

Teachers implement a process to gather student learning throughout the course.

Teachers implement teaching practices that include distributed review practice and elaboration of concepts.

Teachers implement content course frames, such as syllabus, so students can use what is to be learned and what can be learned as their interest develops.

Teachers implement course content that helps students move their knowledge base from novice to expertise.


**Conclusion**

“One of the major benefits of online learning is that it provides an opportunity of individuals to learn about knowledge and skills beyond the boundaries of time and space” (Kuo, 2014, p. 612). Teacher provided high-quality levels of instruction virtually will lead to higher achievement scores for students. Students need effective virtual teachers who know how to support and advocate for student learning and academic needs. Virtual teachers who know how to implement the components of virtual education as examined in this literature review will work toward successfully supporting the student learning process to boost student performance. Those components included empowering teachers, understanding the student – customer approach, developing and managing virtual teachers, time management, engaging the disengaged student, creating virtual teams for continuous school improvement, implementing a robust response to intervention process, and implementing the best online teaching and learning practices.
CHAPTER THREE: Methodology

According to the department of education in most states, there is no special licensure needed to teach online. Any licensed teacher can teach in virtual schools with the understanding that teachers have a solid grasp of content and pedagogy (Heafner et al., 2015). As depicted in the literature review, “although many of the elements of effective teaching are the same online as in face-to-face classrooms, online instruction requires certain skills and dispositions that are unique to the online environment” (2015, p. 46). As virtual school options continue to populate across the nation, it is critical to establish and implement the best online teaching practices. The purpose of this research study was to identify the effective practices of teachers in a virtual high school setting that impact student achievement resulting in high student completion rates.

Research Design Overview

Process-oriented and structure-oriented theories drove my research (Glatthorn et al., 2015). The process-oriented theory is a system of classifying processes (2015). My research identified specific process elements within specific effective practices utilized by virtual teachers that contribute to positive student learning outcomes. The structure-oriented theory analyzes components of research to explain how the components impact the research (2015). My research involved exploring the practices of identified teachers who consistently produced high pass rates to determine conditions that may lead to student success.

For my evaluation, I implemented a mixed-methods research design. James et al. defined mixed-methods research as using quantitative and qualitative measures to compare diverse data sources about a specific problem (2008, p. 60). I used quantitative
data from extant data of student completion rates and linear ratings from survey responses. The qualitative data I used came in the form of open-ended survey questions and interviews of teachers. Analyzing the quantitative and qualitative data sets provided insight into trends among teachers with consistently high student pass rates.

An effectiveness focus emphasizes how an evaluation can become more effective (Patton, 2008). I focused on identifying and exploring the practices of effective teachers in the virtual school setting and how those practices affect student achievement outcomes. The effectiveness focus used in my research was important because it provided an opportunity to link quantitative and qualitative data to student achievement results to identify effective online teaching and learning practices.

I used a knowledge focus to identify teacher practices to improve future online teaching and learning practices. A knowledge focus considers what is learned through the research evaluation process and how it informs future efforts (Patton, 2008). The knowledge focus used in my research plays a vital role in the professional development of online teachers. Applying a knowledge focus allowed newly learned information about online teaching and learning practices to equip future virtual teachers to succeed in the online learning environment.

Learning-oriented evaluations focus the evaluation on practice improvement (Patton, 2008). The learning-oriented evaluations of teachers' online practices allowed for an examination of practices used in the online learning environment and how those practices impacted student achievement. Learning-oriented evaluations also allowed for determining the value of each of the identified online teaching and learning practices.
Participants

There was one stakeholder group in this evaluation of online teaching and learning practices. The group included 11 high school teachers with the highest consistent completion rates as evidenced by section performance reports (90th percentile or better for two consecutive school years in a core course). This group of participants taught in a virtual high school setting, an online schooling option supported by one national education management organization (EMO). The schools in the EMO under study were located nationwide. Therefore, the participants were teaching in various states in the United States.

Data Gathering Techniques

I implemented a mixed-methods research design to gather and analyze data sets. I obtained data sets from several diverse sources: extant data from section performance reports, semi-structured interviews, and surveys. The quantitative data consisted of extant data and Likert scale surveys. The open-ended survey questions and interviews generated the qualitative data.

Extant Data

I used extant student completion data to identify teachers who met the criteria of having a student pass rate in the 90th percentile for two consecutive school years in a core course. In addition, I used student completion rate data in Grades 9-12 from full-time virtual schools nationwide under the same EMO. Using this data, I identified teachers of core classes with the highest student completion rates consistently for the 2018-19 and 2019-20 school years. I provided a copy of the student completion rate report template in Appendix A.
**Teacher Survey**

From the highest student completion rates by core class, I selected 24 virtual high school teachers to participate in a Google form survey and 11 teachers chose to participate. The qualitative and quantitative data collected through the survey provided information about the common teaching and learning practices used by virtual teachers who achieve the highest student pass rates in the virtual learning environment. The survey consisted of eight Likert Scale questions and three open-ended questions for a total of 12 survey questions. I provided a copy of the survey in Appendix B.

**Teacher Interview**

I requested teachers in the last item on the survey to provide their contact information if they were willing to participate in a follow-up semi-structured interview. I interviewed five teachers who agreed to participate in a follow-up interview. The qualitative data collected through the interviews identified virtual teachers' common teaching and learning practices who achieve the highest student completion rates. In addition, the qualitative data provided insight into teaching and learning practices from the teacher’s perspective. I conducted interviews via Zoom, a secured online platform. I provided a copy of the interview questions in Appendix C. With participant permission, I recorded and transcribed all interviews to indicate what the participant conveyed during the interview.

**Data Analysis Techniques**

I analyzed the 2018-19 and 2019-20 school years’ section performance reports of the EMO under study schools at the high school level in the core department of English, Math, Science, and Social Studies. Being able to analyze aggregated performance data to
frame questions for decision-making is a key component in driving change (Carroll & Carroll, 2002). I sorted the aggregated pass rate data of each core department percentile and identified the departments that showed a pass rate of at least 90%. I drilled down on disaggregated data by analyzing each core class within each department to identify teachers who had a pass rate of at least 90% in the school year of 2018-19 and 2019-20. Those teachers comprised the stakeholder group.

I summarized and examined survey data for consistent phrases and themes to determine common teaching and learning practices utilized by virtual teachers who achieved the highest student completion rates. I quantified and analyzed the Likert Scale questions, and I evaluated and coded the open-ended survey responses according to common phrases and themes. To assess the open-ended survey responses, I grouped the common themed responses and established initial codes for each of the different themed survey responses. For responses that did not correlate to an existing theme, I assigned a stand-alone or individual code. Lastly, I categorized and grouped the data using a selective coding method (James et al., 2008).

The qualitative data I collected from the interviews provided insight from the teacher’s perspective. I analyzed the data for consistent phrases, backgrounds, experiences, philosophies, and themes. The qualitative data identified virtual teachers’ common teaching and learning practices who achieve the highest student completion rates. I recorded and transcribed the interviews for accuracy. I then coded interview responses using a selective coding process (James et al., 2008). Several themes emerged from the extensive evaluation of survey and interview data and will be described in the chapter.
Ethical Considerations

All teachers who showed a pass rate in the ninety percentiles for the school years of 2018-19 and 2019-20 consecutively were included in my evaluation. I obtained permission to access and use extant student completion data from schools in the EMO section performance reports nationwide. The section performance report data included: 1) student identification numbers; 2) student names; 3) grades levels; 4) enrolled core course; 5) teacher of record; and 6) earned score. All information was kept confidential.

I obtained permission from the EMO to survey and interview teachers to evaluate online teaching and learning practices. I provided all participating teachers in this study with an informed consent for the survey and interview, providing full transparency and disclosure of collection methods, data usage, and the right to abstain from this study. I maintained teacher and student anonymity throughout the evaluation process and excluded identifying information reporting results. I kept all data files of compiled results in a password-protected folder.

Limitations

Limitations of the evaluation of online teaching and learning practices included my biases on practices I have found to yield gains in student achievement outcomes over the 11 years I have served students and teachers in the online learning setting. I strongly believe in the art of teaching. Therefore, I advocate for direct instruction that incorporates relationship building and effective communication (Bates, 2019).

Another limitation was the different state and district accountability measures taken in each state and school district for each school in the EMO under study. Each state and school district implemented operational practices that impacted student completion
rates. For example, the State Department of Education approved all virtual courses in one state, and all virtual schools operated under a completion model due to the funding model in that state. The completion model meant that students must complete a course as written in its entirety. As a result, virtual teachers in that state were unable to modify the curriculum. In contrast, virtual schools in some other states do not operate under a completion model. Therefore, teachers had the autonomy to change the curriculum based on the learning needs of individual students.

**Conclusion**

I collected both quantitative and qualitative data for my evaluation of online teaching and learning practices. The various data sets used as part of my research contributed to identifying the effective teaching practices teachers use to impact student achievement positively in the virtual school setting. The data analysis established expectations for teaching in a virtual setting that impact student achievement resulting in high completion rates. In the next chapter, I present the data I collected from my research.
CHAPTER FOUR: Results

My research included the work of the Southern Regional Education Board (SREB) partially due to iNACOL fully endorsing their work in establishing a comprehensive set of criteria found in *Standards for Quality Online Teaching and Online Teaching Evaluation for State Virtual Schools* (iNACOL, 2011). In addition, I considered the work that Boettcher and Conrad (2016) completed by establishing ten core principles and 14 best practices of the teaching and learning process to be used across all learning settings, including virtual platforms.

I evaluated the elements of effective practices teachers utilized in the virtual setting. My evaluation consisted of assessing the impact that effective practices have on the virtual learning environment. For example, according to the Digital Learning Collaborative (2018, p. 1), “Digital learning requires effective teachers in order to be successful.” The authors go on to claim:

That statement is not an opinion. It is based on the simple fact that in 18 years of reviewing K-12 online and blended learning, we have found no examples of successful and scalable digital learning programs that did not use teachers. (2018, p. 1)

Virtual school officials need “to ensure all students have access to a world-class education and quality online learning opportunities that prepare them for a lifetime of success” (iNACOL, 2011, p. 3). Virtual schools are responsible for providing students with the best effective teaching and learning practices to ensure students are equipped with the resources and knowledge to graduate high school successfully and better prepare students for their post-secondary plans.
Findings

The purpose of my evaluation was to identify the effective practices of teachers in a virtual high school setting that impact student achievement resulting in high student completion rates. I collected and gathered data from virtual teachers inside the same education management organization (EMO) from different states using surveys and interviews to determine what-like practices were used by effective virtual teachers to produce high student completion rates. I completed a data review to analyze student performance outcomes in the core subject areas of English, math, science, and social studies and for all other subjects (elective courses). I used a mixed-method data collection method to gather data from multiple-choice and open-ended questions on the surveys and interviews conducted (Patton, 2008).

Extant Student Data

I analyzed course completion rates of 29 virtual schools operating under the same EMO from the 2018-19 and 2019-20 school years (Appendix D). Looking at the data collected in Appendix D, I noted the following observations in the 2018-19 school year:

1. Seven out of 29 schools have courses with a 90% pass rate.
2. Six out of 29 schools have pass rates of 90% or better in just two or fewer subject areas.
3. Of all courses taught, including core and elective courses, 11% of courses had a pass rate of 90% or above.

I noted the following observations in the data from the 2019-20 school year:

1. Thirteen out of 29 schools had courses with a 90% pass rate.
2. Seven out of the 13 schools, with courses with a 90% pass rate, had pass rates
Only 23% of all courses had a pass rate of 90% or above.

I numbered each school and highlighted course subject areas in which pass rates were 90% or higher. I contacted the school leaders of the schools who had course subject area pass rates of 90% or higher from the 2018-19 and 2019-20 school years; School 8: Language Arts and Math; School 12: all four core subject areas; School 21: Science and Social Studies; School 23: Science and Social Studies. School leaders of schools 8, 12, 21, and 23 provided the names of 24 teachers who taught in each subject area department whose student pass rates were in the 90th percentile for both school years. A copy of the identified teachers’ pass rates is provided in Appendix E.

Teacher Survey

I asked all 24 teachers to participate in my study by completing a 12-question survey; Appendix B. Out of the 24 potential participants, 11 teachers gave consent and completed a survey, resulting in a response rate of 46%. I had teachers provide feedback regarding factors contributing to high student completion rates in statements one through eight. In Questions 9-10, I asked teachers to provide a written response to explain what strategies they used to support virtual learners and what role their school’s teacher effectiveness rubric had on their daily teaching practices. In Question 11, I asked teachers to provide any other factors worth considering regarding their high completion rates. In Question 12, I asked teachers for their willingness to participate in a following up interview.

Teachers used a scale of 1-4, with one strongly disagree and four strongly agree to respond to Items 1 through 8. In Question 1, I asked teachers to report if they always or
mostly had high student completion rates as virtual teachers; 36% of teachers agreed, and 64% strongly agreed (Figure 5). The teachers who completed the survey all agreed that they have maintained high completion rates during their experience as virtual teachers.

**Figure 5**

*Survey Question 1: Always or Mostly Had High Completion Rates*

In Question 2, I asked teachers if they were considered leaders in their school due to their consistent high student completion rates; 45.5% of teachers agreed, and 54.5% strongly agreed (Figure 6). Thus, the teachers who completed the survey all agreed that they were viewed as leaders by their colleagues due to their consistent high student completion rates. An observation from Questions 1 and 2 is that the bar graphs mirrored each other to indicate that teachers who maintain high student completion rates in the virtual setting were seen as leaders within the schools they served.
In Question 3, I asked teachers if they train or mentor new virtual teachers due to their high student completion rates; 18% strongly disagreed, 9% disagreed, 27% agreed, and 46% strongly agreed (Figure 7). An observation from Question 3 is that not all surveyed teachers with high student completion rates were part of the new virtual teachers' onboarding and training process. I wondered why some of these teachers indicated that they were not involved in the training process of newly hired virtual teachers. In my professional experience, leaders wanted to provide newly hired virtual teachers with adequate training and support in preparing them to be effective teachers. One way to provide virtual teachers with training and support is by pairing them up with one or more of their peers who have consistently high student completion rates.
In Question 4, I asked teachers if they know what teaching and learning practices virtual teachers need to utilize to have high student completion rates; 27% agreed and 73% strongly agreed (Figure 8). An observation from Question 4 is that all surveyed teachers agreed that they knew virtual teachers' teaching and learning practices to produce high student completion rates. The bar graph for Question 4 mirrored the bar graphs in Questions 1 and 2 which indicated that teachers who maintained high student completion rates were seen as leaders in their schools because they established expertise with virtual teaching and learning practices.
In Question 5, I asked teachers if they contribute the success of their high student completion rates resulted from the teaching and learning practices they used; 27% agreed, and 73% strongly agreed (Figure 9). An observation from Question 5 is that all surveyed teachers agreed that they contributed their high student completion rates to the teaching and learning practices they used with their students. The bar graph for Question 5 mirrored the bar graphs for Questions 1, 2, and 4 which indicated that teachers who maintained high student completion rates were seen as leaders in their schools because they had established expertise with virtual teaching and learning practices. They demonstrated a level of expertise because their teaching and learning practices used in the virtual setting positively impacted their student achievement outcomes.
Survey Question 5: High Completion Rates Result from the Teaching Practices Used

5. I contribute the success of my high student completion rates to the teaching and learning practices I use.

11 responses

In Question 6, I asked teachers if their high student completion rates resulted from the teaching and learning practices put forth by their school; 27% agreed and 73% strongly agree (Figure 10). An observation from Question 6 is that all surveyed teachers agreed that they contributed their high student completion rates to the teaching and learning practices that their schools identified and put into place. The bar graph for Question 6 mirrored the bar graphs for Questions 1, 2, 4, and 5 which indicated that teachers who maintained high student completion rates either establish their teaching and learning practices or implement teaching and learning practices put forth by school leaders that results in positive student achievement outcomes. Teachers demonstrated a level of trust, accountability, and community among school staff members when they implement teaching and learning practices put forth by school leaders and produce consistent results (Tschannen-Moran & Gareis, 2015).
Survey Question 6: High Completion Rates Result from the Teaching Practices Put Forth by Their School

6. I contribute the success of my high student completion rates to the teaching and learning practices put forth by my school.

11 responses

In Question 7, I asked teachers if their virtual school provided quality professional development on effective teaching practices; 18% agreed, and 82% strongly agreed (Figure 11). An observation from Question 7 is that all surveyed teachers agreed that the schools they served provided quality professional development on effective teaching practices. In addition, teachers demonstrated that they felt they were equipped with adequate professional development on effective virtual teaching practices.
In Question 8, I asked teachers if their school provided a teacher effectiveness rubric as part of the evaluation process; 9% disagreed, 18% agreed, and 73% strongly agreed (Figure 12). An observation from Question 8 is that most surveyed teachers worked in schools that provided their teachers with a teacher effectiveness rubric. Teacher effectiveness rubrics (TER) provide teachers with expectations as part of the teacher evaluation process. TER tends to focus on student-centered instruction, assessment policies, effective questioning (Irvine, 2019). From my experience, teacher effectiveness rubrics contain objectives of teaching and learning practices and processes that are used to determine the level of effectiveness for each evaluated teacher.
Figure 12

Survey Question 8: Schools Provide a Teacher Effectiveness Rubric

8. My virtual school provides a teacher effectiveness rubric as part of the evaluation process, which I use to drive my teaching practices.

11 responses

8 (72.7%) 2 (18.2%) 1 (8.1%) 0 (0%)

Question 8 was the last scaled response question. The majority of participants chose a scale rating of Agree or Strongly Agree for Questions 1 through 8. The bar graphs for Questions 1, 2, 4, 5, 6, and 7 all mirrored each other which indicated that teachers who maintained high student completion rates either established or implemented effective teaching and learning practices that resulted in positive student achievement outcomes.

In Question 9, I asked teachers to identify the essential strategies they used to support virtual students. One teacher said she implemented targeted instructional interventions to support struggling students identified by lesson completion and performance data. Out of 11 teachers, two said they used differentiated instructional approaches to personalize learning for students. Out of 11 teachers, two said they used student-centered activities that engaged students through videos, chat pod activities, music, virtual games, and other platforms that got students interacting within the lessons, such as Nearpod. Out of 11 teachers, four said they used different instructional
approaches, including whole group, small group, one-on-one instruction, phone conversations, and email communications. Two out of 11 teachers said they used frequent checks for understanding to determine and prescribe instructional methods in areas students show academic misunderstandings and misconceptions. Checks for understanding involves teachers questioning students over learned curricular skills and concepts to determine the students’ knowledge and understanding. Checks for understanding are similar to a mini-quiz in that it is a formative assessment that informs teachers' student mastery of lesson objectives (Marshall Street, 2020). However, checks for understanding generally occur during synchronized conversations with students where the tone is friendly, positive, and welcoming, unlike the feeling of a quiz. One teacher said they implemented virtual study halls where students attended to receive help on assignments.

In Question 10, I asked teachers to explain how their school’s teacher effectiveness rubric played a role in their daily teaching practices. Two out of 11 teachers said that their school’s teacher effectiveness rubric, provided by the state, had to be modified to fit the virtual environment. One teacher said they used their school’s Teacher Effectiveness Rubric (TER) as part of the evaluation process. Five out of 11 teachers said they used the TER as a guide for planning and providing quality instruction as it contained proven methods for teaching online, such as student engagement, learning interventions, documentation, and progress monitoring. Two out of 11 teachers added that the TER was a great tool to reflect on their teaching practices.

In teacher survey Question 11, I asked teachers to provide other factors worth considering regarding their high completion rates. Two out of 11 teachers said they found
that giving tiered instructional interventions to students helped build up their academic
certainty and, as a result, found success in their learning. Two out of 11 teachers said
they found power in providing students with opportunities to redo or retake assessments
and assignments. One teacher said they helped students prioritize the lessons in their
courses to pass the courses successfully. Another teacher said they used student
performance data to drive their decision-making for the teaching and learning process.
One teacher said they used ongoing contacts with students and provided individualized
student learning interventions to improve student learning outcomes. Another teacher
said they used positive feedback with students.

In Question 12, I asked teachers for their willingness to participate in a follow up
interview. Seven out of 11 teachers provided their consent to participate in a follow-up
interview. Copies of completed survey responses by teachers have been provided in
Appendix F.

Teacher Interview

I asked all eleven teachers who completed the twelve-question survey to
participate in a follow-up interview. Out of the eleven teachers who completed the
survey, seven agreed to participate in a follow-up interview. Out of the seven teachers, I
randomly selected five teachers who participated in an interview. The interview consisted
of 11 questions (Appendix C). I gathered qualitative data to identify virtual teachers'
common teaching and learning practices from the interviews. I audio-recorded all
interviews and transcribed them using Rev.com.

In Question 1, I asked teachers to identify the teaching and learning practices that
contributed to their high student completion rates over the last two school years. Three
out of five teachers contributed their high student completion rates to having consistent and individualized communication with students. Teachers shared that providing as much outreach as possible assured students that their teachers were willing to assist them and were accessible to their learning needs. Two out of five teachers contributed their high student completion rates to building positive relationships with the students. Teachers shared that students needed to know that their teachers cared about them and were willing to help them understand the course material. Two out of five teachers contributed their high student completion rates to their ability to provide targeted instruction. Teachers remarked on using student performance data to identify students in need of individualized and small group instruction.

In Question 2, I asked teachers what fundamental beliefs and values drive the work they do. Four out of five teachers believed that students could learn and be successful in the virtual setting. Teachers shared that building solid relationships with students can give students the confidence to be successful learners in the virtual setting. Two out of five believed in having the ‘whatever it takes’ attitude to provide critical learning supports to students. Teachers commented on never giving up on students and always finding ways to help them grasp the material and earn passing grades.

In Question 3, I asked teachers what characteristics make up an effective virtual teacher. Three out of five teachers said that flexibility was an important characteristic. Teachers commented that students came to them with a range of content knowledge; therefore, teachers needed to adapt their teaching styles and instruction to their individual needs. Teachers shared how important it was to be flexible enough to try new things as technology and student needs changed throughout the school year. Two out of five
teachers said the organization was a crucial characteristic that impacted a virtual teacher. Teachers shared that the virtual setting lends itself to having an abundance of student data to analyze. They commented on being organized in order to prioritize the data for practical use.

In Question 4, I asked teachers to explain the role of professional development on their high student completion rates. All five teachers remarked that professional development had impacted their ability to produce high student completion rates. These teachers have found great value in the professional development sessions they attended to develop their craft as virtual educators and improve the student learning experience. Three out of five teachers agreed that it was essential for teachers to be open-minded with the content covered in their professional development sessions. The teachers in this survey agreed that being open to trying new things presented in professional development was a key ingredient to providing effective support and instruction to students.

In Question 5, I asked teachers to provide examples of professional development sessions they attended that they consider to be high-quality. Three out of five teachers reported that colleagues led the best professional development sessions they attended at their school. They decided that they found value in learning from each other in a collaborative setting. During these collaborative group professional development sessions, teachers discussed ways to modify the curriculum, provide direct support to students, identify specific needs of students, and other teaching and learning practices. A concern from the teachers was that some of the content within the professional development sessions was geared more toward a traditional classroom setting versus the virtual setting.
In Question 6, I asked teachers to provide strategies they used to enhance student engagement. Two out of five teachers said they used repeated communication to provide students with resources to succeed in their courses. The teachers said they were persistent with contacting students. They said they exhausted all communication methods, including text messages, emails, phone calls, message boards, and direct instruction to share and promote learning resources with students. Two out of five teachers used interactive activities to engage students in the learning material. The teachers said interactive activities promoted student discourse and interaction among students to learn from each other.

In Question 7, I asked teachers to reflect on what they may do differently as educators compared to teachers who do not have high student completion rates. Two out of five teachers emphasized establishing positive relationships with students. The teachers agreed that when relationships were established, they got to know the students personally, which allowed them to modify the curriculum or implement alternative assignments to meet their individual needs. In addition, having established relationships allowed the teachers to encourage students and offer them incentives to complete their work. Another teacher mentioned that they constantly looked for different ways that students could use to demonstrate mastery.

I asked teachers to explain how long it took them to develop their craft to see high student completion rates in Question 8. Four out of five teachers said that by year three in the virtual setting they observed student completion rates in the 90th percentile. Two out of five teachers observed increased student performance outcomes from year to year. Teachers agreed that the more they organized themselves, the more efficient their
practices became in the virtual setting. Four out of five teachers shared that they had been teaching for several years before teaching virtually. They said they had to learn how to instruct differently in virtual teaching from how they were used to instructing in the more traditional setting before seeing high student completion rates. They agreed that they needed time to comprehend which practices and strategies for virtual learners were best.

I asked teachers to provide information on barriers to higher completion rates in Question 9. Two out of five teachers agreed that there were limitations by having a set curriculum to determine success. The teachers agreed that they could not integrate different digital tools and platforms within the already created curriculum. As a result, students had to navigate and click on different resources instead of the resources being embedded into their course curriculum. Three out of five teachers shared that no matter how hard they worked to engage all students, not every student engaged. Teachers expressed concern about not engaging some students due to variables out of their control, such as lack of motivation, lack of parental support, or other personal matters that prohibited the student from reaching their learning potential.

In Question 10, I asked teachers to provide advice to future online educators. Three out of five teachers mentioned it was important to be patient with yourself and open-minded to try new things as a virtual educator. Two or five teachers said that the first year as a virtual teacher was like a teacher's first year in education. Teachers agreed that the years of teaching experience in a traditional setting did not necessarily make the transition to virtual teaching any easier. Another teacher advised that it was vital to set boundaries. Boundaries were essential to establish as the virtual school remains open 24 hours a day. Being available for 24 hours a day means students can learn and teachers can
work all hours of the day. Finally, another teacher advised future online educators to use colleagues as resources; to learn from the experienced virtual teachers.

Lastly, in Question 11, I asked teachers to share other information that may be important to know about being an effective virtual teacher. All five teachers responded to this question a little differently. One teacher mentioned that it was important for virtual teachers to be supportive and encouraging to all stakeholders. It made a significant difference to the work the virtual teachers do. One teacher mentioned that being flexible, adaptable, and willing to collaborate with colleagues were critical components of being an effective virtual teacher. Another teacher emphasized never giving up on students; keep working with them no matter how little they appeared to be engaged. Another teacher mentioned the importance of advocating for yourself, colleagues, students, and the school they serve.

**As-Is for Virtual Teaching Practices**

The As-Is arenas of change as it relates to the contexts, culture, conditions, and competencies for improving teacher practices in virtual schools contributed to the problem statement (Wagner et al., 2006): Students did not complete and successfully pass online courses (for a complete As-Is organizational chart see Appendix G). My research questions and my mixed-method data results addressed each statement under the four areas of change. Therefore, it was essential to connect the statements under the four areas of change with the findings extracted from my data results to improve virtual teaching practices.
Contexts

Providing intensive professional development is one of the six areas of action within schools and districts identified by Mohammed (2018). Currently, there are no exemplar models of professional development centered around best practices for online learning. All virtual teachers interviewed agreed that there was value in attending professional development as it impacted student learning. However, three out of five teachers said they only experienced quality professional development focused on virtual learning led by school members from within the school they serve. Two out of five teachers mentioned that they attended professional development outside of their virtual school but had to adapt the content from the session to make it applicable to the virtual setting.

In my experience as a virtual school employee, there are no established standards or expectations for developing credible virtual learners. Students are not required to take a course or program to learn about digital citizenship. Digital citizenship is the process of preparing students to be responsible digital learners. Ribble and Park (2020, p. 25) defined it as “continuously developing norms for appropriate, responsible, and empowered technology use.” In my experience, students were required to complete a student orientation course that provided students with information on how to navigate the educational management system. The orientation course did not include aspects of digital citizenship, nor was digital citizenship mentioned in school handbooks.

It was not easy to identify teachers who had high student completion rates for two consecutive school years from my collection of data. It was difficult because most teachers in this study did not have student completion rates in the 90th percentile in each
subject area for two consecutive school years as indicated from the grades 9-12 student completion rate data in Appendix D. The majority of the 29 schools identified on the data report had completion rates between the 70th and 80th percentile.

**Culture**

School culture includes “the assumptions, beliefs, expectations, and habits that constitute the norm” (Muhammad, 2018, para. 1). School culture should be “characterized by purpose and focus, engagement, and collaboration” (Wagner et al., 2006, p. 113). Several times over, the interviewed teachers talked about the importance of building relationships and connections with students. It is assumed that building relationships with students was a focus of the teachers’ school culture. However, the interviewed teachers did not mention the importance of building relationships among school members. There appeared to be an imbalance of the importance of building community among students, families, and school members.

In my experience as a school leader, teachers transitioning into the virtual setting are not prepared or do not understand that teaching in a traditional setting is different than teaching in a virtual setting. One of the participants interviewed shared the same experience by stating virtual teaching was “definitely a different animal than classroom teaching.” Educating students in the virtual setting is not designed for all teachers as it is also not designed for all students. Virtual schools are just one type of school out of many other school options – brick and mortar, blended, homeschool, sports academies, and so on. In my experience with onboarding new virtual teachers, they bring many misconceptions about teaching virtually. These misconceptions included but were not limited to: 1) “classroom instruction offers a higher quality of education as compared to
distant learning; 2) online students lose interaction with instructors and other students; 3) employers value degrees earned from classroom instruction more than those are in from an online school; 4) the role of the professor is less important in online learning programs; and 5) an online degree is easier to earn than a degree from a traditional school” (Palloff & Pratt, 2013, p. 188).

From my experience, one of the challenging aspects of teaching virtually for new teachers is considering the student-customer approach. The student-customer approach allows students to receive learning services and opportunities to learn while voicing their learning needs and expectations (Groccia, 1997). All teachers interviewed shared examples or characteristics of having a student-customer approach. For example, several teachers made remarks on the survey and interviews about giving students grace, including opportunities to relearn course concepts. Students could then redo or retake assignments and assessments to show their learning gains.

**Conditions**

Course loads and class sizes vary according to each virtual school and are different compared to traditional schooling. In my experience, virtual teacher caseloads tend to be higher than those in the traditional educational setting. In the traditional high school setting, teachers have around six different class periods. Each class serves about thirty students. Whereas, in the conventional classroom setting, a typical teacher serves approximately 180 students per day. In the virtual schools I have served, a typical virtual high school teacher taught about three courses each semester and served between 250 to 300 students. Some may argue that one teacher serving 250 to 300 students is problematic; however, none of the interviewed teachers mentioned class size as a barrier
to having higher student completion rates. Currently, little to no research has been completed on how class size impacts student performance rates in the virtual setting (Orellana, 2006). However, in my experience, two of the repeated complaints leaders received from teachers was how large their class sizes can reach and the number of courses they taught each semester. Each year, leaders worked hard to balance out the master schedule so that teachers did not teach more than four courses and served no more than 300 students in a given semester.

Throughout the interviews conducted, teachers talked about motivating students to complete the work and stay on task. Teachers emphasized the importance of maintaining student engagement. Teachers focused on their outreach approaches and interactions with students to keep student engagement at its highest. In my experience, quality educational management systems consist of course/assignment grades and a visual of where students are currently working in the curriculum. From my experience, classroom observations showed teachers spent much time reminding students where they should be in the curriculum according to the school year cycle. There was a lack of emphasis on providing students with expectations with course pacing requirements, resulting in a lack of student accountability.

An obvious assumption about virtual school is that students need the necessary technology to complete their work, such as computers, phones, webcams, and microphones. However, all students do not have the necessary equipment to succeed in the virtual school setting. One interviewed teacher said it best when they said, “Even though students or parents are required to complete a form that says my child has the Internet and a computer, that doesn't always mean they actually have Internet and
computer.” Sometimes teachers learned that students only had their phones or tablets to complete their course work. Students with inadequate technology reduce their chance of having success in the virtual setting.

**Competencies**

From my experience, there is a lack of teacher preparedness regarding 1) student engagement, 2) navigating the educational management system platform, 3) delivering instruction virtually, and 4) consistently documenting all interactions with students promptly. The teachers interviewed discussed areas of productive struggle with student engagement and delivering instruction virtually. As evidenced in two of my interviews, teachers experienced a difference in teaching when making the transition from teaching in a traditional setting to teaching in a virtual setting. A participant in one interview shared that they were “surprised for a while at how different it was” when comparing teaching in a traditional setting with that of teaching in a virtual setting. A participant in another interview shared they experienced “a big learning curve” when transitioning from teaching in a traditional setting to a virtual setting. Because of the difference in the two settings, teachers were not fully prepared to teach online.

Student engagement is a huge topic of discussion in education in general; however, student engagement is an even bigger topic in the virtual school setting, as evidenced by teacher responses from the surveys and interviews. As one interviewed teacher explained student engagement was challenging when there were so many other outside variables that impacted the engagement of students that is outside the control of teachers. From my experience, teachers participate in little to no professional development to engage students virtually before teaching online. Most, if not all, of the
professional development teachers receive once they start to teach online occurs within the schools they serve, as evidenced by interviewed teachers.

**Interpretation**

The surveys and interviews completed by teachers provided online teaching and learning practices used by teachers who produce high student completion rates. As shown in responses to Question 4 of the survey: I know what teaching and learning practices virtual teachers need to utilize to have high student completion rates; all teachers agreed that they knew the teaching and learning practices virtual teachers needed to achieve high student completion rates. In addition, all teachers agreed that they believed the teaching and learning practices they used directly impacted their high student completion rates, as demonstrated in responses to survey Question 5.

Even though teachers who completed the survey knew what best practices to use with students to achieve high student completion rates, not all students which these teachers served completed and passed their classes. Teachers shared that several outside factors prevented students from being successful in their courses. From the interviews conducted, teachers shared the following barriers that prevented their students from being successful: 1) students did not have the necessary technology for learning, 2) health issues, 3) lack of parental support, and 4) students did not know how to advocate for themselves.

The interviewed teachers shared some online practices they used that contributed to their high student completion rates including: 1) individualized instruction; 2) relationship building; 3) multiple modes of communication; 4) multiple methods of instruction; 5) teacher collaboration; and 6) differentiated instruction. The teachers in this
study who used one or more of these practices experienced positive impact on their student achievement scores. I linked each of the six identified practices from the interviewed teachers to the fourteen best practices for teaching online identified by Boettcher and Conrad (2016). Figure 13 shows a chart with Boettcher and Conrad’s (2016) identified fourteen best practices for teaching online matched with each of the six identified practices from the interviewed teachers. Of Boettcher and Conrad’s fourteen best practices, three did not align with the six identified practices in this study. The three unaligned practices are essential in the virtual setting; however, these were not practices mentioned by the teachers in this study. There was also no alignment to teacher collaboration, one of the six best practices identified by the teachers in this study.

**Figure 13**

*Boettcher and Conrad (2016) Fourteen Best Online Practices*

<table>
<thead>
<tr>
<th>Best Practice</th>
<th>Details</th>
<th>Identified Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be Present at Your Course</td>
<td>Teachers show that they care about students’ questions and concerns by communicating often and showing their presence socially, cognitively, and teaching.</td>
<td>Relationship Building</td>
</tr>
<tr>
<td>Create A Supportive Online Course Community</td>
<td>Teachers implement diverse and balanced dialogue between students to teachers, students to students, and students to resources.</td>
<td>Relationship Building</td>
</tr>
<tr>
<td>Develop a Set of Explicit Workload and Communication Expectations for Your Learners and for Yourself</td>
<td>Teachers implement good work habits to obtain a good work-life balance through setting explicit expectations.</td>
<td></td>
</tr>
<tr>
<td>Use a Variety of Large Group, Small Group, and Individual Work Experiences</td>
<td>Teachers implement a variety of learning experiences that provide students with options to apply their skills and abilities.</td>
<td>Multiple Methods of Instruction</td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
</tr>
<tr>
<td>Use Synchronous and Asynchronous Activities</td>
<td>Teachers implement a balance of asynchronous (videos, recordings, discussion boards) and synchronous (real-time discussions and live instruction) activities.</td>
<td>Multiple Modes of Communication</td>
</tr>
<tr>
<td>Ask for Informal Feedback Early in the Term</td>
<td>Teachers implement opportunities for students to provide input on what is working well and not so well within the course.</td>
<td>Individualized Instruction</td>
</tr>
<tr>
<td>Prepare Discussion Posts That Invite Responses, Questions, Discussions, and Reflections</td>
<td>Teachers implement discussion boards that generate critical thinking, reflections, creative thinking, etc.</td>
<td>Multiple Modes of Communication</td>
</tr>
<tr>
<td>Think Digital for All Course Content</td>
<td>Teachers implement course content that is accessible from any technology device at any time.</td>
<td>Multiple Methods of Instruction</td>
</tr>
<tr>
<td>Combine Core Concept Learning with Customized and Personalized Learning</td>
<td>Teachers implement learning options that support students’ personal and professional goals.</td>
<td>Differentiated Instruction</td>
</tr>
<tr>
<td>Plan a Good Closing and Wrap Activity for the Course</td>
<td>Teachers implement end-of-course projects to determine what students are taking away from the course.</td>
<td>Individualized Instruction</td>
</tr>
<tr>
<td>Assess as You Go by Gathering Evidences of Learning</td>
<td>Teachers implement a process to gather student learning throughout the course.</td>
<td></td>
</tr>
<tr>
<td>Rigorously Connect Content to Core Concepts and Learning Outcomes</td>
<td>Teachers implement teaching practices that include distributed review practice and elaboration of concepts.</td>
<td>Multiple Methods of Instruction</td>
</tr>
<tr>
<td>Develop and Use a Content Frame for the Course</td>
<td>Teachers implement content course frames, such as syllabus, so students can use what is to be learned and what can be learned as their interest develops.</td>
<td></td>
</tr>
<tr>
<td>Design Experiences to Help Learners Make Progress on Their Novice-to-Expert Journey</td>
<td>Teachers implement course content that helps students move their knowledge base from novice to expert.</td>
<td>Individualized Instruction</td>
</tr>
</tbody>
</table>

*Note: Boettcher and Conrad, 2016*

According to Wagner (2014), quality continuing professional development is not a top priority in our nation's schools. Findings from my study related to professional
development revealed that teachers relied heavily upon their colleagues or school personnel creating a "learning from each other" culture. "Effective professional development programs use a variety of methods to furnish faculty with technology experiences and incentives to design and teach online." (Nilson & Goodson, 2018, p. 209). Teacher responses to interview Questions 4 and 5 showed a need for virtual teachers to receive quality professional development. In-house professional development tends to be successful because school personnel who created it have an invested stake in its future and a long-term commitment and perspective (Heifetz et al., 2009). Several teachers agreed that school personnel conducted some of the quality professional development sessions they attended. A method that could be used for professional learning and growth alongside school stakeholders is participatory action research (PAR); a dynamic process for research designed to get practical results (James et al., 2008).

**Judgments**

Identifying the practices of effective teachers in the virtual school setting and how those practices affected student achievement outcomes was the focus of this study. The primary research questions addressed the effective practices used by high school teachers with high student completion rates. The research involved comparing survey and interview responses to identify common practices identified by the participants in this study. The primary research questions were:

1. What effective practices should high school teachers use in virtual classrooms?
2. How do the effective practices impact student achievement?
Primary research Question 1 outcomes were determined by analyzing the data from the interviews and surveys teachers completed. Eleven high school teachers who consistently had the highest completion rates for the last two years completed the survey. A copy of the survey is located in Appendix B. Five of the eleven randomly selected high school teachers completed an interview. A copy of the interview questions is provided in Appendix C.

Primary research Question 1, what effective practices should high school teachers use in virtual classrooms, was answered by the six best practices for teaching and learning used by teachers in this study. Analyzing and comparing teacher responses from the surveys and interviews to identify best practices implemented by the teachers in this study produced the six commonly used best practices: 1) individualized instruction; 2) relationship building; 3) multiple modes of communication; 4) multiple methods of instruction; 5) teacher collaboration; and 6) differentiated instruction. Of the interviewed teachers, some provided practices they used in the virtual setting in addition to the six commonly identified practices.

I determined the answer for primary research Question 2 by using the quantitative data collected through student completion rates tied to teacher performance. I collected extant data for grades 9-12 student completion rates from 29 operating full-time virtual schools operating under the same EMO (Appendix D). I identified the high school classes with high student completion rates consistently for two consecutive school years. From the highest student completion rates by class, eleven virtual high school teachers participated in surveys and five of the fifteen randomly selected high school teachers completed an interview (Appendix B and C).
Primary research Question 2, how do the effective practices impact student achievement, was quickly observed in the extant student data. Student performance data were analyzed to determine which teachers had student pass rates in the 90th percentile for two consecutive school years. All teachers who participated in this study had student pass rates in the 90th percentile. The purpose of identifying teachers who had pass rates in the 90th percentile for two consecutive years was to extract the teaching and learning practices they commonly used in the virtual setting.

In addition to two primary research questions, I asked five secondary questions as part of the research study.

- How does the role of a teacher support virtual learners?
- What do teachers need to know about serving students in the virtual setting?
- What characteristics or habits do teachers possess and practice?
- What other variables impact student achievement?
- What quality professional development on effective virtual teaching and learning practices are provided for teachers?

The answer to secondary Question 1, how does the role of a teacher support virtual learners, was found in responses of the essential strategies implemented by the teachers in this study. Teachers in this study shared the essential strategies they used to support learners, as reported in responses to survey Question 9. The essential strategies identified by participants in this study included some of the following: 1) virtual study halls, 2) consistent teacher presentence and accessibility, 3) targeting students who need additional learning supports, 4) regular synchronous and asynchronous communication,
5) interactive student-centered direct instruction, and 6) one-on-one learning support and instruction.

The answer to secondary Question 2, what do teachers need to know about serving students in the virtual setting, was found within many of the responses provided by teachers on the open-ended survey questions and interview questions. Throughout the surveys and interviews, participants' shared information about how teachers could best serve students in the virtual setting. For example, some teachers mentioned how important it was to build relationships with their students. Some teachers talked about how students needed to know that their teachers cared about them and were willing to help them be successful. Some teachers talked about knowing personal information about the student helped them individualize instruction.

The answer to secondary Question 3, what characteristics do teachers possess and practice, was found within teacher responses to Question 3 of the interview. Teachers provided their opinions on the characteristics that teachers needed to possess in the virtual setting. The characteristics identified by the teachers in this study included teachers who: 1) take the time to get to know their students as individuals; 2) know how to interact and connect with students virtually; 3) are self-motivated; 4) are great communicators; 5) are flexible and adaptable to the process of change; and 6) are organized.

The answer to secondary Question 4, what other variables impact student achievement, is found within teacher responses to Question 11 of the survey and Question 9 of the interview. Teachers provided information or variables that had an impact on their student completion rates. On survey Question 11, teachers shared that not
all students completed all the lessons in a given course but could still pass the course to earn high school credit. Other teachers shared that ongoing contact, individualized instruction, and providing students with multiple opportunities to re-learn learning objectives yielded positive student outcomes. Teachers also shared students who were willing to put in the effort were successful with course completion. In Question 9 of the interview, teachers shared the barriers they experienced that prevented them from even higher student completion rates. Teachers felt that the following barriers existed and prevented students from being successful: 1) students did not have the necessary technology for learning, 2) health issues, 3) lack of parental support, and 4) students did not know advocate for themselves.

The answer to secondary Question 5, what quality professional development on effective virtual teaching and learning practices are provided for teachers, is found in responses to Questions 4 and 5 of the interview. All teachers agreed that participating in quality professional development positively impacted the teaching and learning process. They agreed that the impact varied according to the professional development session; however, the impact could be observed by how teachers instructed students or in student performance outcomes. All interviewed teachers saw value in participating in professional development opportunities. Some teachers felt in-house professional development sessions were of higher quality than outsourced professional development. It was unclear from teacher responses whether they participated in quality professional development that specifically focused on effective virtual teaching and learning practices. Their responses to interview Question 4 lacked specific content details of the professional development they attended.
Recommendations

As a result of my analysis of the findings of my study, I recommend that the six commonly used practices identified by teachers who produced high student completion rates in the 90th percentile for two consecutive years be presented by leaders to all virtual teachers. In addition to the six identified practices, I recommend sharing Boettcher and Conrad’s (2016) identified fourteen best practices for teaching online with virtual teachers as part of a best online practices professional development series.

“The purpose of professional development is to leave practitioners motivated and energized to create need to change by bobbing them in the study and improvement of their practice” (James et al., 2008, p. 11). Participants in this study valued the importance of professional development to their growth in their profession as virtual teachers. As a result, I recommend developing a professional development series that examines each online best practice. During each professional development session within the series, school leaders and teachers will engross themselves in practical implementation of each best online practice. Nilson and Goodson (2018) suggested that the best online practice professional development series needs to include various methods for teacher interactions with each session within the series. Implementing a variety of approaches ensures teachers have support with implementing each best practice. Methods may include one-on-one coaching, participation in best practice collaboration teams, or observations of other teachers who implement the identified best practices. During the professional development series, teachers will learn what it means to implement each identified best practice. In addition, teachers will discuss what each best practice sounds like, feels like,
and looks like in the virtual setting when implemented as part of their daily teaching and learning practices.

The challenge of implementing this recommendation comes with the design of the professional development series. Qualifications need to be used to identify teaching professionals best suited to develop and design the best online practices professional development series. Creating qualifications ensures that a team of experts creates the best online practices professional development series. These should include but are not limited to 1) produces student completion rates in the 90th percentile for at least two consecutive school years, 2) currently teaches online, 3) has taught in a virtual setting for at least two years, and 4) earns an effective rating in their overall performance as a virtual teacher.

Conclusion

In this chapter, I identified the As-Is arenas of change (Appendix G) related to the contexts, culture, conditions, and competencies for improving teacher practices in virtual schools. Overall, the findings of this study concluded that the following are online best practices used by teachers who consistently produce high student completion rates: 1) individualized instruction, 2) relationship building, 3) multiple modes of communication, 4) multiple methods of instruction, 5) teacher collaboration, and 6) differentiated instruction. As a result, I recommended that all virtual teachers participate in a professional development series focused on these six online best practices along with the fourteen best online teaching practices identified by Boettcher and Conrad (2016). I share my vision of the To-Be arenas of change for virtual education teaching and learning practices in the next chapter.
CHAPTER FIVE: To-Be Framework

From my research, there is evidence from two different data points that call for improvement: 1) Grades 9-12 Student Completion Rate Data and 2) interview responses from Question 9 over the barriers that prevent students from being successful. The data collected from 29 schools on student completion grades in Grades 9 through 12, Appendix D, revealed an unsatisfactory level of student completion rates across several of the 29 schools represented in this study. Only four schools, 8, 12, 21, and 23, had student completion rates in the ninety percentiles in the 2018-19 and 2019-20 school years. Most of the schools identified in Appendix D had student completion rates between 75% and 85% in both school years. From the interviews conducted, teachers shared the following barriers that prevented their students from success: 1) students did not have the necessary technology for learning, 2) health issues, 3) lack of parental support, and 4) students did not know how to advocate for themselves.

Teachers who participated in my study seemed eager to talk about and share their expertise in producing high student pass rates. Teachers in this study had served students in the virtual setting for at least three years. They each valued the teaching and learning dynamic of virtual education. I discovered that the virtual teachers in this study implemented the following teaching and learning practices: 1) individualized instruction, 2) relationship building, 3) multiple modes of communication, 4) multiple methods of instruction, 5) teacher collaboration, and 6) differentiated instruction. As a result, I propose a change leadership plan focused on educational *reinvention* instead of reform. Virtual education challenges the status quo of teaching and learning because of providing quality education to students remotely. Virtual education is part of an educational
reinvention as it “challenges the basic tenets of what leading, teaching, and learning in schools and districts should look like in the context of the twenty-first century” (Wagner et al., 2006, p. 37).

**Envisioning the Success To-Be**

My vision of the To-Be for virtual education teaching and learning practices includes ideal contexts, culture, conditions, and competencies (Wagner et al., 2006) (for a complete TO-BE chart, see Appendix I). In my To-Be organizational analysis, teachers are prepared and equipped with the best online teaching and learning practices, evidenced by consistent and sustainable high completion rates. A positive school culture is a place where teachers have an unwavering belief that all students can achieve success and establish school policy and practices under that same belief (Muhammad, 2018). In my “To-Be” vision, the school culture is positive because teachers have a “whatever it takes” attitude and serve students under a student-customer approach.

**Future Contexts**

In my years of serving the K-12 school system, I have experienced good and not-so-good professional development. However, many of my colleagues and I have always appreciated professional development that we found relevant to our roles as educators. “Professional development matters when it responds to a need and when it changes outcomes” (Bambrick-Santoyo, 2018, p. 1). In my experience, leaders are responsible for providing quality professional development to the teachers in a school, especially teachers new to virtual education. Providing quality professional development is considered one of the key support systems for new virtual teachers (Muhammad, 2018).
An ideal future context will include quality ongoing professional growth provided to virtual teachers as part of a professional development series focused on best online teaching and learning practices. Professional development sessions will encompass the identified best online teaching and learning practices, the eight themes identified in Chapter 2, and other related topics; see Figure 14.

**Figure 14**

*Professional Development Series Content*

<table>
<thead>
<tr>
<th>Best Practice</th>
<th>Eight Themes</th>
<th>Other Related Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>individualized instruction</td>
<td>empowering teachers</td>
<td>elements of virtual education in which teachers struggle the most</td>
</tr>
<tr>
<td>relationship building</td>
<td>understanding the student/customer approach</td>
<td>school improvement efforts</td>
</tr>
<tr>
<td>multiple modes of communication</td>
<td>developing and managing virtual teachers</td>
<td>student learning problems</td>
</tr>
<tr>
<td>multiple methods of instruction</td>
<td>time management</td>
<td>Fourteen best online practices identified by Boettcher and Conrad (2016)</td>
</tr>
<tr>
<td>teacher collaboration</td>
<td>engaging the disengaged student</td>
<td></td>
</tr>
<tr>
<td>differentiated instruction</td>
<td>creating virtual teams for continuous school improvement</td>
<td></td>
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<tr>
<td></td>
<td>implementing a robust response to intervention process</td>
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<tr>
<td></td>
<td>implementing best practices for teaching online</td>
<td></td>
</tr>
</tbody>
</table>

Teachers and other school officials are not the only individuals who need systems of support to be successful in the virtual environment. Students need systems of support in place to ensure they are successful in the virtual setting. Students need support to become credible learners by practicing digital citizenship. Practicing digital citizenship includes “appropriate, responsible, and empowered technology use” (Ribble & Park,
Without preparing students to be responsible digital learners, students will be ill-equipped to implement the nine themes of digital citizenship, which includes: digital 1) access; 2) commerce; 3) communication and collaboration; 4) etiquette; 5) fluency; 6) health and welfare; 7) law; 8) rights and responsibility; and 9) security and privacy (Ribble & Park, 2020, p. 25).

An ideal future context will include students who know and understand the importance of being a credible learner. Credible learners will know how to interact with technology tools appropriately because they will participate in a digital citizenship program. The digital citizenship program will include the above nine themes of digital citizenship and virtual honors codes. Leaders will design the digital citizenship program as a system of support toward developing students to be successful, responsible virtual learners.

Being a successful and responsible learner lends itself to students successfully completing coursework and passing their online courses. Some state virtual funding models require students to complete courses and earn passing grades to generate funding for the school. Getting students to complete their courses and earn a passing grade comes with challenges. “Learning requires ongoing motivation and deliberately adding motivational strategies improve students’ motivation to learn and their pass rate in online course” (Nilson & Goodson, 2018, p. 108). However, learning what motivates students to learn is a key ingredient to higher pass rates.

An ideal future context will include students having consistent and sustainable high completion rates. Students will utilize the resources, strategies, and tools necessary to successfully complete their courses, as evidenced by course completion and passing
course grades. In addition, students will be able to sustain their course completion, as evidenced by year-to-year student completion data.

**Future Culture**

Many educators are familiar with the famous quote, “School culture eats strategy any day” (Drucker, 1959, p. 28). This quote resonates with many educators, especially school leaders, because educators understand the importance of establishing and maintaining a positive school culture. As a school leader, I know that whatever strategic plan put into place will not have success unless an established, positive working culture exists to accomplish the action items within the strategic plan. Creating a strong, positive school culture is not an easy task for a school leader. There are many strategies, actions, and beliefs that go into establishing a positive school culture. I firmly believe that one of the key ingredients to establishing a positive school culture is creating a sense of connectedness and belonging. School staff, students, and parents all need to feel a sense of connectedness and belonging to each other to establish a positive community.

“Belonging is best created when we join with other people and producing something that makes a better place” (Block, 2018, para. 1). Building a strong sense of connectedness and belonging is one of the most powerful strategies used to end isolation and promote community.

An ideal future culture will consist of students, teachers, and other school stakeholders feeling a powerful sense of connectedness and belonging. When students and teachers display actions of feeling connected, like having a rapport, it speaks volumes to the established school community. Unfortunately, upon being hired or appointed in their positions, many school leaders are asked to focus on policies,
procedures, and practices instead of considering the emotional, symbolic, and purposeful aspects of school culture (Boyatzis, 2005). As a result of not focusing on school culture, school leaders and the colleagues and students they serve feel disconnected and isolated (2005).

Making the transition from a traditional brick-and-mortar teacher to a virtual teacher requires a mindset shift. “Teachers who are effective in the face-to-face environment can be effective as online teachers, but it is not automatic, and it does not happen overnight” (Boettcher & Conrad, 2016, p. 35). A virtual teacher can implement the same instructional practices as a brick-and-mortar teacher; the only difference is the delivery of those practices may look, feel, and sound different as the teacher delivers them using a digital format. Therefore, it is critical to adequately support virtual teachers for them to become knowledgeable with the principles of effective online teaching and learning practices (Boettcher & Conrad, 2016).

An ideal future culture will consist of educators knowing and understanding that teaching in a virtual setting is different from teaching in a more traditional setting. When educators understand there is a difference in the teaching and learning process face-to-face compared to online, educators make mindset shifts on how to deliver instruction and better support their students in the virtual setting. Virtual teachers who have this understanding develop a mindset for applying learning principles and practices that are highly relevant for students taking on the new challenge of learning in a digital era (Boettcher & Conrad, 2016).

Students are both customers and learners (Groccia, 1997). This proves to be true as students: 1) participate in their learning process and academic growth; and 2) can
choose to attend another school of choice with the consent of their parents. From my experience, parents of high students are more willing to listen to their children’s opinions of school choice. In K-12 public education, many virtual schools are charter schools. Charter schools are often responsible for marketing their school as they are considered a school choice. School officials in a school of choice have to be cognizant of the student/customer approach. Otherwise, students and families may not feel they receive quality service and, therefore, withdraw and attend another school. Providing quality customer service does not mean that school officials have to be available to the students 24/7. In most virtual schools, students do not have access to 24/7 teacher customer service; however, it is important for teachers to be readily accessible to students and consistent in their response to students and their feedback to students (Johnson, 2013).

An ideal future culture will include quality customer service to take into account the student/customer approach. Within the school culture, there will be evidence of customer service actions and strategies used such as these four essential qualities: 1) compassion; 2) good listener; 3) available; and 4) flexible (Johnson, 2013). The participants in this study mentioned each of these four essential qualities as evidenced in the responses to Question 3 of the interview. The four essential qualities match the characteristics of an effective virtual teacher as described by the teachers in this study. Virtual teachers need to be: 1) understanding of student time, academic needs, and family dynamics, 2) excellent communicators using various communication tools, 3) available and accessible to provide academic support when needed, and 4) flexible to accommodate the needs of their students and the ongoing changes with technology tools. A student/customer approach should include continued conversations within the school
on parent and student satisfaction which can be captured in many ways, including but not limited to surveys.

**Future Conditions**

Even though enrollment in online K-12 education is increasing year-to-year, little research has tracked and reported regarding teacher-to-student ratios (Boettcher & Conrad, 2004). One big misconception about online education is that class sizes do not matter (Orellana, 2006). “Class size research is important to educational policy development” (2006, p. 230). There is sizeable research available on how class-size affects student learning in the traditional school setting (Blatchford & Russell, 2020); however, little research is available on how class size affects student learning in virtual schools (Orellana, 2006). School budgets often determine online class sizes by matters such as enrollment, teacher allocations, and student retention throughout the school year (2006). Often virtual class sizes are much higher than brick-and-mortar class sizes. For example, in my experience, a typical high school brick-and-mortar teacher serves about 160 to 180 students in six-period days. A typical high school virtual teacher serves about 250 to 300 students a day. This is partially due to school leaders believing that teachers can handle higher numbers of students because of not having a physical space limitation (2006). It is hard to compare brick-and-mortar class sizes to virtual class sizes because circumstances in each setting are different.

Ideal future conditions will include giving teachers a voice in class loads and class sizes (Palloff & Pratt, 2013). Each online school leader determines the class size of each course offered. For example, the leaders of the EMO in this study determine the teacher’s effort level of each course to determine a class size range. The level of interactive
qualities, such as grading, instruction, and student discourse on class forums are examples of competencies used to evaluate the teacher’s effort level. Each online course requires a different level of interactive qualities; therefore, leaders and teachers will determine optimal class sizes per course (Orellana, 2006). Appropriate student-to-teacher ratios will exist in each online course. Leaders will maintain the student-to-teacher ratios to ensure large class sizes do not compromise the quality of online instruction.

Enforcing learning habits can be pretty challenging in the virtual learning setting. The traditional school has structures such as schedules to enforce learning habits (Johnson, 2013). Without the structure of schedules in a virtual school, the environment can feel disoriented (2013). One of the challenges virtual students reported experiencing is not managing their time to follow a set schedule (Nilson & Goodson, 2018). Participants in this study confirmed that keeping students on track with lesson completion is challenging. Students get behind on their lesson completion in the enrolled course.

From my experience as a virtual educator, teachers and students need a pacing guide or course schedule to determine if students are on track for course completion. Samples of a pacing guide can come in the form of calendar planners outlining lesson completion each day, course syllabus, or other formats that map out a schedule for students to stay on track with course completion.

Ideal future conditions will include schedules for both students and teachers to follow as guidelines for pacing through course completion. As part of being a virtual learner, students will commit to following each course pacing guide or schedule for steady progression. Course pacing guides or schedules will remain as guidelines for flexibility to accommodate student and family obligations without compromising course
completion. Virtual schools will implement a distributed schedule that maps out lesson completion over time, such as a semester.

“Emerging technologies are changing the face of online learning” (Palloff & Pratt, 2013, p. 6). It may come as no surprise that virtual students need access to technology to complete their online courses. Yet not all students have the financial means to purchase the necessary technology to be full-time virtual students. Whereas some virtual schools have the funding to provide their students with the required technology, other schools do not. In my experience, some virtual schools have limited funding or hardships to grant to families needing technology assistance. In those schools, households must complete an income form showing a hardship need. Per the budget, the schools can only provide one laptop per household regardless of the number of siblings enrolled in our school. Each virtual school will create a technology plan to handle technology hardships experienced by students. Virtual schools need to be prepared to make accommodations for students who do not have access to acceptable technologies (2013). However, Palloff and Pratt (2013) recommended students who do not have access to acceptable technologies and a high-speed internet connection evaluate how that might affect their online learning experience.

In ideal future conditions, all students will have the necessary learning equipment to be successful virtual students. In my experience, students need access to a computer, phone, the appropriate software, and a high-speed internet connection for course completion. “The choice of technology that makes it easier for students to connect with one another, enabling them to form a learning community, is critical” (2013, p. 9). Students and teachers will adapt to the ever-evolving technology.
Future Competencies

Any licensed teacher can teach in a virtual setting. Knowing that online instruction requires certain skills and dispositions unique to online learning, educators need to consider how they can transfer their educational philosophies into the online environment and maintain high levels of interactivity, engagement, and relationship building with students (Heafner et al., 2015). Due to the increasing enrollment growth in K-12 online education, there is a need for effective teacher preparation for teaching in the virtual setting (2015). Unfortunately, universities typically design teacher education programs to prepare teachers to teach in the face-to-face setting more than the online setting (2015). School leaders must design onboarding processes to train new virtual teachers that transition into virtual schools. Leaders need to continuously analyze onboarding processes and make changes to serve better and support new virtual teachers.

An ideal future competency, all virtual teachers are prepared to teach and serve students in the virtual setting. Teachers will have an understanding that teaching online requires a different approach to the teaching and learning process. Teachers will apply a constructivist model to the teaching and learning online process to allow for a more student-centered approach. A student-centered approach ensures students create new knowledge and interact to share knowledge while the instructor acts as a facilitator in the learning process (Heafner et al., 2015). Teacher effectiveness will be evaluated by how teachers successfully: 1) engage students virtually; 2) navigate an Educational Management System (EMS); 3) deliver instruction virtually; and 4) document all interactions with students.
Conclusion

In my change leadership plan, I aim to implement my vision of the To-Be for virtual education teaching and learning practices identified in Appendix I. In my To-Be organizational analysis, teachers are equipped with the best online teaching and learning practices, as evidenced by consistent and sustainable high completion rates. In the next chapter, I will bridge the As-Is (Appendix G) and the To-Be (Appendix H) by identifying strategies and actions to achieve my change leadership plan to implement the best online teaching-learning practices.
CHAPTER SIX: Strategies and Actions

In comparing my analysis of the As-Is 4 Cs (Appendix G) to my vision of the To-Be 4 Cs (Appendix H), I considered these arenas of change: context, culture, conditions, and competencies (Wagner et al., 2006). My To-Be vision of achieving high student completion rates includes creating strategies and actions within the arenas of change. To accomplish my vision, I will apply my change leadership plan through a series of strategies and actions (Appendix I) which focuses on providing virtual teachers with a quality professional development series centered around the six best online teaching and learning practices identified in this study. I identified seven strategies that address change to online teaching and learning practices. When implemented, the seven strategies enforce a sense of urgency to implement the six best online teaching and learning practices to improve student completion rates across all virtual classrooms.

Results from my evaluation of online teaching and learning practices revealed six online best practices used by teachers who consistently produced high student completion rates. The results suggested a need for professional development to teach all virtual teachers about the six online best practices identified in this study. In my change leadership plan, I prepare teachers to be effective by providing them with professional development that equips them with the identified practices to increase student completion rates. School leaders and teachers will embark on a professional development series that examines the six online best practices.

To achieve this plan, school leaders and teachers, who have high student completion rates, will schedule and design the professional development series focused on the six online best practices for teaching and learning. School leaders will expect all
virtual teachers attend each of the six sessions within the professional development series. Each professional development session will consist of content that dives deeply into implementing each identified best practice. Attending teachers will participate in interactive activities that promote collaborative inquiry. After virtual teachers complete the professional development series, leaders will record and track their student completion rates to compare with previous years to determine the impact of implementing the six online best practices had on their student completion rates.

**Strategies and Actions**

Heifetz et al. (2009) mentioned two core processes involving leadership practices: diagnosis first and then action. Heifetz et al. (2009) explained that it is necessary to diagnose what is going on by identifying the problem and then addressing the identified problems. This process is called adaptive change (2009). Often, organizations rebrand themselves, which consists of auditing existing practices, procedures, and policies. When organizations rebrand, they are undergoing the process of adaptive change. In chapter four, I showcased the process of diagnosis and action (the what) with the data collection and problem identification and interpretive stage (the why) (2009). As evidenced by Appendix D, most virtual schools in this study have low passing rates (the what). Best online teaching and learning practices need to be identified so that all virtual teachers utilize the best practices to improve course pass rates (the why).

In this chapter, to address the ‘what next’ (2009), I provide approaches to action as a series of interventions as seen in my strategies and action chart. A copy of the Strategies and Action Chart is located in Appendix I, but I provide greater detail in this section. I used the frameworks of John Kotter (2012) and Ronald Heifetz et al. (2009) to
create my change leadership plan. I recommend that virtual schools consider applying the strategies and actions I outline to initiate adaptive change.

**Develop a Sense of Urgency**

Developing a sense of urgency is critical when working on a change problem (Kotter, 2012). Developing a sense of urgency pushes for the momentum of change. A sense of urgency is needed as evidenced by the low pass rates I found in the majority of schools identified in the grades 9-12 student completion rate data (Appendix D). District leaders will provide a designated time for school leaders and principals to discuss the low pass rates and the action needed to achieve my “To-Be” vision. “People will find a thousand ingenious ways to hold cooperation from a process that they sincerely think is unnecessary” (Kotter, 2012, p. 36). Creating a sense of urgency with school leaders and principals will help the organization to realize the ideal future context of student pass rates between the 80th and 90th percentiles across all 29 schools in the education management organization (EMO) in each subject area.

**Develop a Change Vision**

To execute any plan, a well-thought-out vision of change needs to occur. According to Kotter (2012), having a vision is a vital component of all great leaders (p. 68). A vision means thinking of the end result. To achieve the end result, school leaders need to implement strategies, initiatives, objectives, or action steps that create a momentum of change toward the vision. For example, the vision of my change leadership plan is to have student completion rates in the 90th percentile across all subject areas in all virtual schools. To achieve this vision, school leaders need to implement a strategic plan that includes action steps such as:
• Collect completion rate data per subject teacher to track completion rates from semester to semester and year to year.

• Explain to school stakeholders the need to implement the six sessions professional development series over online best practices.

• Implement a six-session professional development series over the six online best practices identified in this study.

• Ongoing coaching to provide ample support to teachers in the beginning stages of implementation of the six online best practices.

• Ongoing completion rate data for each subject teacher after the completion of the professional development series.

Keeping the strategic plan simple allows the practitioner to execute the plan efficiently (Reeves, 2013). School leaders will implement a strategic plan that is focused, concise, and intentional. “It’s much harder to be clear and concise than over complicated and wordy” (Kotter, 2012, p. 89). School leaders will disperse the strategic plan to all school stakeholders and community members.

**Develop a Communication Plan to Promote the Change Vision**

Effective vision communication needs to be focused and clear (Kotter, 2012). According to Kotter, communication works best when it is direct and simple. I will use various communication methods and tools, which is also vital when implementing a leadership change plan (Kotter, 2012).

I will create a communication plan that includes the following:

• Promote the professional development series. Use every opportunity to promote the professional development series in other meetings, memos, or
flyers. This gets teachers excited about attending and participating in the professional development series.

- Clearly communicate the purpose of the professional development series. This creates teacher buy-in and ensures support with implementing the professional development series.

- Explain the role that all stakeholders have in ensuring the successful implementation of the professional development series. This includes the expectations and responsibilities of participants who attend the professional development series.

- Share the six best teaching and learning practices with parents to implement the practices with their children at home. This creates a strong partnership and community between school officials and families.

- Provide a place for all stakeholders to reflect and share their feedback on implementing the six online teaching and learning practices. This creates a community of learning and a community of connectedness.

**Develop a School-Wide Professional Development Plan**

Adaptive change requires a commitment to learning (Heifetz et al., 2009). Actions focused on the individual professional growth of teachers show a district’s commitment to its teachers and students. Teacher participation and willingness to implement the best practices in their daily instruction show a teacher's commitment to their school and students.

School leaders will develop quality ongoing professional development for virtual teachers as part of a professional development series focused on best online teaching and
learning practices. Professional development sessions will encompass the identified best online teaching and learning practices. Each session within the professional development series will focus on implementing each of the commonly identified six best online teaching and learning practices identified in this study: 1) individualized instruction; 2) relationship building; 3) multiple modes of communication; 4) multiple methods of instruction; 5) teacher collaboration, and 6) differentiated instruction.

In addition to the six commonly used best practices, the sessions will include the following themes from the literature review located in chapter 2: 1) elements of virtual education in which teachers struggle the most; 2) school improvement efforts; 3) student learning problems; 4) 14 best online practices identified by Boettcher and Conrad (2016); and 5) the eight themes identified in Chapter 2: 1) empowering teachers, 2) understanding the student/customer approach, 3) developing and managing virtual teachers, 4) time management, 5) engaging the disengaged student, 6) creating virtual teams for continuous school improvement, 7) implementing a robust response to intervention process, and 8) implementing best practices for teaching online. Implementing a professional development series that addresses topics relating to improving completion rates in the virtual setting and requiring teachers to participate minimizes levels of complacency with the current status quo.

The professional development plan will include six sessions focused on the six identified best online teaching and learning practices. Each session will have an instructional design approach that educates and coaches teachers to implement each strategy effectively. Each session will also include specific strategies or techniques for
implementing each best online practice and take a deep dive into what it looks like, sounds like, and feels like when implementing each of the six best online practices.

After each session, teachers will receive coaching advice on best implementing the six best practices for practical use in the classroom. Teachers will also be allowed to participate in discourse with other teachers who participated in the professional development series to promote a culture of collaboration and growth as a team. Teachers need time to reflect with one another to improve their development by implementing the learned practices. After completing the professional development series, teachers will receive ongoing coaching tips and advice to ensure that the practices become a reality.

*Maintain Momentum*

A critical step to improving systems, structures, and policies is sustaining acceleration (Kotter, 2018, p. 27). To establish a high level of momentum, school leaders will budget and provide funding to implement the professional development series. School leaders will have to examine their professional development budgets for the school year and determine if increased funding is necessary. School leaders can look into community-based educational foundations or partner up with community businesses to allocate extra funding if needed. School leaders will provide stipends to teachers who design and lead the professional development series.

School leaders will account for a certain number of professional development days as part of the school calendar to continue the momentum of change. School leaders will decide how they will include the professional development series as part of the school calendar. For example, school leaders can provide six half days of professional
development to cover all six best practices or three full days covering two best practices in each professional development session throughout the school year.

It is critical to press harder after experiencing wins to keep the momentum of change fueled (Kotter, 2018, p. 27). Once the EMO establishes the funding and school leaders include the professional development days on the calendar, school leaders will need to spread the word by taking advantage of every opportunity to promote the professional development initiative. School leaders will develop a list of ways to promote the professional development series with school principals, including flyers, memos, and verbal announcements.

According to Kotter (2018), there is a need to continue the momentum of change after initial success to increase credibility and fully reach the vision. School leaders must use transparency, repetition, and common language of the shared vision toward the professional development series. Consistent communication toward the shared vision will emphasize the professional development series’ importance and value to all school stakeholders, including board members, school staff, parents, and community stakeholders.

*Celebrate the Successes*

Celebrating the successes of a change leadership plan adds to the momentum of executing and sustaining the plan. Success can be anything, big or small, that helps move the vision of the change relationship plan forward and may take the shape of actions taken, lessons learned, processes improved, new behaviors demonstrated (Kotter, 2018, p. 25). School leaders will recognize teachers who make gains in their student completion rates. School leaders will track student completion rates by content teacher and celebrate
improved student completion rates monthly. School leaders will post student completion rates on their school websites per semester. School leaders will recognize teachers who achieve improved student completion rates monthly in meetings, memos, and announcements with school staff and board members. They will celebrate the achievement with the appropriate stakeholder group(s).

Mentors and coaches will assist teachers in setting individual goals for improved student completion rates. Mentors and coaches will note the positive experiences teachers have while implementing the six best teaching and learning practices and the gains they make along the way toward their goal. They will recognize and celebrate the individual teachers’ progress toward implementing the six best teaching and learning practices.

Teachers will have an opportunity to join a teacher completion rate collaboration team. Teachers will share their successes with other teachers for continued support, praise, and encouragement with implementing the six best teaching and learning practices. Teachers will have opportunities to observe other teachers who have shown great success with implementing the six best teaching and learning practices in this study.

**Assessing the Effectiveness of the Strategies and Actions**

The purpose of developing the strategies and action items for my change leadership plan is to improve student completion rates in the virtual setting. I will use two sets of data in my analysis: course completion rates and teacher survey results from teachers who complete the professional development series (Patton, 2008). Course completion rates will be collected for up to two school years prior to the teacher completing the professional development series and for up to two years after the teacher
completes the professional development series. Teachers will complete surveys at three points.

I will analyze the course completion data to identify individual teacher rates and subject area rates. I will compare the two sets of data to determine if there are more teachers within a specific subject area who get more noticeable results from implementing the practices from the professional development series. It will be important to know if the implementation of the best practices yield better results in one or more specific subject areas. Further investigation will need to take place if the results show that one or more subjects areas achieve higher completion rates than others. In an interview with Robert Marzano, he said, “The art part of effective teaching is where individual teachers figure out the best ways to use specific strategies in the context of their content area, their students, and their personalities. That’s art, in the sense that people have to adapt the research to their specific situations” (Marshall & David-Lang, 2021, p. 175)

School leaders or teachers can decide the next steps for individual teacher professional growth or overall school professional development using the results of the data. School leaders will empower teachers to use their independent judgment and calibrate their ability to make informed decision-making based on their student completion rates (Heifetz et al., 2009). Teachers will adjust their practices to better fit their teaching style or the needs of the students or receive additional mentoring or coaching from teacher leaders of the professional development series. Based on the student completion rates after implementation, school leaders can adjust the professional
development series to either change or expand on this study's six best teaching and learning practices.

Leaders will use surveys to gather information from participating teachers to learn about their perspectives of the best practices, including their views on the usefulness and effectiveness of the best practices. Teachers will be asked to complete a survey to provide their feedback at three different points in this process:

1. Teachers will complete a survey before attending the professional development series to share what current teaching and learning practices they use to improve and obtain high student completion rates.

2. Teachers will complete a survey after attending the professional development series to learn what they took away from that professional development session. Teachers will provide information to extract their perspective on the quality and usefulness of the professional development through the survey questions.

3. Teachers will complete a survey at the end of the current school year, having implemented the best practices learned for the professional development series for one year.

Teachers will be asked to reflect on the impact the best practices had on their student completion rates.

**Involving Community Partners in Decision Making**

I will include community partners in the decision-making process as it relates to the strategies and actions for my change leadership plan. I will network with district community partners to learn about other teaching and learning practices other district virtual schools are using that have been shown to work. I will collaborate with school
principals and teachers of virtual learning to expand on the teaching and learning practices that engage students in the learning process resulting in higher student completion rates.

School leaders know that parent involvement and buy-in for school initiatives play a vital role in school development (Wagner, 2014). A study conducted on the Department of Defense Education Activity (DoDEA) schools revealed that parent involvement was a key goal that contributed to their high student performance rates (Wagner, 2014). I will work with parents of students committed to implementing the best teaching and learning practices in this study with their children at home to build upon a connected purpose (Heifetz et al., 2009). All the best practices teaching and learning practices in this study can be implemented by parents at home. A parent workshop will be provided to help teach parents about these best practices and what they will look like, sound like, and feel like from the perspective of the parent-student relationship. Together with parents, collective action will implement the best practices to yield high student completion rates (Heifetz et al., 2009).

**Conclusion**

My change leadership plan focuses on providing virtual teachers with quality professional development that encompasses the six best online teaching and learning practices identified in this study. To execute my change leadership plan, I will employ seven strategies to include action steps needed for successful implementation (Appendix I). In my next chapter, I examine issues identified from my data findings in chapter 4 and provide implications and policy recommendations.
CHAPTER SEVEN: Implications and Policy Recommendations

I propose a policy that would require all high school leaders and teachers in virtual education to attend a six-session professional development series at the start of the new school year. School leaders will provide an easily accessible professional development series on the six best online teaching and learning strategies found in this study. Teachers hired after the start of the school year will have to complete the professional development series as part of their onboarding process. The new policy will require that teachers participate in the professional development series and track student completion rates to measure the effectiveness of the learned teaching in learning practices. Teachers will be held accountable to attend the professional development series as evidenced by the school’s teacher effectiveness rubric used in the teacher evaluation process. Leaders will add the teachers’ attendance and participation in the professional development series to the evaluation process. Teachers who did not attend and participate well will be rated poorly under professional development in the evaluation system. After the professional development series has concluded, school leaders will evaluate its effectiveness in improving student completion rate.

Policy Statement

All high school leaders and teachers in virtual education will be required to attend a six-session professional development series at the start of the new school year. Leaders implementing the six-session professional development series over the six best online teaching and learning strategies will ensure that all high school teachers can implement the strategies to improve student learning outcomes. School leaders will enforce this policy for all high school teachers. Requiring all teachers to attend and participate in the
professional development series, teachers will have the same information, resources, and training to be successful with implementing the learned best practices for teaching and learning from this study. Requiring all school leaders to attend and participate in the professional development series will prepare them to adequately evaluate teachers’ effectiveness with implementing the teaching and learning practices.

The policy participation requirement of the six-session professional development series is an effort to improve student completion rates across the 29 virtual high schools identified in Appendix D. Having all teachers implement the six strategies presented in the professional development series will lead to yield higher student completion rates as evidenced in this study. As a result, teachers will be able to collaborate with each other to adjust and reflect on their implementation of each of the strategies in order to achieve maximum results. Students will benefit from receiving a like experience from each of their content teachers with the implementation of the six strategies. The policy of requiring teachers to attend and participate in the six-session professional development series targets different aspects of virtual classrooms' teaching and learning process. The strategies learned in the professional development series prepare teachers to serve their students better. Each session in the professional development series will go into great detail on how each strategy may look like, sound like, and feel like from the perspective of the teacher and the student. The vision for this high-quality professional development series is to provide all high school teachers with the means to improve student completion rates with the implementation of the strategies; as a result, student completion rates across all 29 schools will increase.
School leaders will implement an accountability system to ensure teachers utilize the best online teaching and learning strategies identified in this study. The accountability system will include: 1) the attendance and participation expectations included in the teacher effectiveness rubric as part of the evaluation plan; and 2) the best online teaching and learning strategies identified while completing formal classroom observations. Teachers’ attendance and participation in the professional development series will be added to the school’s teacher effectiveness rubric under professional development as part of the evaluation process. Formal observation forms or templates will include the best online teaching and learning practices. Evaluators conducting formal classroom observations will note the use of the best online teaching and learning practices and note student outcomes and responses as a result of implementing the practices.

**Analysis of Needs**

Implementing the six-session professional development series policy requires an analysis of needs from six distinct disciplinary areas to understand further the problems involved. The six disciplinary areas of analysis include 1) educational; 2) economic; 3) social; 4) political; 5) legal; and 6) moral and ethical. Addressing each disciplinary area of analysis will further explain and provide reasons for implementing the six-session professional development series. Through the analysis of the six disciplinary areas, school leaders can make choices and trace implications. The analysis of the six disciplinary areas provides the necessary considerations on how the policy will impact all stakeholders and steps to implement the policy successfully.
Educational Analysis

Student completion rates are low across all subject areas in the virtual schools represented in the data in Appendix D. Having teachers trained to implement the six best practices identified in this study has the potential to improve student completion rates across all schools. Based on the current completion rates, the teaching and learning practices used at the majority of schools are not yielding positive student performance results. For example, each of the high school teachers in this study who consistently had high student completion rates in the 90th percentile implemented the following teaching and learning strategies: 1) individualized instruction, 2) relationship building, 3) multiple modes of communication, 4) multiple methods of instruction, 5) teacher collaboration, and 6) differentiated instruction. Therefore, virtual teachers who implement these six strategies and students exposed to the strategies are likely to increase their student completion rates.

Implementing effective online teaching and learning practices “contribute to an effective, efficient, and satisfying teaching and learning experience for both faculty and students” (Boettcher & Conrad, 2016, p. 43). It is important for teachers to feel confident and comfortable while developing experience in teaching online. The six online teaching and learning practices identified in this study represent effective strategies used in any school environment; however, as proven in this study, the six strategies are successful in the online environment. Therefore, teachers who implement the six strategies have a higher probability of achieving higher student completion rates.
Economic Analysis

Implementing a professional development policy from an economic standpoint requires analyzing the financial implications. Implementing a policy change that affects a whole school system requires extensive planning, resources, and money. Below are the implications of implementing the requirement of teacher participation in the six-session professional development series on the six best online teaching and learning practices. The implications captured below impact schools’ financial budgets.

1. Teachers will feel confident and better prepared to serve students, and therefore, teacher retention will increase. When teacher retention increases, leaders spend less time and money on recruiting and hiring new employees.

2. School leaders will budget for the appropriate funds to cover the schoolwide professional development series.

3. Teachers leading the professional development sessions will require financial stipends.

4. The teacher turnover rate will decrease, making the source system more marketable to teachers.

5. Student proficiency scores will increase as well as graduate rates making the school system more enticing for families looking for school options that have a high rating or school letter grade issued by the state using a matrix that includes state assessment proficiency scores.

6. Student scores on state assessments will increase preparing students for post-secondary plans.
Social Analysis

Implementing a professional development policy from a social perspective includes collaborative care. Collaborative care involves creating a place and time to bring stakeholders together to express and share concerns or solutions with the students at the core of the decision-making process (Block, 2018). Collaborative care creates collaborative relationships among teachers and positive partnerships with parents and students. Many schools work to establish conditions that allow for more collaborative work amongst teachers. These schools encourage collaboration to problem solve and share insight to improve student performance outcomes (Muhammad, 2018). Included in this policy change is creating a place and time where teachers can come together to reflect, discuss, and reflect on their experience with implementing the information taken from the professional development series. Creating a place and time allows teachers to collaborate to develop and perfect the six best practices for online teaching and learning identified in this study.

Teachers, parents, and students impact schools (Muhammad, 2018). Teachers need to establish a rapport with parents and students to form a partnership. In my experience, as an educator for over a decade, creating a partnership with parents increases parent involvement and student engagement. Educators will create a partnership by keeping parents updated with communications about implementing the policy of the professional development series and providing them with resources they can use at home with their students to reiterate the six best online teaching and learning practices as identified in this study. Parents will receive essential resources to utilize the six practices from a parent’s perspective. This kit will serve as the parent’s guide to bridge the
curriculum used in the online classroom with what the parents can use to support the
students’ learning process outside of the online classroom.

**Political Analysis**

A political impact of implementing a policy proposal of a professional
development series will include allocating appropriate funds. According to the financial
needs and resources of implementing the professional development series, school leaders
may need to increase funding for professional development in the yearly budget. School
leaders will promote and share the importance of implementing the professional
development series to express the need to increase funding. If the professional
development budget needs to increase due to the implementation of the professional
development series, other school budget allocations may decrease depending on available
school funds. In this case, school leaders will need to refer to their school board members
for approval and be prepared to engage in the strategic budgeting process (Odden, 2012).

Another political impact could include an increase in student mobility from local
district schools to virtual charter schools. When students attend a virtual charter school,
depending on how the school is funded and authorized, students are going outside their
district even though they physically reside in the district to attend school. When students
leave their local district school, the school district will no longer receive state financial
funds; therefore, local district schools receive lesser funds used to operate the school.

Budgeting practices need to be aligned with school improvement efforts when
addressing areas to improve student performance (Odden, 2012). School leaders should
have the actions steps developed under building a sense of urgency and building a vision
from the Strategies and Action Chart when requesting changes to the school budget. They
must share their strategies and actions as part of their strategic plans to implement the policy change of the professional development series. They must share the vision of increasing student pass rates in the 90th percentiles across all twenty-nine schools in each subject area by improving the online teaching and learning process.

**Legal Analysis**

School leaders, principals, and teachers carry the burden of improving or maintaining a certain school letter grade issued by the state. Depending on the state, the state Department of Education calculates school letter grades using a matrix that includes but is not limited to 1) student proficiency on state assessments; 2) graduation rates and 3) student retention. Suppose schools do not show an improvement in the areas included in their school letter grade matrix. In that case, school authorizers may decide not to renew charter applications or resign from authorizing the school. Creating a policy change of implementing the professional development series shows a preparedness to earn a proficient school letter grade.

States develop school leadership standards to hold school leaders accountable for the well-being and success of students. Many states have similar school leadership standards. For example, if implemented in one of the states represented in this study, the policy change would incorporate student learning and faculty development, meeting Standards 2 and 4 of the state’s Principal Leadership Standards (2011). Standard 2 Student Learning as a Priority states, “Affective school leaders demonstrate that student learning is their top priority through leadership actions that build and support a learning organization focused on student success” (Stewart, 2011). Standard 4 Faculty
Development states, “Effective school leaders recruit, retain, and develop an effective and diverse faculty and staff” (Stewart, 2011).

Another legal aspect is creating a policy that requires teachers to attend the specific six-session professional development series. School leaders must create and enforce a policy requiring all Grades 9-12 teachers to attend and participate in the professional development series. The policy will include the expectations and responsibilities of teachers attending and participating. It will also include the ramifications if teachers do not attend. Ramifications will result in the teacher being unable to earn a highly effective or effective rating on their yearly evaluation, depending on other factors that go into the annual evaluation process.

Moral and Ethical Analysis

The policy change of implementing the professional development series supports all virtual teachers and students. The policy supports teachers’ professional growth in teaching online to digital natives. The policy support students’ academic success. The policy ensures all students in grades 9-12 experience the same teaching and learning practices by all teachers. All educators have a moral and ethical responsibility not to discriminate but provide a like experience that ensures equitable student services. Many states have written ethical principles for educators; for example, Florida has the Principles of Professional Conduct for the Education Profession in Florida.

Implications for Staff and Community Relationships

The policy of implementing the professional development series has implications on staff and community relationships. The policy change has the potential to change and impact school culture significantly. The policy will create a culture where teachers learn
together and grow together. Under the new policy, leaders will expect teachers to collaborate and learn from one another. The policy indirectly creates an environment for teachers to feel valued, supported, and appreciated. Teachers will be encouraged to talk about their experiences of implementing the six strategies learned in the professional development series. This collaboration promotes schoolwide professional growth.

Levels of academic support are different for every household (Muhammad, 2018). The policy change will create a community culture of all students' success by keeping families informed of the employed teaching and learning practices. School leaders will provide training and resources to parents to implement the strategies at home with their children. Keeping parents included as active participants in the policy change create a stronger partnership between parents and teachers. Sometimes it takes parents more time to trust new school initiatives. Building trusting relationships with parents and other stakeholders have an impact on student achievement outcomes. "Respectful and trusting relationships are essential if stakeholders are expected to take risks involved in change, to learn from each other, to remain deeply committed to their students and their community, and to share responsibility" (Wagner, 2006, p.163). As stakeholders observe an incline in student performance rates, more families may be willing to implement this study's six best online teaching and learning practices.

**Conclusion**

The proposed new policy of implementing a six-session professional development series over the six best online teaching and learning strategies identified in this study will improve student pass rates across all subject areas. In this chapter, I analyzed my policy of implementing a six-session professional development series through the lens of needs
using six distinct disciplinary areas: 1) educational, 2) economic, 3) social, 4) political, 5) legal, and 6) moral and ethical. In my next chapter, I revisit the purpose of my evaluation and provide a broad summary of my evaluation.
CHAPTER EIGHT: Conclusion

In my research and evaluation, I identified the effective teaching practices teachers used to impact student achievement in the virtual school setting positively and compared my findings to Boettcher and Conrad's 14 best practices for teaching online (2016). “Both teachers and students alike need to learn how to develop new habits of mind, a growth mindset, and to understand what it takes to be successful in a student-centered, personalized learning environment in which their roles are evolving” (Powell et al., 2015, p. 16). Through my research, I recommended a policy to implement a professional development series to teach virtual teachers about the effective teaching and learning practices that most impact student achievement.

Discussion

Teachers must acquire effective online best teaching and learning practices to serve students successfully. The purpose of this evaluation and research was to identify and explore the practices of effective teachers in the virtual school setting and how those practices affected student achievement outcomes. I analyzed course completion rates of twenty-nine virtual schools operating under the same EMO from the 2018-19 and 2019-20 school years (Appendix D). Most of the 29 schools identified on the data report did not have student completion rates in the 90th percentile in any subject area for two consecutive school years. The goal of my evaluation and research was to identify and implement effective virtual teaching and learning practices to optimize student learning outcomes.

My research, driven by two primary questions, required a deep focus on the teaching and learning practices of virtual teaching: 1) What effective practices should
high school teachers use in virtual classrooms? 2) How do the effective practices impact student achievement? My research to answer Question 1 revealed the six commonly used best practices for teaching and learning: 1) individualized instruction; 2) relationship building; 3) multiple modes of communication; 4) multiple methods of instruction; 5) teacher collaboration; and 6) differentiated instruction. My research to answer Question 2 started by analyzing quantitative data collected through extant student completion rates in grades 9-12 collected from 29 operating full-time virtual schools operating under the same EMO. The data revealed 24 virtual high school teachers who had student pass rates in the 90th percentile. It also showed that the teaching and learning practices used at most schools were not yielding positive student performance results.

Due to the outcomes of the evaluation results, I recommended that all virtual school leaders and teachers participate in a professional development series focused on these six online best practices along with the fourteen best online teaching practices identified by Boettcher and Conrad (2016). The professional development series examines each online best practice, breaking down the series into six sessions represented by the six online best practices identified in this study. I recommended the policy of requiring teachers to attend the six-session professional development series to improve student completion rates across the 29 virtual high schools identified in Appendix D.

My change leadership plan aims to implement my vision of the To-Be for virtual education teaching and learning practices. In my To-Be organizational analysis (Appendix H), teachers are equipped with the best online teaching and learning practices, evidenced by consistent and sustainable high completion rates. My change leadership plan, driven by a series of strategies and actions identified in Appendix I, focuses on
providing virtual teachers with a quality professional development series centered around the six best online teaching and learning practices identified in this study. The professional development series equips teachers with the identified six online best practices to increase student completion rates. The vision of my change leadership plan is to have student completion rates in the 90th percentile across all subject areas in all virtual schools.

I recommended a schoolwide policy requiring all high school teachers to attend a six-session professional development series at the start of the new school year. The policy requires that school leaders provide an easily accessible professional development series on the six best online teaching and learning strategies found in this study. The policy requires that teachers participate in the professional development series and track student completion rates to measure the effectiveness of the teaching and learning practices. As part of the policy, teachers are held accountable to attend the professional development series. I will evaluate the effectiveness of the policy after the professional development series has concluded and student completion rates are calculated at the end of the school year.

The policy I have advocated for in this study addresses low student completion rates. My recommended policy of implementing a six-session professional development series over the six best online teaching and learning strategies identified in this study will improve student pass rates across all subject areas. Students need effective virtual teachers that know how to support their academic growth and needs. The intent to implement the professional development series policy is to provide high-quality levels of instruction that will lead to higher achievement scores for students.
School leaders will implement an accountability system that will include: 1) the attendance and participation expectations included in the teacher effectiveness rubric as part of the evaluation plan; and 2) the best online teaching and learning strategies identified while completing formal classroom observations. Each school will adopt its teacher affectedness rubric to include the completion of the professional development series. Formal observations will include the best online teaching and learning practices. Evaluators will note the observed practices and how students responded to the best online teaching and learning practices during direct instruction.

**Leadership Lessons**

Leading a district requires tenacity, strength, and a level of unapologetic commitment to student success. There are many simultaneously factors operating that contribute to the overall success or failure of a district including: equitable access to academic programs, social services, health care, the strength of relationships within the community, and the success of the governing board. There are two leadership lessons that I have taken away from my evaluation and research: 1) create a leadership change plan to drive change and 2) provide relevant professional development.

District leaders are the driving force behind creating a leadership plan to drive change. Leaders can change a school district’s vision and create a strategic plan to employ the vision. During my research, I realized how important it is to create a district strategic plan to employ change. I learned the value of analyzing student performance outcomes to identify student learning problems through my evaluation. Using both quantitative and qualitative data is necessary for strategic planning to promote change.
School officials across all levels and learning environments must be involved and engaged in implementing new policies to inflict change. School leaders should create leadership change plans that involve all stakeholders. When school officials are involved and engaged in transforming a school, they feel a sense of genuine ownership (Wagner et al., 2006). School leaders will attend the professional development series alongside teachers to adequately evaluate teachers’ effectiveness with implementing the teaching and learning practices. Providing relevant professional development as part of the new leadership change policy is vital in the success of a new vision. It is critical for school leaders to penetrate schools simultaneously with the new visions and policy change plans. As part of my recommendations, I express a need to provide the professional development series at the start of a new school year.

Ensuring that professional development is relevant to participants allows them to feel a sense of ownership in the change process toward a new vision. It is important for leaders to create a culture in which all teachers are expected to participate and provide opportunities to implement change that drives improved student learning outcomes. Moving forward as a leader, when initiating change and implementing a strategic plan, I will find ways to get all stakeholders involved so there is a sense of ownership from all stakeholders.

In reflection of my leadership takeaways from my evaluation study, I have several pressing questions: 1) If educators conduct further research with a larger group of participants, could other best practices be identified? 2) How should teachers be evaluated on using online best teaching and learning practices? 3) What are the next steps if the student performance data does not improve after a year of implementing the best
online teaching and learning practices from the professional development series? 4) What other accountability measures can school leaders implement to hold teachers accountable for attending and participating in the professional development series and implementing the best online teaching and learning strategies identified in this study?

**Conclusion**

Educators must implement change to improve the learning process for students. As a leader, it is critical to question and analyze student performance data to improve student learning outcomes. My evaluation process allowed me to thoroughly analyze student completion rates, conduct research, and provide recommendations to address student learning problems identified in my data.

I collected extant student data, surveys results, and interview responses as I conducted my research. My analysis of the data revealed specific online teaching and learning practices used in classrooms with student completion rates in the 90th percentile. Through my research, I extracted the teaching-learning practices used in classrooms with high student completion rates to share those practices with other teachers who experience lower student completion rates.
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Appendices

Appendix A: Student Completion Rate Report Template
Appendix B: Teacher Survey Questions
Appendix C: Teacher Interview Questions
Appendix D: Grades 9-12 Student Completion Rate Data
Appendix E: Identified Teachers’ Pass Rates
Appendix F: Completed Survey Responses by Teachers
Appendix G: As Is Chart
Appendix H: To Be Chart
Appendix I: Strategies and Actions
### Appendix A

Student Completion Rate Report Template

<table>
<thead>
<tr>
<th>Teacher of Record</th>
<th>HS Course Taught</th>
<th>Pass Rate Percentage Sem 1 SY 18-19</th>
<th>Pass Rate Percentage Sem 2 SY 18-19</th>
<th>Pass Rate Percentage Sem 1 SY 19-20</th>
<th>Pass Rate Percentage Sem 2 SY 19-20</th>
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Appendix B

Teacher Survey Questions

On a scale of 1-4, with one being strongly disagree and four being strongly agree, please provide feedback regarding factors that contribute to high student completion rates for questions 1-8.

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree

1. As a virtual teacher, I have always or mostly had high student completion rates.

2. I am considered a leader in my school due to my consistent high student completion rates.

3. I help train or mentor new hires or virtual teachers at my school because of my high student completion rates.

4. I know what teaching and learning practices virtual teachers need to utilize to have high student completion rates.

5. I contribute the success of my high student completion rates to the teaching and learning practices I use.

6. I contribute the success of my high student completion rates to the teaching and learning practices put forth by my school.

7. My virtual school provides quality professional development on effective teaching practices.

8. My virtual school provides a teacher effectiveness rubric as part of the evaluation process, which I use to drive my teaching practices.
Please provide written responses to questions 9-12.

9. What essential strategies do you use to support your virtual learners?

10. What role does your school’s teacher effectiveness rubric play in your daily teaching practices?

11. Is there anything else you would like me to know about your student completion rates?

12. Please leave your first and last name and work email below if you are willing to participate in a follow-up interview via Zoom.
Appendix C

Teacher Interview Questions

1. What teaching and learning practices did you use that you believe contributed to your high completion rates over the last two school years?

2. What basic beliefs and values do you have that drive the work you do?

3. In your opinion, what are the characteristics of an effective virtual teacher?

4. What role has professional development played on your success with student completion rates?

5. What are some examples of professional development sessions you attended that you considered to be of high quality?

6. What essential strategies do you use to increase student engagement?

7. What do you think you do differently than most virtual teachers that sustains your high completion rates?

8. How many years had you been teaching virtually before you started experiencing consistent high student completion rates?

9. What barriers are keeping you from having your completion rates even higher?

10. What advice do you have for future virtual teachers?

11. Is there anything else you would like me to know about being an effective virtual teacher?
# Appendix D

## Grades 9-12 Student Completion Rate Data

<table>
<thead>
<tr>
<th>Percent of Students - 2018-19 Scores</th>
<th>Percent of Students - 2019-20 Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Arts</td>
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<tr>
<td>School 1</td>
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</tr>
<tr>
<td>School 2</td>
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<td>School 12</td>
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<td>School 29</td>
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<td>Grand Total</td>
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# Appendix E

## Identified Teachers’ Pass Rates

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<tr>
<th>Teacher of Record</th>
<th>HS Course Taught</th>
<th>Pass Rate Percentage Sem 1 SY 18-19</th>
<th>Pass Rate Percentage Sem 2 SY 18-19</th>
<th>Pass Rate Percentage Sem 1 SY 19-20</th>
<th>Pass Rate Percentage Sem 2 SY 19-20</th>
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<td>Teacher 21</td>
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<td>98%</td>
<td>95%</td>
</tr>
</tbody>
</table>
Appendix F

Completed Survey Responses by Teachers

1. As a virtual teacher, I have always or mostly had high student completion rates.
   11 responses

![Graph 1](image1.png)

2. I am considered a leader in my school due to my consistent high student completion rates.
   11 responses

![Graph 2](image2.png)

3. I help train or mentor new hires or virtual teachers at my school because of my high student completion rates.
   11 responses

![Graph 3](image3.png)
4. I know what teaching and learning practices virtual teachers need to utilize to have high student completion rates.

11 responses

5. I contribute the success of my high student completion rates to the teaching and learning practices I use.

11 responses

6. I contribute the success of my high student completion rates to the teaching and learning practices put forth by my school.

11 responses
9. What essential strategies do you use to support your virtual learners?

Virtual study hall periods have been the most effective at the high school level - I would set aside blocks of time (2-4 hours) in which students could work in a breakout room independently on a task (general lesson completion, writing an essay, taking a test, etc.) and would be able to raise their hand and check in with me 1-1 as they got stuck. I have found that students at this age are reassured knowing that their teacher will be right there if they need help and are more willing to start and finish assignments in this format. This has also been very effective with students
that are behind on work or do not have an involved learning coach at home - they can set aside large blocks of time to target a multitude of tasks when they are available. High school students often have part time or full-time jobs or are involved in extracurricular activities that impact their daily schedule, so many students in the virtual setting are not able to attend multiple small sessions throughout the week, which is why the larger blocks of time are of greatest value to them. Furthermore, this allows me to work with many students at once, with each one working in their own breakout room and then I can move around as needed.

I use research based strategies and instructional tools to promote learning for all.

I use a tiered RTI approach to support my struggling students. I target students who need support based on their overdue lessons and data from previous work. The focus sessions depend on where the student is working to help them master the material and feel confident to keep moving.

Lots of communication, phone calls, 1:1 live lesson, diversified focus sessions, asynchronous walk through videos and lesson recaps, participation incentives

I hold fun and engaging live lessons that my students love to attend. I use a variety of teaching strategies in live lesson from music to games to videos and chat pod activities or breakout rooms. I plan my live lessons based on the curriculum I have been given.

Live Lessons (whole group and targeted), asynchronous instructional videos, phone calls, templates & example documents

I provide multiple ways for my students to access the content and receive support. I provide large group lessons with opportunities for students to work together in
active problem solving. I provide opportunities for students to meet with me for individual support. I do frequent learning checks (Curriculum Based Assessments) to identify areas of need and develop relationships with my students. I also provide my students with supplemental video lessons.

During our weekly LL I use direct instruction and some student-centered activities. During my tutoring sessions with individual students, I try to guide the students in the right direction without giving them the answers to questions they are working on. I also customize learning for students that require a different approach.

I use a tiered RTI approach to support my struggling students. I target students who need support based on their overdue lessons and data from previous work. The focus sessions depend on where the student is working to help them master the material and feel confident to keep moving.

| Individualized instruction, modified curriculum and assessments, synchronous instruction, asynchronous instruction, individual support | webmail, phone contacts, virtual classroom, recordings |

10. What role does your school’s teacher effectiveness rubric play in your daily teaching practices?

Our rubric indicates various areas to focus on to engage students, provide interventions, document progress monitoring, etc. It reinforces the targeted strategies that will best support students.

It plays an integral role in teacher effectiveness.
The rubric that we have is based on directives from the SC Department of Education. This rubric is designed for traditional education environments. We share best practices with our colleagues that are based on the rubric but that are focused on our learning environment.

It is something I consider several times a year in planning. I would love to see an effectiveness rubric geared specifically to virtual education rather than blanket state rubric.

My school uses the adept 4.0 rubric when evaluating my teaching. I am unsure about the teacher effectiveness rubric if this is the same thing or something different.

The rubric informs about opportunity areas and is a guide when reflecting on past and planning for future lessons.

The teacher effectiveness rubric provides me with proven methods for teaching in an online environment. I use it as a guide in my planning and also as a tool when reflecting on my practice.

Since I do not directly teach on a daily basis it plays more of a role in my management of my student's weekly lessons and how I provide extra materials such as, recordings and online resources for them to use when completing their work independently.

The rubric that we have is based on directives from the SC Department of Education. This rubric is designed for traditional education environments. We share best practices with our colleagues that are based on the rubric but that are focused on our learning environment.
Our rubric is based on the state rubric for teachers. I use this rubric to ensure that I provide quality instruction.

11. Is there anything else you would like me to know about your student completion rates?

I think for clarity, it would be helpful to discern whether this is addressing a successful pass of the course or more so the "completion" of the lessons in the course. At the high school level, not all students will complete all lessons, but as a teacher I can work with them to determine a plan to scaffold and prioritize assignments that will enable them to demonstrate their understanding. These students may not submit every assignment, but they are able to successfully complete the course in that they have mastered the content/skills and turned in the work to demonstrate that.

Ongoing contact, individualized student interventions, and ensuring undergraduates (especially freshman) are well supported improves academic outcomes for all students.

With the tiered approach my students have found confidence in their learning and they find success. Obviously this does not work for every student, but it does work for the students who wish to succeed and who are willing to work.

As I learn and grow as a virtual educator and try new interventions by completion rates have increased significantly. My colleague and I have shared instructional
intervention presentations with our school via instructional fair, high school meetings, etc. at the request of our admin.

Every year I usually have in the fifties fail part A of Spanish 1 and this year I had less than 10! This was due to my huge effort of continuously holding portfolio sessions for students who had failed that assignment.

N/A

Nothing else comes to mind.

Our school believes in giving student's every opportunity to be successful so I feel that since we allow students to re-take alternative assessment and re-write things like essays and portfolios that helps with the completion rates of my course. If students were not given that opportunity there would be more that fail and would have to re-take the course.

With the tiered approach my students have found confidence in their learning and they find success. Obviously, this does not work for every student, but it does work for the students who wish to succeed and who are willing to work.

My completion rates are high because I use data to make decisions in my daily teaching practice.

Positive feedback to students is very important.

12. Please leave your first and last name and work email below if you are willing to participate in a follow-up zoom interview.

Seven teachers provided their names and contact information to participate in a follow-up interview. Teacher names are withheld to protect confidentiality.
Appendix G

As Is Chart

"As Is" 4 Cs Analysis for Improving Teacher Practices in Virtual Schools

**Context**
- Students are not credible virtual learners
- Lack of professional development for identified best teaching and learning practices for online learning
- Lack of consistent and sustainable high completion rates

**Culture**
- Students, teachers, and other school stakeholders do not feel a strong sense of connectedness and belonging
- Educators believe teaching in a virtual school is the same as teaching in a brick and mortar school.
- Lack of Student-customer approach

**Students do not complete and successfully pass online courses**

**Competencies**
- Lack of teacher preparedness to:
  - Engage students virtually
  - Navigate an EMS
  - Deliver instruction virtually
  - Document all interactions with students

**Conditions**
- High student to teacher ratios
- Lack of a structured schedule
- Inability to ensure all students have the necessary learning equipment: phone, computer, appropriate software, and high-speed internet connections
Appendix H

To Be Chart

“To Be” 4 Cs Analysis for Improving Teacher Practices in Virtual Schools

Context
- Students are credible virtual learners
- Quality professional development for identified best teaching and learning practices for online learning
- Consistent and sustainable high completion rates

Culture
- Students, teachers, and other school stakeholders feel a strong sense of connectedness and belonging
- Educators know and understand that teaching in a virtual school is different than teaching in a brick and mortar school.
- Student-customer approach

Conditions
- Appropriate student to teacher ratios
- Structured schedule/pacing guide
- All students have the necessary learning equipment: phone, computer, appropriate software, and high-speed internet connection

Competencies
- Teachers are prepared to:
  - Engage students virtually
  - Navigate an EMS
  - Deliver instruction virtually
  - Document all interactions with students

Students complete and successfully pass online courses
### Appendix I

#### Strategies and Actions

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Actions</th>
</tr>
</thead>
</table>
| Develop a Sense of Urgency       | • Have discussions between school leaders and principals on the low pass rates in most schools identified in the grades 9-12 student completion rate data (Appendix D).  
• School leaders will provide quality professional growth to virtual teachers as part of a professional development series focused on best online teaching and learning practices. |
| Develop a Change Vision          | • The vision is to have student pass rates in the 90th percentiles across all twenty-nine schools in each subject area.  
• School leaders implement a strategic plan. |
| Develop a Communication Plan to Promote the Change Vision | • A variety of communication methods and tools will be used to share the vision of the professional development series.  
• Promote the professional development series.  
• Communicate the purpose of the professional development series.  
• Explain the role that all stakeholders have in ensuring the successful implementation of the professional development series.  
• Share the six best teaching and learning practices with parents  
• Provide a place for all stakeholders to reflect and share their feedback on implementing the six online teaching and learning practices. |
| Develop a School-Wide Professional Development Plan | • Professional development plan will include six sessions focused on each of the six identified best online teaching and learning practices in this study. Each session will consist of an instructional design approach that teaches teachers to implement each strategy. Each session will include specific strategies for implementing each best online practice.  
• Teachers will receive coaching advice on how to implement the six best practices. Teachers will participate in discourse with other teachers to promote growth as a team. |
|---|---|
| Maintain Momentum | • School leaders will budget and provide funding to implement the professional development series.  
• School leaders will decide how they will include the professional development series as part of the school calendar.  
• School leaders will develop a list of ways to promote the professional development series with school principals. |
| Assessment of the Impact of the Six Online Practices | • School leaders and teachers will collect completion rate data from previous school years and compare the completion rate data after one year of implementing the six best teaching and learning practices.  
• Teachers can adjust the practices to fit better the needs of their students or their teaching style or receive additional mentoring or coaching from teacher leaders of the professional development series.  
• School leaders can adjust to the professional development series to either change or expand on the six best teaching and learning practices. |
| Celebrate the Successes | • School leaders will track student completion rates by content teacher and celebrate improved student completion rates monthly.  
• School leaders will post student completion rates on their school websites per semester.  
• School leaders will celebrate achievement with the appropriate stakeholder group(s).  
• Mentors and coaches will assist teachers in setting individual goals for improved student completion rates.  
• Mentors and coaches will note the positive gains teachers make toward their goals.  
• Mentors and coaches will recognize and celebrate the individual teachers’ progress toward implementing the six best teaching and learning practices.  
• Teachers will share their successes with other teachers by implementing the six best teaching and learning practices.  
• Teachers will have opportunities to observe other teachers who successfully implement the six best teaching and learning practices. |
|---|---|