Professional Educators' Perceptions of Implementing Virtual Education in a Rural Georgia School District

A Dissertation submitted to the Graduate School Valdosta State University

in partial fulfillment of requirements for the degree of

DOCTOR OF EDUCATION

in Leadership

in the Department of Curriculum, Leadership, and Technology of the Dewar College of Education and Human Services

May 2017

Lisa N. Williams

M.Ed., Valdosta State University, 2006 B.S., Valdosta State University, 2002 © Copyright 2017 Lisa N. Williams All Rights Reserved This dissertation, "Professional Educators' Perceptions of Implementing Virtual Education in a Rural Georgia School District," by Lisa Williams, is approved by:

Dissertation Committee Chair

Pudo/semula

Rudo E. Tsemunhu, Ph.D. Associate Professor of Curriculum, Leadership and Technology

Committee Member

Robert B. Green, Ph.D. Professor of Curriculum, Leadership and Technology

00 \$ Times

Committee Member

Committee Member

Lee Grimes, Ph.D. Assistant Professor of Psychology and Counseling

William F. Truby, Ph.D.

Assistant Professor of Curriculum, Leadership and Technology

Dean of the Graduate School

James T. LaPlant, Ph.D. Professor of Political Science

FAIR USE

This dissertation is protected by the Copyright Laws of the United States (Public Law 94-553, revised in 1976). Consistent with fair use as defined in the Copyright Laws, brief quotations from this material are allowed with proper acknowledgement. Use of the material for financial gain without the author's expressed written permissions is not allowed.

DUPLICATION

I authorize the Head of Interlibrary Loan or the Head of Archives at the Odium Library at Valdosta State University to arrange for duplication of this dissertation for educational or scholarly purposes when so requested by a library user. The duplication shall be at the user's expense.

Signature Lisa N. Williams

I refuse permission for this dissertation to be duplicated in whole or in part.

Signature _____

ABSTRACT

The researcher examined the experiences of a virtual program implementation team at a rural Georgia school district with limited resources. One strategy schools are employing to increase student access and achievement is the implementation of an online educational program, specifically Georgia Virtual School [GaVS]. Rural school districts with limited resources have been restricted in their ability to implement GaVS effectively (Hall, 2015; Tankersley, 2006). A basic interpretive study was utilized as the research design for the study coupled with Cavanaugh's (2009) theory of virtual learning as an educational alternative. Waters, Marzano, and McNulty's (2003) leadership framework theory served as the additional supporting theoretical framework. The researcher interviewed six professional educators using a three-interview series to understand interpretation and meaning of their experiences implementing the GaVS program (Seidman, 2006). Data analysis utilizing memos, categorizing, connecting strategies, document analysis, and constant comparative method produced two main themes: expanding educational opportunities for students and integrating resources and support. Integrating resources and support included three sub-themes: school leadership and the GaVS program, virtual school counseling and technical support, and ensuring compliance of state virtual learning mandates and GaVS oversight. Based on the findings, the researcher recommended prospective rural school districts implementing a virtual learning program focus on program pre-planning, with special focus on employee training and the availability of technology required for an online learning platform. The greatest barrier for the participants was developing new leadership practices and school counseling practices to meet the new demands of virtual education.

i

TABLE OF CONTENTS

Chapter I: INTRODUCTION	1
Statement of the Problem	11
Purpose	13
Research Questions	13
Significance of the Study	14
Conceptual Framework	17
Researcher's Personal Interest	17
Virtual Program/School as an Educational Alternative	19
Virtual Learning and School Leadership	21
Summary of Methodology	23
Limitations	23
Assumptions	24
Definition of Terms	24
Chapter Summary	28
Chapter II: LITERATURE REVIEW	30
Overview and Background of Virtual Learning and Virtual Programs/Schools	33
Educational Reform	41
Virtual Learning Helps to Prepare Students for the 21st Century	43
Virtual Education Facilitates Constructivist Learning	44
Advantages of Virtual Learning	47
Characteristics of Rural School Districts	50
Political and Fiscal Influences on Virtual Learning	52
Effectiveness of Virtual Learning	57

Virtual Program/School Implementation Barriers	68
Conceptual Framework for the Study	75
Virtual Program/School as an Educational Alternative	75
Virtual Learning and School Leadership	76
Chapter Summary	79
Chapter III: METHODOLOGY	81
Research Questions	
Research Design	82
Setting	83
Participant Selection	85
Instrumentation and Data Collection	87
Interviews	88
Observation	
Document Review	
Data Analysis	91
Issues of Trustworthiness	
Validity	
Credibility	
Reflection and Reflexivity	95
Transferability	
Dependability	
Ethical Considerations	
Chapter Summary	

Chapter IV: RESULTS	
Profiles of Participants	101
Coding and Themes	
Descriptions of the Themes	119
Expanding Educational Opportunities for Students	119
Integrating Resources and Support	
Chapter Summary	
Chapter V: DICUSSION AND CONCLUSIONS	
Discussion of the Themes	
Research Questions: Final Discussions Summary	156
Implications of the Study	
Limitations of the Study	
Recommendations for Future Research	
Final Conclusions	
REFERENCES	
APPENDIX A: Participant Consent Agreement	196
APPENDIX B: Interview Guide and Questions	198
APPENDIX C: Institutional Review Board Approval	

LIST OF TABLES

Table 1: Clark's Seven Categories of Virtual Schools	
Table 2: Participant's Demographics Profiles	101
Table 3: Examples of Some of the Initial Codes Used	116
Table 4: Themes Supporting Commentary	117

ACKNOWLEDGEMENTS

I would like to express my deepest appreciation to my committee chair, Dr. Rudo Tsemunhu. Your commitment to students' success is truly inspiring and your expert guidance, support, and friendship helped me to complete this journey.

Thank you to my other committee members, Dr. Ronny Green, Dr. Lee Grimes, and Dr. Bill Truby. Your expertise and advice were truly valued and greatly appreciated.

A very special thank also to Dr. Dusty Kornegay, the Superintendent of Thomas County Schools. Your continued words of encouragement helped me to persevere and finally finish the work. I am forever grateful.

Thank you also to my colleagues at Thomas County Schools. Your dedication in helping see me through this process was insurmountable.

To my wonderful family: Andy, Dylan, Hannah, Zach, Dad, and Mom. I love you all so very much. Thank you for your unconditional patience, love, and support.

Last, I would like to thank God for all of His many blessings. With Him, all things are truly possible.

DEDICATION

This dissertation is dedicated to my children (Dylan, Hannah, and Zach), my husband (Andy), and my parents (Buzz and Sara). My family has been a constant source of love, support, and encouragement through this entire journey.

Although I cannot regain the time that I have missed with each of you, my hope is that the sacrifices made to complete this journey will allow us to share many new experiences together.

Chapter I

INTRODUCTION

On May 27, 2011, President Barack Obama reminded the nation that America was once the educational leader of the world. Other countries had taken the lead in becoming superpowers in educating students (Obama, 2011, May 27). In April of 1983, President Ronald Reagan's National Commission on Excellence in Education released an open letter to the American citizens entitled "A Nation at Risk: The Imperative for Educational Reform." The report detailed many of the problems that existed in schools across the United States and provided recommendations on how to improve education, including strengthening and establishing a minimum set of graduation requirements, implementing rigorous and measurable academic standards, and devoting an increased and effective use of time in learning established academic standards (National Commission on Excellence in Education, 1983). Hanushek, Peterson, and Woessman (2012) believed a country's economy and success are dependent upon having an educated population. President Obama concurred with this belief when he stated that by 2020, the United States would be the world's leader in the overall percentage of college completers (Obama, 2011, May 27). The Obama administration recognized virtual learning as playing a role in creating student success by providing flexible options for students and equipping them with the 21st century skills that they will need to compete globally (United States Department of Education [USDOE], 2011a).

On January 8, 2002, President George W. Bush signed into law the *No Child Left Behind* (NCLB) *Act*, widely considered to be one of the most significant pieces of educational legislation in generations (Illinois State Board of Education, n.d.). NCLB, a revision of the Elementary and Secondary Education Act (ESEA) of 1965, resulted from the concern that the education system in America was no longer globally competitive (Klein, 2015). President Lyndon Johnson signed the ESEA into law in 1965 on the premise of the nation's goal in providing equal opportunities for all students. This was part of President Johnson's War on Poverty campaign (Klein, 2015; Thomas & Brady, 2005). ESEA has remained the largest fiscal source of federal spending in elementary and secondary education in an attempt to enhance the learning experiences of children in poverty (Klein, 2015).

According to Thomas and Brady (2005), NCLB allowed the federal government to play a larger role in education by holding schools accountable for the academic achievement and progress of all students. The reform measure also placed a significant focus on increasing the graduation rate and reducing the achievement gap between highand low-performing students and schools (Thomas & Brady, 2005). NCLB demanded that schools meet "Adequate Yearly Progress" (AYP) by establishing set targets based on students' standardized test scores, graduation rates, and other academic indicators (Thomas & Brady, 2005). NCLB declared that all students must achieve grade-level standards, as measured by the state's standardized test, within a 12-year period. An increase in student retention and schools labeled as "Needs Improvement" were consequences of students not meeting their state's standards. Across the nation, schools

deemed as "Needs Improvement" faced mandatory restructuring and enrollment loss, as students could transfer to their school of choice (Thomas & Brady, 2005).

NCLB brought many challenges and criticism over the years (Klein, 2015). A few of the complaints included the belief that the federal government was playing too large of a role in K–12 education while it continued to underfund the Act, and that it placed too much emphasis on state standardized assessment scores (Klein, 2015). Many states and districts elected not to comply with certain parts of the law, such as ensuring the even distribution of highly qualified teachers between the wealthier and poorer schools (Klein, 2015). In an attempt to improve the implementation of NCLB, President George W. Bush allowed the United States Department of Education (USDOE) to establish competitive pilot projects for states, including a growth-model that allowed schools to consider student progress in lieu of the comparison of student cohorts (Klein, 2015).

During the NCLB era, virtual schools became a tool to help supplement the curriculum of local schools by offering a multitude of courses, from Advanced Placement (AP) to remedial (Winoguard, 2002). A virtual school is an alternative educational entity that offers K–12 courses through web-based methods or the Internet (Clark, 2001). Virtual schools allow teachers and students the flexibility to access classroom instruction and materials anytime and anywhere. This especially applies to students who attend rural schools and who may not have limited access to higher level courses taught by highly qualified teachers (Winoguard, 2002).

In 2005, the USDOE published the *National Education Technology Plan* (NETP). The plan presented a clear vision that positioned technology as a tool to improve

education in the United States. Four of the seven major goals in the plan addressed online education: (4) support e-learning and virtual schools; (5) encourage broadband access; (6) move towards digital content; and (7) integrate data systems (USDOE, 2005). The following five recommendations moved the goal to provide support for e-learning and virtual schools forward:

- 1. Provide every student access to e-learning.
- 2. Enable every teacher to participate in e-learning training.
- 3. Encourage the use of e-learning options to meet NCLB requirements for highly qualified teachers, supplemental services, and parental choice.
- 4. Explore creative ways to fund e-learning opportunities.
- Develop quality measures and accreditation standards for e-learning that mirror those required for course credit (USDOE, 2005, p. 42).

Since 2009, President Obama and the USDOE have advocated for the implementation of three major national school reform initiatives: the development, adoption, and implementation of the Common Core State Standards (CCSS), the Race to the Top (RT3) initiative, and the Reauthorization of the ESEA (CCSS Initiative, 2012; Executive Office of the President, 2015; USDOE, 2009, 2011a, 2011b).

The CCSS sought to increase the rigor of the academic standards for student mastery. The CCSS focused heavily on developing problem-solving, analytical, and critical thinking skills that students will need to be successful. President Obama and the USDOE encouraged states to adopt the CCSS in order to help all students be fully prepared for the future and to be able to compete in the global economy successfully (CCSS Initiative, 2012). During the time states were adopting CCSS, the USDOE (2009) revealed that President Barack Obama's administration was implementing RT3, a competitive grant program. The RT3 initiative encouraged states to advance in the school reform movement by competing for monetary rewards (USDOE, 2009).

According to the USDOE (2009), between the American Recovery and Reinvestment Act of 2009 (ARRA), which authorized RT3, and the 2009 federal budget, more than 10 billion dollars were made available to the states and districts that were leading reform and classroom innovative efforts made available as RT3 grant reward opportunities (USDOE, 2009). Leading school reform efforts that were to be awarded included (a) adopting standards and assessments that prepare students to be college and career ready; (b) the development of data systems that measure student growth and inform systems and schools on how they can improve instruction; (c) the implementation of methods to recruit, develop, reward, and retain effective principals and teachers; and (d) the improvement of the lowest-performing schools (USDOE, 2011a). In an attempt to win federal grant dollars, many states began lifting restrictions placed on charter schools, passing teacher accountability laws, and adopting college- and career-ready standards in reading and math (USDOE, 2009).

The USDOE began awarding the RT3 grants to states in 2010. It named Georgia as one of these grant recipients and awarded the state \$400 million to use for educational initiatives (Badertscher & McWhirter, 2010). Quillen (2010) noted that Georgia, as one of the winning candidates, was ready to offer more online opportunities and to make the necessary state policy revisions related to online learning. These included policy revisions related to seat time standards, not only in online courses, but also in traditional courses (Quillen, 2010). Governor Perdue declared that Georgia would be utilizing the

RT3 grant funds to transform education through professional learning opportunities, a statewide student achievement tracking system, the development of a teacher evaluation system, and the development and implementation of innovative programs by local school districts to help improve progress and achievement (Badertscher & McWhirter, 2010).

Klein (2015) noted that in 2010, it was evident that most systems and schools across the nation were not going to meet the achievement targets established in NCLB. Klein (2015) believed that the passing of the NCLB Act of 2001 created unprecedented accountability for schools across the United States. The law mandated for systems to ensure that all of their students would be performing on grade level by 2013–14, determined by their 2013–14 state standardized assessment scores (Klein, 2015). NCLB had forced districts and schools into a one-size-fits-all solution, regardless of the needs of the students and the community (Klein, 2015). Legislators, parents, and educators from across the nation believed a complete overhaul of the NCLB law was necessary (Klein, 2015). Such a revised law would need to allow for an expansion of opportunities to all students, in addition to providing support for administrators, teachers, and schools throughout the country (Klein, 2015).

According to the Executive Office of the President (2015), as Congress would not reauthorize the ESEA at the time, President Obama allowed his administration to grant states flexibility waivers in 2011 for NCLB's specific mandates. In exchange for flexibility, states had to design comprehensive and rigorous state education plans that would account for an increase in equity and academic outcomes, a decrease in the achievement gap, and the improvement of quality instruction (Executive Office of the President, 2015). The states requesting flexibility also had to agree to adopt standards

that would prepare students for higher education and a potential career; align state assessments with the state's academic standards; implement a teacher-evaluation system that would account for student progress on the state assessments; and utilize targeted interventions or turnaround efforts on the state's lowest performing schools, where graduation rates were consistently low and student progress was lacking (Executive Office of the President, 2015).

In 2012, the Alliance for Excellent Education, America's Promise Alliance, Civic Enterprises and Everyone Graduates Center (2015) found that the nation had experienced a 27% reduction in the number of student dropouts since 2008. This was largely due to the federal government putting specific policies into place, combined with state and local efforts. However, the number of students failing to graduate remained excessively high at 744,193 in 2012. Most of these students were disproportionally students of color and low-income (Alliance for Excellent Education et al., 2015). In 2014, Georgia's graduation rate was 72.5% with 33,438 dropouts, equating to 186 students dropping out per school day (Georgia Department of Education [GaDOE], 2015).

According to the Executive Office of the President (2015), President Obama signed the Every Student Succeeds Act (ESSA) on December 10, 2015, reauthorizing the ESEA. Unlike NCLB, the ESSA allows the federal government to relinquish a portion of its educational control back to the states and districts (Executive Office of the President, 2015). The ESSA gives local educational leaders the authority to intervene first if there is no progress or if inequities persist in their schools or districts. If disparities continue at the local level, the ESSA requires states to initiate school improvement methods within the failing school or district (Executive Office of the President, 2015).

The ESSA builds on President Obama's and the USDOE's vision for education, including the key areas in which progress needs to continue (Executive Office of the President, 2015). The main areas addressed in the bill include the implementation of college and career standards, support and attention for the lowest-performing 5% of schools, expanding opportunities for preschool, and supporting new and current innovative initiatives or programs (Executive Office of the President, 2015). The law focuses on fully preparing students for success in college and potential careers, which may assist in strengthening the education system and the economy (Executive Office of the President, 2015).

According to Archambault and Crippen (2009), in order to help increase academic achievement and graduation rates, schools are searching for new ways to reach students today, and virtual learning is becoming a viable option. As Archambault and Crippen (2009) noted, "...the 21st century educational landscape has been altered. One of these changes has been the addition of online distance education, specifically the proliferation of virtual schools in K–12 settings" (p. 363). Students in grades K–12 are electing to enroll in virtual programs/schools, with the majority of these students representing middle and high school students who are seeking an alternative path in earning their high school diploma (Archambault & Crippen, 2009).

In the United States, 40% of high schools do not offer a full college preparatory curriculum and these high schools are more likely to be located in rural or low-income areas (North American Council for Online Learning [NACOL] & the Partnership for 21st Century Skills, 2006). Rural school districts enroll over 9.7 million students, which equates to more than 20% of all public school students in the United States (Johnson,

Showalter, Klein, & Lester, 2014). At least two out of five students residing in rural districts live in poverty, at least one in four is a minority, and one in eight has moved residence within the past 12 months. Rural schools are serving a more diverse and a larger population of students than schools in the past have not served effectively (Johnson et al., 2014). Currently, one in four rural students is failing to graduate from high school. This rate is lower for minority youth (Alliance for Excellent Education et al., 2015). According to Johnson et al. (2014), the percentage of rural students that qualified for free and reduced meals, the percentage of rural minority students, and the percentage of rural students that qualified for special education services increased from 2008–09 to 2010–11. This increase in the rural population assisted in bringing awareness to policymakers about the "challenges faced by rural schools and the students they serve, or what those challenges mean to the state and national goals of improving achievement and narrowing the achievement gap" (Johnson et al., 2014, p. 28).

More than 580,000 students attend rural schools in Georgia (Johnson et al., 2014). Only two other states, Texas and North Carolina, educate more rural students than Georgia. The poverty and mobility rates of students in Georgia are among the highest in the nation, with half of the rural students residing in poverty (Johnson et al., 2014). In Georgia, many of the school systems are understaffed and too small to expand course offerings for diverse student populations. Thirty-five percent of Georgia's school systems have a total population of fewer than 2,500 students and over one-third of Georgia's school systems only have one high school, which decreases the availability of course options and offerings (Barge, n.d.).

In an attempt to provide school systems accessibility to an expansion of course options, specifically the impoverished rural districts, Governor Sonny Perdue signed the Georgia Virtual bill into law on May 4, 2005, and provided funding for a virtual program in the state budget (Barge, n.d.). The Georgia Virtual bill, also known as O.C.G.A. 20-2-31, established the first official state virtual school in Georgia: Georgia Virtual School (GaVS). The initial design of GaVS aimed to deliver AP courses to rural students (Barge, n.d.; Goss, 2011; Ingram, 2016; Teague, 2013). At first, schools were limited on the number of students who could participate in the GaVS program. There were only 10 GaVS courses allotted to schools and only one course per student per semester. Schools had to submit all of their Full-Time-Equivalent (FTE) funds received for the courses to the state (Barge, n.d.; Goss, 2011).

The passing of Senate Bill (SB) 289 in 2012, better known as the Georgia Online Learning bill, allowed for the expansion of student access to online courses. The bill removed the initial barrier set for GaVS participation. The Georgia legislature desired all students to have the opportunity to experience online learning. SB 289 allowed for the revision of the funding formula in an attempt to increase the chances of systems promoting the online program to others and to encourage schools to maximize online learning options for their students (Klein, 2012). Barge (n.d.), Ingram (2016), and Teague (2013) noted that any Georgia public school student may now participate in GaVS free of charge unless the student has signed up for more courses than would equate to a regular school day, or the student elects to participate in the summer session courses. Home study and private school students may also participate in the GaVS program free of charge following the same rules applied to public school students and if course seats are

available after the public school student enrollment periods. For course fees, GaVS charges \$250 per ½ Carnegie units (Barge, n.d.; Ingram, 2016; Teague, 2013).

GaVS offers over 100 different courses to Georgia high school students and core academic courses to middle school students, serving over 10,000 students annually (Barge, n.d.; Ingram, 2016; Teague, 2013). GaVS promotes itself as a provider of opportunities and options for all Georgia students. The developers of GaVS course options aimed to engage and challenge students in gaining 21st century skills and preparing them for the 21st century economy (Barge, n.d.; Ingram, 2016; Teague, 2013). Georgia state legislatures and the GaDOE continue to promote and fund GaVS as an educational alternative option to provide students with more course options and to increase their ability to access high-level and rigorous content through online learning (Barge, n.d.; Ingram, 2016; Teague, 2013).

Statement of the Problem

Beginning with the open letter to the American citizens in April of 1983, "A Nation at Risk: The Imperative for Educational Reform," there have been many national and state initiatives implemented to increase student achievement and graduation rates, including Georgia's more recent RT3 four-hundred-million-dollar grant program (CCSS Initiative, 2012; Executive Office of the President, 2015; National Commission on Excellence in Education, 1983; USDOE, 2009, 2011a, 2011b). One strategy that schools are employing to increase student access and achievement is the implementation of an online educational program, specifically GaVS (Barge, n.d.; Ingram, 2016; Teague, 2013). School districts, especially rural districts with limited resources, have been restricted in their ability to implement GaVS effectively (Hall, 2015; Tankersley, 2006).

The arrival and integration of technology has become a critical component of education. Rural schools have grown accustomed to facing challenges inclusive of access to quality education, but with the emergence of technology, the majority of these schools are overcoming the challenges systemically. However, the establishment of learning environments that are technology-enabled still faces other barriers, such as lack of adequate infrastructure, effective implementation of technology interventions, adequate Internet access, and the shortage and funding of tech-savvy teachers (Berge & Muilenberg, 2003; Clark, 2001; Gordon, 2011; Griffin & Sherrod, 2005.) Among the various challenges that rural schools face, which vary from one community to another, is the establishment and delivery of an all-inclusive technology solution that would meet the needs of both teachers and students. Socioeconomic status, race, and school remoteness are not the most significant factors encompassing rural schools and technology integration, as these dynamics have no relationship to the integration of technology into the learning environment. However, adequate evaluation for effectiveness is a requirement for technology solutions in rural communities (Cakir, Delialioglu, Dennis, & Duffy, 2009; Howley, Wood, & Hough, 2011).

Online learning programs, such as GaVS, allow for more learning opportunities, including flexibility, creativity, and experiential learning (NACOL & the Partnership for 21st Century Skills, 2006). Online courses are more cost effective when compared to traditional courses, and the virtual delivery model helps to keep the attention of students (NACOL & the Partnership for 21st Century Skills, 2006). There is a push for the provision of virtual learning programs and for schools to meet the different learning needs of students. Virtual schools and online programs help provide students with more

choices for personalizing the instruction to meet their needs, including how to respond to assignments, what time of the day they want to work, where they want to work, and what months of the year in which they prefer to take classes (NACOL & the Partnership for 21st Century Skills, 2006).

Purpose

The purpose of this study was to determine how an identified rural Georgia school district with limited resources implemented the GaVS program with the intent to increase student access and achievement by utilizing strategies to mitigate significant implementation barriers.

Soehner and Ryan (2011) noted that the role of the school-level administrator is well documented concerning student achievement, school climate, and the use of innovative practices within a school. In addition, one of the roles of the school counselor at the high school level is to assist students in selecting appropriate courses that relate to students' future aspirations, as well as to encourage and monitor students' success in their courses. Because of their leadership roles, school-level administrators and school counselors affect the success of virtual school programs (Soehner & Ryan, 2011).

This study explored how the GaVS program supported the professional educators' goals of increasing student access and achievement. Using a basic interpretive qualitative approach, the researcher allowed the educators to share their professional experiences in their own voices.

Research Questions

The following research questions guided this study:

RQ1: What are the experiences of the professional educators who implemented the GaVS program in a rural Georgia school district and what were the lessons learned during the GaVS program implementation process?

RQ2: What implementation barriers did the professional educators in a rural Georgia school district experience while implementing the GaVS program with the intent to increase student access and achievement?

RQ3: What strategies to mitigate implementation barriers did the professional educators in a rural Georgia school district use while implementing the GaVS program with the intent to increase student access and achievement?

Significance of the Study

Costly school reforms over the last 50 years have resulted in very little progress made toward America regaining its status as a global leader in education (Klein, 2015). There have been many reform efforts implemented through the years in an attempt to increase student achievement and the graduation rates and to decrease student dropout rates (CCSS Initiative, 2012; Executive Office of the President, 2015; National Commission on Excellence in Education, 1983; USDOE, 2009, 2011a, 2011b). High student dropout rates affect the ability to have an educated nation, costing billions of dollars annually (Alliance for Excellent Education et al., 2015). Brenner (2007) believed that online learning could serve as a resource to help decrease the student dropout rate and increase the graduation rate and student achievement. The research from this study intended to reveal how one rural Georgia school district with limited resources utilized the GaVS program to increase student access and achievement.

The findings from the study may benefit the GaDOE, GaVS, state leaders, and other district- and school-level leaders' efforts to increase student achievement and graduation rates. The study's participants revealed the barriers they experienced during the implementation of the GaVS program in the rural Georgia school district and strategies they developed to overcome the barriers. System leaders may use this study's findings to determine if the same barriers exist in other systems and utilize similar strategies to overcome these barriers, thus allowing for a more effective and efficient implementation of the GaVS program with the intent to increase student access and achievement.

As LaPrade, Marks, Gilpatrick, Smith, and Beazley (2011) reported, there is a push for the provision of virtual learning programs and schools to meet different learning needs for students. Additionally, the authors observed a nationwide effort to develop virtual programs/schools as the Internet and e-learning increasingly became a promising solution. LaPrade et al. (2011) revealed that digital learning has expanded to low-income and rural area schools, which also tend to be the harder-to-staff areas of the country, and has rapidly expanded across the United States.

This study is significant as it provides current literature on virtual learning and the influence of virtual programs on high school students as a reform method and an alternative option, especially for those considered at-risk and potential dropouts. The results have the potential to inform the practice of virtual learning. The results may be informative for other high schools, whether rural or urban. However, due to the small sample size, it is important to exercise caution about transferability to other virtual programs. The results may be transferable to another setting of comparable structure and

size, but not necessarily to any other virtual learning environments throughout the region, state, or country (Creswell, 2007). This study provides a critical understanding of connections between virtual learning and increasing student access and achievement. The study also provides data specifically for the Southern County School District (SCSD) regarding virtual learning.

Soehner and Ryan (2011) noted that school administrators play a vital role in creating and ensuring school success and student achievement. Administrators must often review and approve many school programs and policies before implementation (Soehner & Ryan, 2011). As a result, the findings from the study provide resources to help leadership from the local and state level understand the possible barriers that professional educators experienced during the implementation of the GaVS program in the rural Georgia school district, as well as the strategies they developed to overcome such barriers. In addition, the researcher conducted this qualitative study to assist in (a) providing empirical literature on virtual learning to inform school officials in their decision-making process, (b) providing systems with data to improve their current processes and practices, and (c) adding evidence to the limited amount of research regarding professional educators' perceptions in implementing the GaVS program with the intent to increase student access and achievement. Finally, as a result of exploring the professional educators' perceptions about implementing a virtual program in a rural southern state in this study, the researcher was able to add to the growing body of literature.

Conceptual Framework

Researcher's Personal Interest

This study was of particular interest to me because of my role as a system-level administrator and my first-hand knowledge and experiences gained from being a virtual learner. During my years of attending college, I took several online courses. In the beginning, I was a little apprehensive about the lack of face-to-face interaction with the professors and classmates. After completing an online course, I realized that the convenience factors far out-weighed the lack of social interaction concerns. I was able to complete the work assigned at my convenience. I enjoyed the online courses and was academically successful in them. During the majority of my years attending college, I had a family and a full-time job. The flexibility that the online courses provided was, at many times, the only way I was able to continue pursuing my degree. My schedule would not allow me, as a student, to sit in a traditional class during a scheduled time every day based on the amount of courses I needed to graduate.

Among several other factors, I can also attribute my success in academics to the outstanding online pedagogy and teachers' commitment to online learning and well-structured course offerings. The assignments were not too difficult and did not deviate from my expectations of a college course.

Thus far, two of my children have also experienced the benefits of virtual learning and have found academic success in their online college courses. The convenience of online classes has made it possible for my oldest son to work while attending college without having to manage a traditional daily college class schedule.

My educational background includes a Bachelor of Science in Nursing, a Master of Education in School Counseling, and completed leadership courses towards earning a Doctorate of Education in Leadership in the near future, along with on-the-job training in K–12 administration responsibilities. I currently serve as an assistant superintendent. As a district-level administrator, I oversee the system's student services department, which includes the district's central student enrollment center and school counseling department. I have assumed these duties for the last 3 years, which also include reviewing and analyzing all system- and school-level data required by the state throughout the school year. These data include graduation percentages, virtual learning enrollment and course completion percentages, and all final assessment data. I work with the system's school-level administration and school counselors as needed throughout the school year in regards to student- or data-related matters.

Through my years of working as a district level administrator, I have built a rapport and a relationship of trust with the high school administrators, school counselors, and the virtual program technician responsible for implementing the Southern High School (SHS) GaVS program. These relationships were helpful in gaining access to the research site to collect data. The administrators at the SHS play a leading role in deciding the type of courses offered, programs made available, the hiring of qualified teachers, and assisting with the overall course schedule for the school. The school counselors play a large role in assisting students in determining which programs and courses best fit their needs and providing feedback to the high school administrators regarding the effectiveness of various school programs, including GaVS. The virtual program technician and GaVS support specialist help to eliminate progression barriers the students may experience due to technical difficulties.

Virtual Program/School as an Educational Alternative

The USDOE (2011b) has revealed that, since NCLB, Georgia and other states have worked to develop initiatives that will help increase student achievement and graduation rates. One method that states are utilizing and promoting at an increasing rate is the implementation of virtual learning programs. Virtual learning programs provide students with an alternative approach to academics. The programs allow students to have access to a wide variety of course selection and flexibility in completing the course. Virtual learning programs provide an effective means for closing the achievement gap between high- and low-achieving students and improving academics (USDOE, 2011a).

In most states, schools provide all levels of K–12 students with the unique learning opportunities that virtual learning programs offer (Watson, Pape, Gemin, & Vashaw, 2015). A major component of President Obama's 2010 *A Blueprint for Reform*, released as a way to reform the NCLB legislation, is for all students to be college and career ready upon graduating (USDOE, 2011a). The Obama administration has recognized virtual learning as playing a key role in creating student success by providing flexible options for students and equipping them with the 21st century skills they will need to compete globally (USDOE, 2011a).

Virtual learning programs emerged as an alternative option to the traditional public schooling in the late 1990s in K–12 education (Cavanaugh, 2009). An alternative education is a method of education that allows for a different delivery style and school structure than the traditional school design. According to Foley and Pang (2006), there are three types of alternative programs: (a) Type I programs are themes for content and/or instructional purposes, such as a virtual program; (b) Type II programs are for students

who have been disruptive; and (c) Type III programs are used to rehabilitate or remediate. These alternative delivery models and ideologies are necessary for granting many students the opportunity to succeed. Online education allows students and teachers to communicate with ease through the alternative program's virtual delivery (Foley & Pang, 2006). In 2005, Georgia implemented an online education program, GaVS, as an alternative virtual educational program (Barge, n.d.; Ingram, 2016; Teague, 2013). GaVS is the alternative program utilized by SHS and served as the basis for this study.

Clark (2008) explained how virtual learning programs serve as a solution to three looming problems in public education: budget deficits, teacher shortages, and the attainment of 21st century skills. Clark (2008) noted that "for states and school districts striving to raise student outcomes without additional dollars, there is a steadily growing evidence of the cost-effectiveness of online learning" (p. 7). The author noted that, with online learning, one teacher can teach students from many different schools. The online program allows students to learn at their own pace. Clark (2008) recommended "restructuring secondary school classrooms so that the traditional model of one teacher in front of twenty-five students no longer applies" (p. 8). Online learning allows a student to take more responsibility for his or her own learning and teachers to serve more in a facilitator role instead of being the sole content deliverer (Clark, 2008).

Clark (2008) reported, in August 2007, the National Governors Association called on the federal government and Congress to form a partnership in order to create expanded learning opportunities and to increase their availability, including virtual school options. Clark (2008) asserted online learning provided through alternative virtual programs/schools is necessary to reform the K–12 landscape. Online courses allow

students to receive a personalized learning experience and an expansion of curriculum choices. Watson et al. (2015) noted that almost all school districts are using online learning programs as an alternative in some capacity, and some more effectively than others.

Virtual Learning and School Leadership

In addition to understanding virtual programs as an alternative educational conceptual framework for examining virtual learning practices, it is also important to understand school leadership as it relates to this study. Waters, Marzano, and McNulty (2003) determined that school leaders play a key role in creating an environment where innovation flourishes and students can maximize their achievement. In 2003, the group completed a meta-analysis examining leadership studies over a 30-year time span. They analyzed 70 studies involving 2,894 schools and representing 1.4 million students and 14,000 teachers. Their findings concluded that school leadership positively correlated with school achievement. The average effect size between student achievement and leadership was 0.25. The authors were able to identify 21 key leadership responsibilities from their research. From these, they created a new leadership framework named the Mid-continent Research for Education and Learning's (McREL) Balanced Leadership Framework. This framework described the tools, skills, knowledge, and strategies needed to positively impact student achievement (Waters et al., 2003).

Waters and Grubb (2004) utilized McREL's Balanced Leadership Framework to distinguish principal leadership responsibilities considered "essential" from those considered "important." The authors argued that not all changes are within the same order of magnitude. Some changes have greater implications based on the factors

involved and with regard to the people who are implementing the changes. Two different types of changes emerged: first and second order (Waters & Grubb, 2004).

Waters and Grubb (2004) revealed that first-order change occurs when people perceive leaders as possessing experience, knowledge, and resources, which is advantageous for stakeholders and consistent with existing norms and values. Secondorder change occurs when leaders must master new knowledge, practices, or approaches to implement the change, are unclear about how the change will make things better, or feel that the change conflicts with prevailing personal values or organizational norms (Waters & Grubb, 2004).

Waters and Grubb (2004) believed that reform efforts can either be a first- or second-order change, depending upon the stakeholder. Once school leaders are able to determine if the change is a first- or second-order, then they are able to select leadership strategies and practices appropriate for their initiatives. The likelihood of the initiative creating a positive impact on student achievement increases when leaders are mindful of the type of change needed. Offering online high school courses as an alternative to traditional face-to-face courses requires adaptive leadership skills to implement a second-order change in a positive manner (Waters & Grubb, 2004). The theory of adaptive leadership is the framework by which leaders diagnose, interrupt, and innovate using non-traditional approaches to assist in increasing student achievement (Heifetz, 1994; Heifetz & Linsky, 2002). This study used the concept of school leadership and the alternative virtual program framework to analyze the GaVS professional educators' implementation decisions and practices and the perceived benefits experienced throughout the implementation process.

Summary of Methodology

The basic interpretive qualitative design used in this study helped to describe the experiences of the professional educators responsible for implementing the GaVS program by discovering how people interpret personal experiences, construct their own worlds, and interpret the meaning they attribute to their experiences (Merriam, 2002). The researcher used a purposeful sampling procedure to select the professional educators who have found success implementing the GaVS program at the secondary school level in a rural school district. Data collection methods included observations, a review of documents, and conducting interviews with the study's participants. The researcher used the constant comparative method during the data analysis process to develop the major conceptual themes from this study (Glaser & Strauss, 1967).

Limitations

The sample size, geographic region, and scope of the study limited the research design used in the study. The study sample consisted of the professional educators responsible for implementing the GaVS program at the secondary school level and did not reflect middle or elementary school perspectives. The study did not address teacher or student perceptions regarding the implementation of the GaVS program at SHS. Conclusions of this study referred to an identified virtual program implemented in an identified high school located in South Georgia. The primary goal of this qualitative study was to determine how a rural Georgia school district with limited resources implemented the GaVS program with the intent to increase student access and achievement. The assumption is that the professional educators who participated in the interviews gave thorough and honest responses, and recalled information and facts as

accurately as possible. The bias of the respondents, as well as the interpretation of the data, may have produced potential limitations, as discussed further in Chapter 3.

Assumptions

This study was based on the assumption high school administrators and school counselors are key decision makers in the use of online learning for students in their schools. Further, the researcher assumed professional educators who participated in interviews reported their perceptions accurately and truthfully for the purpose of the study.

Definition of Terms

The study makes use of the following terminologies:

21st Century Skills. These include learning and innovation skills that prepare students for a 21st century complex life and work environment. These skills originate from the following five areas: (a) creativity and innovation; (b) critical thinking and problem solving; (c) communication and collaboration; (d) information, media, and technology skills; and (e) life and career skills (Partnership for 21st Century Skills, 2009).

Asynchronous Learning. Communication exchanges between participants, which occur in elapsed time. Examples include email, online discussion forums, and any other online delayed communication exchange mode of delivery (Wicks, 2011).

Authoritarian-style Management. This term describes the type of management in which the leader or manager makes all of the important decisions and closely supervises his employees while delivering a clear long-term direction (Cardinal, 2015).

Blended Course. A course that "…combines two modes of instruction, online and face-to-face" (iNACOL, 2011, p. 3).

Blended Learning. Students receive their education through a hybrid model partly in a traditional brick-and-mortar setting and partly through an online delivery system, which includes the content and instruction. The student has some control over the time, pacing, and setting of the online learning component (Horn & Staker, 2011).

Brick-and-Mortar School. A traditional school or school building (iNACOL, 2011).

Charter School. A public school established with a charter which details the school's mission, goals, program, students served, assessment methods, and ways to measure success detailed in a performance contract (Treetops School International, 2011).

Computer Literacy. This is a term that refers to the knowledge and skills needed to use a computer and other related technology devices (Beattie-Moss, 2011).

Cyberbullying. Bullying that takes place using electronic means such as computers, tablets, and cell phones as well as communication tools including online social media sites, websites, and text messages (Barlett, Gentile, & Chew, 2016).

Digital Divide. This term "...refers to the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access information and communication technologies (ICTs) and to their use of the Internet for a wide variety of activities" (Organization for Economic Co-Operation and Development [OECD], 2001, p. 5).
Dropout. An individual who is not attending school via online or traditional means and has not earned a high school diploma or equivalency (Intercultural Development Research Association, 2014).

e-learning (Electronic Learning). A term covering a wide set of applications and processes, such as web-based learning, computer-based learning, virtual classrooms, and digital collaboration. It includes the delivery of content via Internet, audio and videotape, satellite broadcast, interactive TV, and CD-ROM (Sener, 2015).

Full-time Virtual Program. A program that provides a full-time virtual education for students (Watson, Murin, Vashaw, Gemin, & Rapp, 2010).

Instant Messaging. This is an online tool that provides for real-time text communication and transmission over the Internet (Stewart, 2001).

Learning Management System (LMS). A technology platform that allows for course management and delivery, including communication and assessment tools incorporated into the platform (Wicks, 2011).

Massive Open Online Course (MOOC). A term describing a model for delivering learning content online to any individual who wants to participate in a course, without a limit on attendance (Allen & Seaman, 2013; Watson et al., 2013).

Online or Virtual Learning. Learning taking place over the Internet either through synchronous or asynchronous means of communication while using a web-based educational delivery system that houses the software, which provides the course curriculum. *Online* and *virtual* are interchangeable terms (Picciano & Seaman, 2007; Watson & Kalmon, 2005). *Online or Virtual School.* An educational organization that offers full-time education delivered through web-based methods or the Internet (Clark, 2001; Wicks, 2011).

Part-time Virtual Program. A program allowing students to take less than a full load of courses online. An alternative term is "supplemental online program" (iNACOL, 2011, p. 8).

Professional Educators. The professional educators who implemented the GaVS program at SHS are defined as the principal, an assistant principal, two high school counselors, the high school virtual program technician, and a GaDOE GaVS support specialist (SHS, 2016).

Rural School District. School districts "...are considered rural...if they serve fewer than 25 students per square mile." These districts "...serve a more dispersed population and do not have the economies of scale of larger districts." (The Governor's Office of Student Achievement [GOSA], 2016a, p. 6).

School Administrators. For the purpose of this study, school administrators refer to the principal and assistant principal at SHS who are responsible for shaping a vision of academic success for all students; managing school operations including faculty and staff members, data, programs, and processes; fostering school improvement; coordinating curricula and improving instruction; and providing a safe and productive learning environment for students (The Wallace Foundation, 2013).

School Climate. The "quality and character of school life." It is based on "patterns of students, parents, and school personnel's experiences of school life and

reflects the norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures" (National School Climate Center, 2014, p. 1).

Social Media. This term refers to the online channels used for community-based communication, interaction, collaboration, and content sharing. Examples include Facebook and Twitter (Blaschke, 2014).

Student Achievement. A measure of a student's knowledge and preparedness for future endeavors. Frequently used measures to evaluate student achievement in core subject areas which include international, national, and state assessments (Georgia Partnership for Excellence in Education, 2012).

Synchronous Learning. Online learning that allows participants to communicate and interact at the same time and in the same space (Watson, Murin, Vashaw, Gemin, & Rapp, 2013).

Urban School District. School districts located in an urbanized area with a core population of 50,000 or more with population density of at least 500 people per square mile (The Rural School & Community Trust, 2013).

Chapter Summary

Schools have implemented national and state reform initiatives to increase student performance and graduation rates (CCSS Initiative, 2012; Executive Office of the President, 2015; National Commission on Excellence in Education, 1983; USDOE, 2009, 2011, 2011a). Virtual learning courses serve as a viable option for increasing student achievement and the graduation rate and for decreasing the dropout rate (Brenner, 2007). In addition, virtual courses can help satisfy the demand for fluency in a foreign language, potentially enabling the United States to compete in global education. Specifically, the GaVS program is one of the reform strategies employed to increase student access and

achievement (Barge, n.d.; Ingram, 2016; Teague, 2013). School districts, especially rural districts with limited resources, have been restricted in their ability to implement the GaVS program effectively (Hall, 2015; Tankersley, 2006). This study revealed barriers that the professional educators experienced during the implementation of the GaVS program in a rural Georgia school district and the strategies they developed to overcome these barriers.

The study is organized into five chapters. Chapter 1 presents the introduction, the statement of the problem, the purpose, the research questions, the significance, the conceptual framework for the study, a summary of the methods, limitations of the study, and the definitions of terms used. Chapter 2 focuses on the review of literature related to virtual learning. Chapter 3 presents the methodology used for the study. Chapter 4 presents an overview of the findings of the study. Finally, Chapter 5 presents an in-depth discussion of the findings, implications, and recommendations for practice, as well as future studies and conclusions.

Chapter II

LITERATURE REVIEW

The literature review shows a need for this study by examining previous research that describes and analyzes the impact of virtual schools on student access and achievement, including the perceptions of those who implemented the GaVS program. The researcher began with a search for terms related to the study's topic: virtual schools, school reform initiatives, GaVS, virtual learning, school leadership, rural schools and students, alternative school programs, and student achievement. The researcher used the terms independently and in various combinations. The various databases used in the search included the Educational Resources Information Center (ERIC), ProQuest, Georgia Library Learning Online (GALILEO), Google Scholar, and the Evergreen Education Group's K–12 Digital Learning Policy and Practice website.

The study's literature review begins with an overview and historical background of virtual learning and virtual programs and schools. This section chronicled the events that led to an increase in the implementation of virtual learning programs/schools as an alternative option in public education. Other sections or topics contained in the literature review and relevant to virtual learning and virtual program implementation include: educational reform; virtual learning helping to prepare students for the 21st century; virtual education to facilitate constructivist learning; advantages of virtual learning; characteristics of a rural school district; political and fiscal influences on virtual learning; effectiveness of virtual learning; virtual program/school implementation barriers; and finally the conceptual frameworks used for the study, which consist of a virtual program/school serving as an educational alternative and virtual learning and school leadership.

In today's economic climate, students must be able to compete globally (National Commission on Excellence in Education, 1983). Consequently, legislators are very mindful of the retention rates of college students, the dropout rates of high school students, and the increasing amount of time it takes students to receive a college diploma (USDOE, 2009, 2011a, 2011b).

Beginning with the open letter to the American citizens in 1983, "A Nation at Risk: The Imperative for Educational Reform," there have been many national and state initiatives implemented to increase student achievement and graduation rates, including Georgia's more recent RT3 four-hundred-million-dollar grant program (CCSS Initiative, 2012; Executive Office of the President, 2015; National Commission on Excellence in Education, 1983; USDOE, 2009, 2011a, 2011b). One strategy that schools are employing to increase student access and achievement is the implementation of an online educational program, specifically GaVS (Barge, n.d.; Ingram, 2016; Teague, 2013). School districts, especially rural districts with limited resources, have been restricted in their ability to implement GaVS effectively (Hall, 2015; Tankersley, 2006).

The purpose of this study was to determine how an identified rural Georgia school district with limited resources implemented the GaVS program with the intent to increase student access and achievement by utilizing strategies to mitigate significant implementation barriers.

The following research questions guided the study:

RQ1: What are the experiences of the professional educators who implemented the GaVS program in a rural Georgia school district and what were the lessons learned during the GaVS program implementation process?

RQ2: What implementation barriers did the professional educators in a rural Georgia school district experience while implementing the GaVS program with the intent to increase student access and achievement?

RQ3: What strategies to mitigate implementation barriers did the professional educators in a rural Georgia school district use while implementing the GaVS program with the intent to increase student access and achievement?

Costly school reforms over the last 50 years have resulted in very little progress made toward America regaining its status as a global leader in education (Klein, 2015). There have been many reform efforts through the years in an attempt to increase student achievement and graduation rates and to decrease student dropout rates (CCSS Initiative, 2012; Executive Office of the President, 2015; National Commission on Excellence in Education, 1983; USDOE, 2009, 2011a, 2011b). Continued high school student dropout rates affect the nation's education statistics, costing the United States billions of dollars annually (Alliance for Excellent Education et al., 2015). Brenner (2007) believed that online learning could serve as a resource to help decrease the student dropout rate and increase the graduation rate.

The findings from the study may benefit the GaDOE, GaVS, state leaders, and other district and school level leaders' efforts to increase student achievement and graduation rates. Participants in this study revealed barriers that they experienced during the implementation of the GaVS program in the rural Georgia school district and the

strategies they developed to overcome the barriers. System leaders may use this study's findings to determine if the same barriers exist in their systems and then utilize similar strategies to overcome these barriers, thus allowing for a more effective and efficient implementation of the GaVS program with the intent to increase student access and achievement.

Overview and Background of Virtual Learning and Virtual Programs/Schools

Virtual learning emerged as an alternative to the traditional public schooling in the late 1990s in K–12 education (Cavanaugh, 2009). The establishment of the first K– 12 virtual school was in Eugene, Oregon, in 1995 (Samuelsohn, 2015). The federal government decided to help jumpstart the virtual school revolution by offering pioneering grants to states and systems in 1996, allowing for the opening of additional virtual schools (Samuelsohn, 2015). The Hudson Public School system in Massachusetts opened the Virtual High School in 1997, which offered 24 online courses to 500 students in 27 schools located in 10 different states during the 1997–98 school year. The virtual school has since annually grown 10% in student enrollment (Samuelsohn, 2015). In addition, the Web School in Orange County, Florida, opened in 1997 and later became known as the Florida Virtual School (FLVS). Today FLVS is the largest and most recognized virtual school in the country (Greenway & Vanourek, 2006).

Florida was the first state in the nation to pass legislation for all K–12 public school students to have full- and part-time virtual options (Watson et al., 2015). FLVS has accounted for more than two million course completions since it opened in 1997 and its mission is to serve students from public, private, and home schools. It is the main supplemental virtual course supplier in the state of Florida. State legislation established

FLVS as an independent educational entity in 2000, and it became designated as a public school choice option due to legislation passed in 2002. This legislation allowed rural, low-performing, and high-minority districts to have school choice priority (Watson et al., 2015). This practice supported Blaylock and Newman's (2005) belief that online learning may help in correcting educational inequalities existing due to budget constraints, income, school size, substandard teaching, and race/ethnicity. The legislation called for full-time equivalent (FTE) students for FLVS based on the completion of the course and performance rather than seat time. Out of the 24 state virtual schools in the nation, only two receive funds based on course completion (Watson et al., 2015).

Soon, other states that shared the same needs and goals as Florida joined the virtual school movement (Greenway & Vanourek, 2006). In 1999, Michigan began setting the groundwork by adopting the Michigan Merit Curriculum, which called for the participation in at least one online or blended course as a high school requirement. In 2003, the Arkansas Department of Education established a full-time online program, the Arkansas Virtual School (ARVS), and funded it through a partnership with K12, Inc. (Greenway & Vanourek, 2006).

Between 2001 and 2007, students taking online courses in elementary and secondary education increased from 200,000 to nearly two million (Cavanaugh, 2009). Forty-four states had many supplemental online programs for students in grades K–12 by 2008. Some K–12 school systems offered virtual courses to their students in the traditional school setting, while others gave them the opportunity to take all of their courses online (Cavanaugh, 2009).

The term "virtual school" refers to any private or public institution delivering instruction through the Internet (Cavanaugh, Barbour, & Clark, 2009; Clark, 2001). Greenway and Vanourek (2006) believed that the best way to visualize a virtual school was to imagine a regular school without the structure of the building and with the Internet serving as a student's means of transportation to school.

Based on Clark's descriptions, there are seven types or categories (see Table 1) of virtual schools (Cavanaugh et al., 2009; Clark, 2001, 2007). Virtual schools are most frequently sorted by how they are funded, the technology used, policies and administration, marketing and public relations, curriculum and teaching style, and the student services provided (Cavanaugh et al., 2009; Clark, 2001, 2007).

Table 1

Category	Description
State-sanctioned, state	Virtual schools operating on a state-wide level, such as the FLVS
level	
College and university	University-sponsored or independent university high schools'
based	delivery of courses to K-12 students, such as the University of
	California College Prep Online (UCCP)
Consortium and	Virtual schools operated by a group of schools or school districts,
regionally based	such as the Virtual High School (VHS)
Local education agency	Virtual schools operated by a single school or school district, such
based	as the Gwinnett County Online Campus
Virtual charter schools	Virtual schools created under the charter legislation in many states,
	such as Georgia Cyber Academy or Georgia Connections
Private virtual schools	Virtual schools operating in the same manner as a traditional
	school, such as the Christa McAullife Academy

Clark's Seven Categories of Virtual Schools

For-profit providers of Companies acting as vendors for the delivery of courses or the use curricula, content, tools, of course materials, such as Fuel Education or Apex Learning and infrastructure

Note. Extracted from "Research and Practice in K–12 Online Learning: A Review of Open Access Literature," by C. S. Cavanaugh, M. K. Barbour, and T. Clark, 2009, *International Review of Research in Open & Distance Learning*, *10*, p. 3.

FLVS and GaVS are examples of state-sanctioned virtual schools, a type of virtual school operated entirely by the state. Other types of virtual schools consist of college and university based, consortium or regionally based, local education agency based, virtual charter, private virtual schools, and for-profit providers of the virtual curriculum, courses, and infrastructure (Cavanaugh et al., 2009).

Traditional public schools represent the largest sector of K–12 education and the largest user of online learning (Watson et al., 2015). Watson et al. (2015) reported that 50.1 million K–12 students attended public schools in the United States in 2014-15, 2.9 million attend charter schools, 4.9 million attend private schools, and 1.8 are home schooled. Many of these students attended full-time online schools. Most full-time online schools are charter schools enrolling students from across entire states, but an increasing amount of regional service agencies and districts are enrolling virtual students from a defined boundary (Watson et al., 2015).

In 2015, most school districts were using online learning in some capacity (Watson et al., 2015). The majority of the courses are supplemental online courses, with a smaller amount of students in fully online and hybrid schools. Students attending hybrid schools receive online and face-to-face instruction. Such schools generally serve students who have dropped out of school and are reentering through an alternative program, or students who are at risk of dropping out (Watson et al., 2015). Watson et al. (2015) presented an annual report on the progress of virtual schools in every state in the United States. The report revealed that 24 state virtual schools served 462,025 students who took 815,482 online semester-long courses during 2014-15. Another 2,254,000 students took a total of 3,800,000 supplemental semester equivalent online courses from virtual course suppliers other than the 24 state virtual schools. Together, the total number of supplemental online course enrollments soared to over 4.5 million with a total number of 2,716,025 students participating (Watson et al., 2015). Some of these students took courses that were not available at their physical schools, while others took courses that were available, but they needed the scheduling flexibility that the online courses provided (Watson et al., 2015).

Watson et al. (2015) analyzed a representative sample of the online course enrollments to determine how major academic subject areas utilize online courses. The sample included core subjects: Language arts, math, science, and social studies. Of these students, 73.9% utilized online core subject area courses compared to 26.1% of students utilizing online non-core subject area courses such as electives, health, physical education, world languages, and fine arts. The results revealed Language arts and math as the top two most-utilized online subject area courses at 23.1% and 22.7%, respectively. Elective online course utilization came in third at 20%. World languages only accounted for 2.5% of the selected courses. The sample size consisted of 3,739,983 courses. Watson et al. (2015) concluded from the sample size that 1,385,708 students took on average 1.4 courses each semester.

Barth (2013) noted that advocates for virtual learning represented a range of interest, but they all desired to see an increase in virtual learning participants. The

pioneers in education technology recognized the ability to customize online learning to individual students, while also realizing the potential savings in the lowering of expenses for facilities and staffing (Barth, 2013).

According to Grady, Bielick, and Aud (2010), the public school choice seed implementation began in the 1960s. Since then, schools have presented parents with many new opportunities from which they can select the best educational learning experience for their children. School choices consist of magnet programs and schools; charter schools, which are independent public schools; private school options; homeschooling; inter-district school choice; scholarship programs; publicly funded voucher programs, which allow students to attend private schools; and online learning options (Grady et al., 2010). Most parents today see technology playing an integral part in their children's education and believe that it contributes to their ability to learn more effectively (Barth, 2013).

The accountability provisions of the NCLB Act of 2001, expanded school choice opportunities for students attending public schools not meeting their state's expectations (Hassel & Terrell, 2004; NCLB, 2002). Opponents of public school choice have argued that school choice takes resources away from traditional public schools and it does not help increase student achievement. On the other hand, school choice advocates claim that giving parents the right to choose schools promotes learning innovation and opportunities, and provides for racial and economic educational equalities (National Conference of State Legislature, 2013).

There has been a transformation of elementary and secondary education due to expanded school options and alternative educational opportunities (Cavanaugh, 2009).

Parents and students now have the freedom of selecting educational resources that were not previously available. One educational alternative brought about by the school choice movement is the establishment of charter schools. A charter school is a public school established with a charter that details the school's mission, goals, program, students served, assessment methods, and ways to measure success detailed in a performance contract (Treetops School International, 2011). There are three different kinds of charter schools: traditional, traditional with blended learning, and fully online. The aim of charter schools is to provide better educational opportunities for students who want to be in a public school, but cannot or will not attend their own traditional school due to existing barriers (Marsh, Carr-Chellman, & Sockman, 2009).

The school choice movement has allowed for technological advancements in alternative educational opportunities, such as virtual learning (Marsh et al., 2009). Virtual learning is an instructional method of delivery, allowing for an expansion in school time through the utilization of technology (Cavanaugh, 2009). In other words, students are free from the constraints of the typical school day. The students are in control of when they work and how much time they spend on learning activities. Virtual learning is student focused and provides a more efficient learning environment, which allows the teacher more time to focus on an individual student's needs. The virtual school movement in K–12 is increasing rapidly as millions of K–12 students now rely on distance learning educational opportunities (Cavanaugh, 2009).

As virtual learning progressed, two major changes occurred. First, more districts began offering online courses to their students, which resulted in students participating in the online courses with their school districts instead of state virtual schools and virtual

charter schools (Watson, Pape, Murin, Gemin, & Vashaw, 2014). Students now had the opportunity to take courses that their schools previously did not make available. The online courses did not replace or compete with existing classroom courses, but served as course options from which the students could select (Watson et al., 2014). In 2014, eleven states currently allowed students to choose online course enrollments from multiple providers instead of one (Watson et al., 2014). Even though this effort is new and small, it is significant because it allows students to choose from multiple providers at the course level (Watson et al., 2014). Second, schools began to utilize blended learning, which combines online learning with traditional face-to-face classroom instruction. In most cases, the bell schedule and classroom configuration remained unchanged (Watson et al., 2014).

The private school arena has also integrated online learning on all different levels. Some offered fully online schools while others incorporated online content into their current instructional practices (Watson et al., 2014). While the total quantity of students enrolled in private, online, and charter schools accounts for only 16% of the K–12 student population in the United States, these schools have incorporated virtual learning and tens of millions of these students have used it within the past four decades (Watson et al., 2014).

These different types of personalized learning options are beneficial to students at all levels. Many virtual school programs began as an attempt to provide AP courses to students. However, as John Bailey, a former United States Office of Educational Technology Director, stated, "Virtual schools serve students at both ends of the bell

curve, not just AP students but also those needing remediation" (Bailey, as cited in Tucker, 2007, p. 2).

Educational Reform

The National Commission on Excellence in Education's (1983) "A Nation at Risk: The Imperative for Educational Reform" provided recommendations to improve education, which resulted in a renewed attention towards student achievement and the implementation of rigorous and measurable academic standards (Hunt & Sanders, 1996). In 2002, NCLB brought about the change in education that all students had to be on grade level (Klein, 2015). In 2009, the ARRA, which authorized RT3, and the 2009 federal budget allotted more than ten billion dollars to the states and districts that were leading reform and classroom innovative efforts. In 2015, Congress passed ESSA. This new education law allowed for the reauthorization of the ESEA, and endorsed the adoption of the CCSS in an attempt to help increase student achievement and prepare students to compete on a global scale. ESSA also allows the government to relinquish a greater amount of educational control back to the states and local systems and encourages the implementation of innovative programs and initiatives (Executive Office of the President, 2015; Klein, 2015). Obama's and the USDOE's visions are expressed in the ESSA, as it promotes the key areas in which progress needs to continue. The law focuses on fully preparing students for success in college and potential careers, which may assist in strengthening the education system and the economy (Executive Office of the President, 2015). In order to help prepare students for college and careers and increase academic achievement and graduation rates, schools are searching for new ways to reach students today (Archambault & Crippen, 2009). One initiative for increasing student achievement

and preparing students for college and careers at the federal, state, and local levels is the implementation of virtual learning programs (LaPlante, 2007; USDOE, 2005).

Friedman and Friedman (2011) believed that, in order to compete in today's global economy, it is necessary to create engaging, effective, and relevant instructional and technology-enabled approaches in public education. The authors believed that all types of schools should be experimenting with some type of online or blended model approach. Christensen, Johnson, and Horn (2008) predicted that by 2019, 50% of all high school courses in the United States will be taught online. Online learning can be a resourceful tool to help solve the problems facing education today (Friedman & Friedman, 2011). Brenner (2007) believed that online learning could serve as a resource to help increase student achievement and the graduation rate while decreasing the student dropout rate.

Tucker (2007) revealed that virtual learning is changing public education, the essence of learning, and what it means to attend school. Virtual schools allow for personalized student learning, extending beyond the regular school day. Virtual schools have been utilizing performance-based education funding models, and for the practice of teaching and learning, they are developing new models to serve as available options. Numerous school reformers have sought these changes in traditional public schools. Tucker (2007) noted that it is increasingly important to understand the innovations emerging from virtual schools and online learning, and the potential to leverage reform on a far larger scale in public education. Watkins (2005) believed that the systems of public education need to not only adapt to the changes brought on by virtual learning, but

also to lead the change; otherwise, global competitors will surpass schools, which remain constrained by space and time.

Virtual Learning Helps to Prepare Students for the 21st Century

The majority of students in the United States today still experience public education in a typical "brick-and-mortar" school setting (Cavanaugh, 2009). However, opportunities for school choice continue to expand and grow as an instructional alternative. These opportunities are changing the landscape of the traditional view of public education (Cavanaugh, 2009). Cavanaugh (2009) believed that online learning breaks the chains of students bound to the length of a typical school day; it allows for a more flexible individualized education. Such flexibility allows students to learn the content at an accelerated rate or to spend additional time to master the content (Cavanaugh, 2009). With online learning, students are able to utilize 21st century skills such as interacting with others from various backgrounds, working collaboratively with others, and developing independent learning skills (NACOL & the Partnership for 21st Century Skills, 2006). In addition, Cavanaugh (2009) believed online learning provides an efficient learning environment, as it is an educational process centered on the learner, and it allows the teachers to focus on the specific needs of each student. Because of this, millions of K–12 students are utilizing online learning opportunities for their education (Cavanaugh, 2009).

The NACOL and the Partnership for 21st Century Skills (2006) concluded the establishment of online schools "...is one of the most important advancements transforming education in the United States" (p. 9). They contended that online schools allow students access to virtual, collaborative and self-paced learning environments. The

NACOL and the Partnership for 21st Century Skills (2006) determined that 40% of high schools in the United States do not offer a rigorous, college preparatory curriculum and are most likely to be located in low-income or rural communities. This study suggested virtual schools might offer students an increased access to a greater variety of highquality courses. In addition, virtual schools may also allow individualized instruction to meet the needs of the students, consequently allowing students to set their own learning schedules (NACOL & the Partnership for 21st Century Skills, 2006).

In 2007, WestEd challenged educational leaders to think of innovative ways to meet the challenges of the 21st century while acknowledging the benefits of utilizing virtual courses to deliver advanced content. WestEd (2007) recommended key implementation practices for schools and districts: assigning overall virtual program responsibility to the site coordinator; ensuring the high quality of the course, instructor, and the instruction, recruitment procedures; providing support to students; and monitoring and evaluating student progress. In conclusion, WestEd (2007) emphasized if students are to be well prepared for the 21st century, then educational leaders must ensure they have access to the right course work.

Virtual Education Facilitates Constructivist Learning

In 2007, Proserpio and Gioia noted that the theoretical components of virtual learning helped form the groundwork for understanding the unique aspects of its own environment. With the virtual school components, instructors are able to align their teaching style with the adolescent's learning style. This has flowed well into the lives of those students known as the virtual generation. Virtual learning may allow for a great and different learning opportunity. It is imperative that one must "recognize and account

for the fact that the nature of the virtual teaching and learning experience is different" (Proserpio & Gioia, 2007, p. 72).

In 2005, Kim (2005) concluded that the conditions of receiving a virtual education facilitated constructivist learning. The virtual program provides an interactive environment for the virtual learner. Hill (2006) determined that the virtual learning model allowed for an open and flexible learning environment, which can involve students in concrete learning experiences, while gaining knowledge by utilizing a learner-centered and teacher-supported approach. A virtual learner has options and is in control of the course as it relates to time, setting, and the pace that most suits the student's needs (Hill, 2006).

Constructivist learning is the key to education in the 21st century (Abdoli Sejzi & Aris, 2012). This theory describes how learners construct their own knowledge and understanding of their environment and the world, through experiencing things and events, which occur in life, and reflecting on their experiences (Abdoli Sejzi & Aris, 2012). The main aspects of the constructivist approach in online learning include active learning, context-specific learning, social learning, and formative evaluation. While embracing these aspects in online learning, students will gain the opportunity to construct their own knowledge by using their own cognitive abilities to interact and learn with others (Abdoli Sejzi & Aris, 2012; Pigliapoco, Torrisi, Messina, & Bogliolo, 2008).

Active learning allows students to gain knowledge while working, rather than obtaining it passively (Abdoli Sejzi & Aris, 2012; Schroeder & Spannagel, 2006). Context-specific learning is the construction of knowledge as an adaptive process affected by the specific context and the learning environment (Abdoli Sejzi & Aris, 2012;

Lesgold, 2004). Social learning is an activity involving people interacting on some level, which can also apply to virtual learners (Bransford, Brown, & Cocking, 1999; Swan & Shae, 2005). Three themes, which emerged from social learning theory, are (a) cognition is situated in certain social contexts, (b) knowledge is distributed across groups, and (c) learning takes place in communities (Swan & Shae, 2005).

With the increasing development of technology and availability, there has been a strong demand for a generation of learners who can analyze and reason in this era of technological growth (Abdoli Seizi & Aris, 2012). In utilizing the constructivist learning approach in online learning, one can allow students to design and collaborate with others during the learning process. This approach allows students to develop critical thinking, communication, and analytical skills. It also enables them to comprehend active learning, relevance, challenging beliefs, and flexibility in the teaching and learning process (Abdoli Seizi & Aris, 2012).

Certain cognitive measures are indicative of whether students will be good K–12 online learners, including self-motivation, self-regulation, previous exposure to technology, self-confidence, good attitude, and time management skills (Archambault, Kennedy, & Bender, 2013). According to the theory of constructivism, learners actively create meaning for themselves in the process of learning. In applying constructivist learning principles and a constructivist approach, online learning can foster communicative skills, knowledge, and the autonomy of learners. The constructivist approach promotes a belief that high-quality teaching and learning can occur anytime and anywhere (Abdoli Seizi & Aris, 2012).

Advantages of Virtual Learning

Toppin and Toppin (2016) noted that school systems in almost every state across the nation offer some version of virtual education. These authors believed that virtual school enrollments will surpass those of traditional K-12 institutions within the next 10 years. A report by the Legislative Division of Post Audit (LPA) revealed that online learning and virtual schools may help to improve public education (LaPlante, 2007). Advantages of a virtual education include (a) students may take classes in which local schools lack qualified teachers; (b) flexible scheduling can help schools retain at-risk students; (c) students have the opportunity to take AP and college-level courses; (d) programs can be tailored to match the way a student learns; (e) one-on-one interaction between the teacher and student is an integral part; (f) home school parents who elect to use virtual schools have a support network, along with a curriculum that meets state standards; (g) virtual schools are able to expand without the additional cost of building new schools which are expensive to maintain and become outdated; and (h) small communities benefit as families are able to pursue educational opportunities for their children without having to move (LaPlante, 2007). Barbour and Reeves (2009) believed that the benefits of online learning can be divided into five main areas: "...expanding educational access, providing high quality learning opportunities, improving student outcomes and skills, allowing for education choice, and achieving administrative efficiency" (p. 413).

In 2007, the Sloan Consortium studied the benefits of online learning for rural school districts. The researchers argued that online learning helped to provide access to basic courses, which should be a part of every curriculum, as well as expanded course options. It also helped to address teacher shortages in the high-demand secondary subject

areas such as mathematics, science, and foreign languages. Online learning provides rural districts with a cost-beneficial method of providing courses for students who otherwise would have required the hiring of teachers who would not have enough students to justify their salaries, especially for enrichment and elective courses (Picciano & Seaman, 2007).

In 2004, Hassel and Terrell (2004) conducted a survey of virtual schools to determine the benefits of online learning. The researchers revealed that a virtual school program has the capacity to provide students with an expanded curriculum. Hassel and Terrel (2004) determined that online learning advocates see online learning as an opportunity to help meet the needs of individual learners. This type of learning needs to be transparent, use a common set of standards, and be accountable for student growth outcomes (Hassel & Terrel, 2004). Some of the noted benefits of online learning are better communication among and between students and teachers, the accommodations of different learning styles, frequent assessment opportunities, unlimited access to instruction and course content, and an increase in the supply of top-notch instructors. Hassel and Terrel (2004) stated, "The main differences between online learning and a traditional classroom are location accessibility" (p. 2).

Other benefits of online learning include greater equity of available resources and the ability to develop skills needed for the real world, such as written communication, research and inquiry, social media and multimedia presentations, and self-motivation (Blaschke, 2014). Brown (2006) believed that virtual school students would be able to take advantage of the freedoms existing online for students who have social, emotional, and physical problems. He felt that if students did not have to face the adolescent

barriers that they would find in a traditional setting, then they may succeed and actually enjoy school.

Repetto, Cavanaugh, Wayer, and Feng (2010) concluded that it is possible for virtual schools to improve graduation rates for students considered at-risk and those with disabilities through connection, climate, curriculum, control, and a caring community (i.e., the 5 Cs). Ferdig (2010) studied the potential benefits of online learning for students who are at-risk of dropping out of school or who have dropped out of school. He noted the following findings: (a) at-risk students can succeed as K–12 virtual learners if they are provided with support to meet their needs; (b) schools should continue to view online learning as an educational alternative option and a potential graduation path for atrisk students; (c) there is a direct relationship between the success of a student who has dropped out of a traditional school and access to both a high quality mentor and teacher; and (d) more research needs to be conducted to determine best practices in working with at-risk students in online learning environments. Watson, Gemin, Ryan, and Wicks (2009) also believed that it is important to study the effectiveness of virtual programs as a whole, along with the strategies used on an individual basis, in order to identify best evidence-based practices for at-risk students and dropout prevention.

The National Center for Educational Statistics reported significant growth in distance learning (Snyder & Dillow, 2012). The National Education Policy Center Virtual Schools 2016 Report revealed that in 2013-14, 447 full-time virtual schools enrolled close to 262,000 students. Thirty-three states had full-time virtual schools. Among these, 51.5% were charter schools; together they accounted for 82.6% of enrollment. Increasingly, school districts have been creating and implementing their own

virtual schools or programs, but these often enroll far fewer students (Miron & Gulosino, 2016). Rural areas have benefited the most from the availability of online courses and have the highest percentage of participation when compared to suburban and urban areas (Growth in Distance Learning, 2005; LaPlante, 2007). Students in rural schools have more options in the amount and type of online courses available. This helps to eliminate the teacher shortage problem experienced in rural schools. Moreover, online course availability allows rural schools to expand their virtual program without having to build expensive additional space (Growth in Distance Learning, 2005; LaPlante, 2007).

Characteristics of Rural School Districts

Rural school districts enroll more than 20% of all public school students in the United States and more than 580,000 of these students attend rural schools in Georgia (Johnson et al., 2014). At least two out of five students residing in rural districts across the nation live in poverty, at least one in four is a minority, and one in eight has moved residence within the past 12 months (Johnson et al., 2014).

In some states, rural students perform significantly better on the National Assessment of Educational Progress (NAEP) than non-rural students, but significantly poorer in others. According to McCabe (2011), the differences in the performance scores seem to be linked to variances in a wide range of school factors, such as advanced course offerings and instructional resources. In addition, the spread of high-speed Internet access and the development of online learning programs has helped expand opportunities and access to resources for rural students in several states and districts (McCabe, 2011).

Kollie (2007) and McCabe (2011) believed the communities in which the rural school districts reside are very diverse, but they all face similar challenges. These

challenges revolve around the following areas: funding, poverty, administration, staffing, facilities, and technology. As Kollie (2007) shared, states typically provide less than 50% of a district's funds. Rural school districts typically do not have the tax base to account for the remaining amount needed to provide the warranted level of educational services. This creates a large amount of inequity between the quality of education afforded by rural districts compared to urban districts. These funding limitations create problems on every level within the district including, capital improvement initiatives for facilities construction and maintenance, technology and textbooks, and the recruitment and retention of highly qualified personnel (Kollie, 2007; McCabe, 2011).

Rural school districts are also challenged financially with the educational needs of their poverty-stricken students. The poverty and mobility rates of students in Georgia are among the highest in the nation, with half of the rural students residing in poverty (Johnson et al., 2014). Kollie (2007) and McCabe (2011) revealed that greater funding is required to meet the needs of educating low-income students. Students of poverty attend both rural and urban school districts. However, urban school districts have access to a larger amount of funding to help pay for high quality teachers and any additional educational resources needed to teach the under-privileged students (Kollie, 2007; McCabe, 2011). Urban school districts tend to be wealthier than rural districts. Increased funding and size allow urban school districts to meet most of their personnel and financial needs. Thus, they are often well-staffed with highly skilled personnel at all levels. In contrast, rural school districts rely on limited funding and mostly operate with minimal personnel. Typically, in rural communities, the school district is the focal point

of the community and the administrators serve as the community leaders. The school district also serves as one of the largest employers in the community (Kollie, 2007).

Rural school districts often struggle to recruit and retain the best highly qualified teachers due to a limited recruitment pool (Kollie, 2007; McCabe, 2011). Rural teachers are paid less than teachers in an urban district, causing them typically to move to urban areas where there are excellent amenities, leaving behind a less qualified staff in the rural districts (Kollie, 2007; McCabe, 2011). Because of the limited tax base, rural school districts struggle to build new schools and maintain their existing facilities. However, these districts usually possess a great sense of community, which allow them to look to their community as a resource to help fund items that need to be built, replaced, or repaired (Kollie, 2007).

Rural school districts are increasingly providing their students with technological literacy to help them compete favorably with their peers from urban school districts (Kollie, 2007; McCabe, 2011). Thus rural districts strive to provide students access to online courses that were not offered before due to feasibility. As the cost of technology equipment and internet access are becoming more affordable, rural school districts are taking advantage of the reduced costs and gaining the same access to online resources as urban school districts (Kollie, 2007; McCabe, 2011).

Political and Fiscal Influences on Virtual Learning

Through their research, Watson et al. (2014) showed that most systems are using a variety of digital learning resources. However, policy plays a huge role in how or if students have access to online courses or schools. Each state has its own policies regarding online learning. Course choice programs and state policies allow a student to

select one or more online courses, which may or may not be available in his or her home school, from a provider other than the student's system of enrollment, and the funding for the course will flow to the online course provider. This is a critical emerging area of focus in digital learning (Watson et al., 2014). Students may also prefer to take select online courses to create flexibility in their schedules due to the demands of extracurricular activities, work, or family needs. Students have the opportunity to take one online course or a full academic load of online courses. Regardless, it is necessary for either the student's parent or the enrolling district to pay the course fee (Watson et al., 2014).

While virtual learning has offered students an array of online courses at any location, the current K–12 educational funding formula in many states has limited access to these courses. The basis for course limitation has been whether a state had authorized virtual programs, whether the state had approved taxpayer money to pay for the virtual programs, and whether the state allowed teachers to teach across state lines or teacher reciprocity (Patrick, 2008). System and school level administrators reported funding formulas and program costs as barriers to implementing virtual programs. State and local educational policies that require course seat time and attendance-based funding are also barriers to virtual program implementation (Piccano & Seaman, 2010). The eradication of the program funding barriers needs attention at the state, system, and school levels (Piccano & Seaman, 2010).

In Georgia, unless the local school districts are utilizing a LMS to house their district-created and -developed online courses, they must pay vendors to provide online courses (Watson et al., 2014). The district is only responsible for providing and paying

for a full-time academic load for each student who has elected to participate. The student would be responsible for the payment of any additional courses. The student must also pay for online courses taken during the summer school break (Watson et al., 2014).

In 2012, three Georgia state laws, Senate Bill (SB) 289, House Bill (HB) 797, and HB 175, reshaped the landscape for online learning by influencing online learning policy (Barge, n.d.; Teague, 2013). SB 289 allows students in grades 3 through 12 opportunities to take online courses. Students can access the online courses through GaVS or other online programs or schools. The districts must inform parents of the online options in writing annually, and districts must allow students to take an online course even if the local district course offers the course. There is no longer the rule that limits students to one GaVS course per semester. School districts must pay the GaDOE for the online course costs, which cannot exceed \$250.00 per a half credit course, per student, per semester, and the GaDOE must approve all online course providers (Barge, n.d.; Teague, 2013). HB 797 established a new funding formula for state charter schools. This allowed virtual charter schools to receive the same funding as the traditional systems, plus supplemental state funding. HB 175 allowed the GaDOE to create an online clearinghouse in which online programs can offer online courses to their students and to students outside of their district (Watson, Murin, Vashaw, Gemin, & Rapp, 2012).

Watson et al. (2012) estimated that during the 2011–12 school year, 275,000 students across the nation attended virtual schools full-time and there were 619,847 course enrollments in 28 state virtual schools. This was an increase of 16% from the previous school year. An estimated 10% of all of the districts offered a comprehensive online and blended set of courses to their students (Watson et al., 2012). However, 25%

of all districts were not offering a significant volume of virtual courses to their students. The smaller online programs were only offering specific online courses, such as AP, credit recovery, or dual credit. These systems were relying on external course providers. Most of these districts were using a state virtual school or a private provider such as Aventa to provide virtual learning to students. The virtual school and private providers typically furnished the LMS, the course content, and, if needed, an online teacher (Watson et al., 2012). Some systems realized that they did not have the resources to fund online courses or schools of their own. Thus, many of these districts began teaming up with other systems and creating consortiums to offer online options to students (Watson et al., 2012).

According to Watson et al. (2012), funding methods for virtual programs and traditional schools differ and the funding for virtual schools varies depending upon the state. The methods include appropriation, which includes the state virtual schools; standard average daily attendance (ADA) used by district programs; online student funding, which sets a funding level for fully online schools; charter school funding, which sets a funding level for all charter schools, including online; and other alternative programs. Course level funding, which follows the student, and performance-based learning funding are relatively new concepts. Many states have begun funding based on the student's demonstrated success in the course (Watson et al., 2012).

According to Toppin and Toppin (2016), a major concern in funding for virtual schools is the fact that it does not correspond to the amount of students participating in the virtual schools, nor what it costs to operate the schools. For example, public virtual schools in Georgia receive funding according to their enrollment counts based on certain

dates during the school year. However, if students drop out of the program and return to a traditional school after the specified dates, the virtual school receives the funding for the students, while the traditional schools usually wind up educating the students without funding for the remainder of the school year. This can result in payments of millions of dollars to virtual schools for services they did not render (Toppin & Toppin, 2016). Miron and Urschel (2012) advocated for virtual school funding to reflect the actual costs required for educating virtual students and believed that it should not be based on the same scale of costs for educating students in a traditional school. The authors offered a funding formula based on the quantity of students who satisfactorily complete a virtual course rather than the percentage of students who are enrolled on a specified date. As of 2013, Florida students only generate funding if they complete their online courses. This method encourages districts to discourage virtual course enrollment and to keep students in traditional courses (Watson et al., 2013).

In 2012, Georgia SB 289 changed the funding significantly for GaVS. Previously, GaVS received an appropriation based on the per-pupil funding a district would have received. Now, districts receive the per-pupil funding and pay GaVS \$250.00 per course, per semester. Therefore, GaVS is scheduled to receive about \$3.1 million in the annual line item funding plus the amount the districts are paying. As the Georgia school district payments to GaVS continue to increase, there will be a reduction in annual line item funding in the state budget (GaDOE, 2012; Ingram, 2016; Watson et al., 2012).

As of September 2013, Alabama, Florida, Michigan, and Virginia are the only four states requiring students to complete an online course in order to graduate. North Carolina and Arkansas are in the process of implementing this requirement. Other states, such as Georgia, have passed legislation to encourage online learning (Watson et al., 2013).

Massive Open Online Courses (MOOCs) have gained much attention in postsecondary education, and are starting to gain the attention of K–12 educators. MOOCs offer students access to certain online courses that they would not be able to access otherwise. If MOOCs are used for online learning courses, then policies implemented for other online courses would need to apply to MOOC courses as well (Allen & Seaman, 2013; Watson et al., 2013).

While school systems generally offer virtual courses at the high school level, they are beginning to offer courses at the elementary and middle school level at a higher rate. However, administrators have expressed hesitation and concerns in promoting the courses in fear of losing funding and the additional costs of the needed technological equipment (Growth in Distance Learning, 2005). Watson et al. (2013) concluded that funding for online courses must be equal to traditional courses, accountability must be in line with student outcomes, policies should be implemented to clarify the availability of online opportunities, and that incorporating online learning opportunities in existing classrooms is important to the advancement of innovative online learning (Watson et al., 2013).

Effectiveness of Virtual Learning

Since the establishment of virtual high school courses over a decade ago, there has been an implementation of effective virtual learning practices. A complex system of educational, political, fiscal, technological, and cultural influences determines the

effectiveness of virtual schools (Cavanaugh, 2009). Determining the extent of these influences on online learning and virtual schools will prove to be valuable to policymakers, researchers, educators, virtual program coordinators and designers, communities, and society (Cavanaugh, 2009).

According to Peterson (2010), online education supports many different types of students. For example, it helps students who choose to pursue taking AP courses in rural school districts that either cannot find a teacher to teach at this advanced level, or cannot afford to offer the course for a few students. Potential dropouts benefit from working on coursework at their convenience while earning a high school diploma. Students with disabilities that impede regular school attendance may also benefit from online education. In addition, the quality of homeschooling will likely improve due to parents being able to obtain additional online resources for their students (Peterson, 2010).

Berge and Clark (2005) suggested that all students who are minority, low-income, rural, inner city, or attending small schools are in need of remedial and alternative educational benefits from online learning. Furthermore, virtual learning also provides disadvantaged students with a resource-rich, high-quality learning environment that allows for individualized instruction, along with the capability of improving student skills and outcomes using technology to access higher-level courses (Berger & Clark, 2005).

According to Watson et al. (2012), many elements complicate the provision of effective online learning. First, school accountability is primarily based on a single assessment. This does not reflect the knowledge the student gained in the preceding year. Second, student growth measurements hinder the online learning effectiveness determination. Results differ, depending upon the measurement system used for

calculations. Third, many virtual schools do not report to the state as a separate school; they count the students within the district's data. Further investigation is necessary to assess the ability of state accountability and data systems to capture and report student outcomes (Watson et al., 2012).

The National School Boards Association Center for Public Education has expressed caution regarding the continued promotion of online learning due to the limited amount of research conducted to determine its effectiveness. The group determined for the few studies conducted showing positive student outcomes that the research was small in scale and based only on specific programs (Barth, 2013).

According to Blomeyer (2002), a growing body of evidence supported the conclusion that online learning can effectively complement, enhance, and expand educational options for K–12 students when schools implement it with the same attention to quality that characterizes effective face-to-face instruction. When there is an appropriate implementation of online learning, student academic performance is at least equivalent to traditional classroom instruction (Blomeyer, 2002).

Smith, Clark, and Blomeyer (2005) identified six factors affecting a student's academic performance in online courses: (a) effectiveness of the program, such as student-centered teaching, collaboration, problem-based learning, constructivist learning models, performance-based assessments and principals of differentiation; (b) the participants' socioeconomic status; (c) school climate; (d) parental involvement; (e) teacher qualifications; and (f) learner characteristics, including cognitive ability, motivation level, and affective attributes. These are important factors to consider as

school leaders make decisions about virtual learning opportunities for their students (Smith et al., 2005).

The USDOE determined in 2008, through a meta-analysis of studies published since 2006, that students in a virtual learning environment performed, on average, equal to or better than students receiving similar instruction in a traditional, face-to-face, classroom. Means, Toyama, Murphy, Bakia, and Jones (2009) concluded that the mean difference was statistically significant at the p < .01 level, with an average effect size of +0.24. Means et al. (2009) also determined that virtual learning produced better outcomes than traditional instruction in studies with random assignment experimental designs (p < .001) and with the largest sample sizes (p < .001). Other meta-analyses of virtual learning programs concluded that in well-designed programs, students were equally successful compared to their peers attending traditional school programs (Barbour & Reeves, 2009; Cavanaugh et al., 2009).

Woodworth et al. (2015) conducted a mixed-methods analysis study that included data sets from 158 virtual charter schools from 17 states. The group concluded that learning in charter virtual schools has fallen behind learning conducted in traditional brick-and-mortar schools, as measured by student growth changes in state standardized assessment scores. Thirteen states had negative effect sizes in reading, according to the study's results. In two other states, the differences were not significant. Wisconsin and Georgia were the only two states that had a positive effect size in reading (Woodworth et al., 2015). Hence, Woodworth et al. (2015) recommended that states examine oversight policies and the current progress of existing virtual programs before allowing any further virtual program expansions.

Chingos (2013) believed that using metrics such as standardized test scores or graduation rates to compare virtual schools to traditional schools is very misleading. According to Chingos, these measurements reveal more about the background of the student than about the quality of the school. The information that stakeholders and policymakers need to learn is how well the students attending virtual schools do compared to how they would have done if the virtual school was not an option. Also, according to Chingos, "A credible measure of the effectiveness of a virtual school would compare the achievement growth of students at that school to the performance of students in the schools those students would have attended otherwise" (p. 3). Chingos noted that policymakers are in charge of deciding whether or not to allow virtual schools to exist or to limit the virtual school enrollment growth. The ability of policymakers and parents to evaluate the quality of virtual schools will determine the schools' success or failure (Chingos, 2013).

A phenomenological study was conducted by Marsh et al. (2009) to determine why the parents who had always home schooled their children chose to enroll their children in an online charter school. The researchers collected data for this study through interviews, observations of informational sessions, and document analysis. The study sample group consisted of seven mothers who had at least one child enrolled in the Pennsylvania Virtual Charter School (PAVCS). The researchers prompted the mothers to talk about themselves and their decision for choosing the K12 online curriculum for their child. The mothers responded that the online curriculum was tailored to their children's needs, the program was free, it made sense, and it provided hope. Parents also wanted
the challenging curricula provided through virtual learning to reflect their values. Marsh et al. (2009) concluded that traditional schools need to customize learning for students.

Virtual schools continue to attract students from both ends of the achievement spectrum, allowing struggling students to take the time they need to master the content and advanced students to accelerate their work through self-paced study (Greenway & Vanourek, 2006). Students and their families have chosen virtual schools for many reasons, including the quality of the curriculum, the individualized instruction, flexible scheduling, and an interest in the utilization of technology involved (Greenway & Vanourek, 2006).

Wang, Shannon, and Ross (2013) conducted a study to examine the relationship between students' characteristics, self-regulated learning, technology self-efficacy, and course outcomes in virtual learning settings. Two hundred and fifty-six student participants completed an online survey consisting of demographic information, a course satisfaction questionnaire, a modified motivation strategies learning questionnaire, technology self-efficacy, self-regulated learning, and final grades. Structural equation modeling revealed the relationships among student characteristics, self-regulated learning, technology self-efficacy, and course outcomes. The group concluded that students who had previous online learning experiences tended to gain more effective learning strategies when taking virtual courses. In addition, students with higher levels of motivation in their virtual courses also had increased levels of technology self-efficacy and course satisfaction. These students also had an increase in their final course grades. Based on the study findings, Wang et al. (2013) recommended that students should approach online learning as if they were taking regular classes. They believed that

students must set up a specific place and time to complete their course work. They also concluded that instructors should be familiar with the online platform and environment in order to help students participate fully.

In order to examine the teaching experiences and demographics of K–12 online teachers and in an attempt to provide more online instructional insight to meet the growing demand for virtual learning teachers, Archambault and Crippen (2009) conducted a non-random sample study, which consisted of 596 K–12 teachers in the United States who had taught at least one online course with K–12 students in a state virtual school. The researchers used a questionnaire survey along with open-ended questions to collect data. The respondents reported their desire to learn a different means by which to connect with their students, and they did not demonstrate any constraints of teaching in a traditional manner. The study identified aspects of online teaching that can be overwhelming and may have an effect on the virtual students' learning experience, such as the motivational level of students and the need to keep the students engaged, the amount of courses taught at one time, and the percentage of students who need instruction in each course (Archambault & Crippen, 2009).

Two research lines identified by Roblyer, Davis, Mills, Marshall, and Pape (2008) emerged to help determine a student's success with online learning. These included the characteristics of the student and the learning environment. Roblyer et al. (2008) investigated factors that may have an influence on the participating students' virtual algebra course grades, including the amount of times the learner logged into the LMS, free and reduced lunch status, characteristics in the learning environments, and virtual school individual education plans. For data analysis, a hierarchical linear modeling

technique revealed the influence that the students' characteristics and the use of the LMS had on the students' final course grades. The study described the effect of teacherstudent communication, the ease of utilizing the LMS, and student demographics on final K–12 virtual algebra course grades. Liu and Cavanaugh (2011) concluded that researchers need to take all of these factors into account when determining success in virtual learning.

Student success achieved in online courses correlates with the support received from the local system or school, according to Watson et al. (2015). However, the amount of support the student's enrolling school offers for online courses varies. Some schools provide a computer, a room on the school's campus, and a teacher to serve as a facilitator. At the other end of the spectrum, some schools offer no support for students who are participating in online courses. These students complete their work at home or another off-campus site (Watson et al., 2015).

Lee, Srinivasan, Trail, Lewis, and Lopez (2011) looked at student support, specifically in the context of the course and focusing mainly on guidance provided to students within the course in the areas of instructional, peer, and technical support. One hundred and ten students participating in an online course completed an online survey with 25 items on a 5-point Likert scale and one open-ended question. The students relayed their perceptions of the type of support needed and received in the online course and their level of satisfaction. Correlation analysis revealed that there was a significant relationship between students' perceived support and their overall satisfaction in the online course, as well as a positive association between instructional, peer, and technical support and satisfaction with the online course. There was also a correlation between

final course grades and course satisfaction. In the open-ended question responses, students requested more interaction with the teacher, the need to see the relevance of what is being learned online and the ability to apply it to real practice, and the desire to continue learning at their own pace (Lee et al., 2011). The amount of support a student receives influences the performance of the virtual learner (Lee et al., 2011; Watson et al., 2015).

In an attempt to examine the relationship between academic performance and teacher-student interaction, Hawkins, Graham, Sudweeks, and Barbour (2013) conducted a study based on 2,269 surveys completed from a pool of 46,089 students enrolled in a supplemental, statewide, self-paced asynchronous virtual high school located in Utah. The researchers used Pearson's product-moment correlation coefficient, hierarchical linear modeling (HLM), and hierarchical logistical regression to examine the relationship between the quality and frequency interaction variables with academic performance, as measured by the course completion status and the grade earned in the course. The researchers concluded that the quality and frequency of teacher interaction had a significant impact on student course completion, but not on the grade earned in the course. Based on the study's findings, Hawkins et al. (2013) recommended for teachers to continue maintaining a high level of quality and frequency when interacting with their virtual students, especially those at-risk of dropping out. In addition, teachers need to reach out to students regardless of their progress in the virtual course. The group felt that this interaction may help move students from the non-completion status to the completion status of their virtual courses (Hawkins et al., 2013).

Wallace (2009) examined the impact of technology on education and behavior. The study focused on determining the effectiveness of the use of online learning with gifted school-aged learners. Participants included 690 gifted students, ages 5 to 17, 56.5% female and 43.5% male, drawn from the students enrolled in the Johns Hopkins University Center for Talented Youth virtual education program who submitted virtual course evaluation forms between July 2005 and March 2007. More than 94% of the sample resided in the United States. Data collected for the study included responses to a course evaluation submitted by the students and parents, demographic data of the study participants, and the final course grade. Data included reasons for enrolling, appropriateness of the course for the student, effectiveness of the instruction, and student outcomes as measured by interest and performance upon course completion. The student and parent evaluations and the final grades were data sources, compared by each age group. The participants in the study reported their online learning experience to be effective. The older students found their courses to be more demanding when compared to the rating of the elementary group. Each group reported enrolling for different reasons and the elementary group gave their online teachers a higher satisfactory score when compared to the high school group. These findings suggested that virtual schools may be a potential format for gifted students at the elementary or high school level (Wallace, 2009).

Bolliger and Erichsen (2013) conducted a study to determine if a student's personality type influenced his or her satisfaction with online and blended learning environments. Seventy-two students from two research universities, enrolled in blended and online courses, participated in an online questionnaire and a shorter version of the

Myers-Briggs Type Indicator. Forty-six were in blended courses and 26 were online. The students were primarily K–12 or post-secondary female administrators working on their master's degree. Most of the students who participated reported as being intuitive, introverts, judgers, and feelers. The students reported satisfaction with both styles of learning environments. However, data from this study suggested significant differences based on personality types with certain elements in online and blended learning. The researchers recommended that educators understand and take into account the individual differences when planning and designing the course content and method of delivery. The researchers concluded that personality is not the only factor in determining the reason why a student chooses a type of learning environment (Bolliger & Erichsen, 2013).

Carver and Kosloski (2015) conducted a study to analyze student perceptions of the psychosocial learning environment in career and technical education (CTE) online and traditional courses as an attempt to examine the effectiveness of the psychosocial environment from a student's perspective. They administered surveys to 179 online and 564 face-to-face Washington State high school students enrolled in a CTE course. Overall, the results of the Mann-Whitney U test conducted for the study revealed that there was no significant difference between the virtual and traditional groups of students pertaining to their perceived levels of instructor support, authentic learning, or personal relevance. There was a significant difference in students' perceived levels of interaction and collaboration, active learning, enjoyment, and autonomy. Online learners reported a higher level in active learning and a lower level in enjoyment. Carver and Kosloski (2015) recommended that, based on the lower level in enjoyment experienced by the

virtual learners, it is important to attempt simulations of in-class type strategies with virtual learners.

Virtual learning seems to offer most of the solutions for today's educational pressing issues, including the flexibility and expansion in learning times, personalized learning lessons, and greater cost-effectiveness compared to the traditional classroom setting (Dillon & Tucker, 2011). However, it is unclear as to exactly what constitutes high performance in virtual learning. In order to ensure success in virtual learning and to implement effective virtual programs, it is necessary to collect data, conduct research, provide students with options, and monitor the quality of the instruction and learning (Dillon & Tucker, 2011).

Virtual Program/School Implementation Barriers

Even with the rapid popularity, growth, and innovation possibilities, virtual schools face barriers as they spread across the nation. The most notable barrier is the considerable differences in the quality of K–12 virtual programs. Many of the virtual schools combine the unique qualities of online learning as an instructional model to offer more personalization, rigor, and flexibility. Some are structured similar to a traditional class with a syllabus and set schedules of assignments, but offer the flexibility of where and exactly when to complete the course assignments. Other models take into account the needs of the individual student and can provide a traditional, extended, or accelerated pace of instruction (Tucker, 2007). On the contrary, some systems have established virtual programs that provide unchallenging lessons and little support for students, or not enough information to measure the program's quality. Other barriers include, but are not limited to, high start-up costs, accreditation, access issues, student readiness and retention

issues (Barbour & Reeves, 2009). There should be more research to help inform the types of programs, circumstances, or supports that schools need for a successful virtual program (Tucker, 2007).

Oliver, Osborne, Patel, and Kleiman (2009) have revealed five barries discovered during the implementation of virtual programs: (a) expensive virtual program start-up costs; (b) access issues; (c) the accreditation process for virtual schools; (d) student readiness; and (e) student retention. The high start-up costs included purchasing or developing course content, developing or leasing the method of course content delivery, and designating a program coordinator to handle the administration duties, course design and delivery, and any technical difficulties experienced. Many small or rural schools cannot afford the high virtual program start-up cost nor fund a virtual program coordinator staff position (Oliver et al., 2009).

Ninety-nine percent of public schools in the United States have access to the Internet, even in rural areas (Ross, 2015). However, only 30% of school districts nationwide were meeting the Federal Communications Commission's (FCC) minimum Internet access goal of 100 kilobits per second per student in 2013 (Education Superhighway, 2015; Ross, 2015). Due to these alarming figures, President Obama announced his ConnectED initiative in June 2013, which aimed to equip practically every school in the country with a high-speed broadband connection within 5 years (Ross, 2015). Today, 77% of school districts are meeting the FCC access goal, representing 59% of schools and 53% of students (Education Superhighway, 2015; Ross, 2015). Nonetheless, despite this recent progress, 23% of school districts are still not meeting the minimum Internet broadband connection speeds needed for students to access the curriculum and educational software programs online, leaving 21 million students without proper connectivity (Education Superhighway, 2015; Ross, 2015). Systems are reporting having to ration students' Internet time due to not having the broadband needed for students, with affordability noted as the chief roadblock for systems. Access is particularly difficult in rural areas, where 21% of schools lack fiber connections compared with 5% of schools in urban areas. Advocates say the tech movement is further exacerbating the already-large achievement gap; in education circles, this phenomenon is better known as the "digital divide" (Education Superhighway, 2015; Ross, 2015). Discrepancies exist among schools and across districts, but they also spread to individual students, many of whom live in homes without sufficient connectivity. Any student without access (i.e., namely connectivity that is sufficiently fast) inevitably falls behind (Education Superhighway, 2015; Ross, 2015).

Horrigan and Duggan (2015) also confirmed the "digital divide" across socioeconomic and demographic lines. The results of this study indicated that, although 67% of households in the United States have access to the Internet, only 55% of rural households and 41% of poverty-stricken households have access. Forty-three percent of 2,001 non-broadband Internet users surveyed reported cost as their most important reason for not having the service (Horrigan & Duggan, 2015). The lack of Internet access at home would severely limit a virtual learner's ability to work on virtual courses outside of the school day (Oliver et al., 2009).

Virtual schools also need accreditation by regional agencies or state approval before post-secondary institutions will consider accepting credits earned in a virtual

environment. Accreditation reassures parents and other stakeholders that virtual schools are comparable to traditional schools (Blomeyer & Cavanaugh, 2007).

Successful virtual learners possess an ability to work independently and are able to accept greater responsibility for their learning (Archambault et al., 2013). This type of learner displays student readiness characteristics and is more persistent in completing online courses (Archambault et al., 2013). It is critical for online learning content and experiences to focus on the developmental stage of the student (Jegede, Taplin, Fan, Chan, & Yum, 1999). This will allow students to remain engaged in the virtual curriculum. Retention improves if schools offer a facilitator, other than the online teacher, to provide support services to the virtual students (Irvin, Hannum, Farmer, de la Varre, & Keane, 2009). Such support services may include offering technical assistance for technical issues students may face in online courses. Research has shown that technical problems are the leading component in creating challenges and determining student satisfaction in online learning environments (Lee et al., 2011). Students who were familiar with using virtual learning technologies perceived significantly fewer barriers as opposed to those who were not familiar with virtual leaning technologies (Lee et al., 2011; Muilenburg & Berg, 2005).

O'Neill and Sai (2014) examined students' preferences to enroll in traditional face-to-face post-secondary courses versus online courses. The researchers hypothesized that, with the cost of education continuing to rise, it would be tempting for institutions to replace face-to-face courses with online courses. O'Neill and Sai surveyed 48 post-secondary students taking a traditional Introductory Educational Psychology course to determine why they had chosen the face-to-face course over the virtual course. Fifty-

eight percent of the students believed they would learn more by taking a face-to-face course and 52% indicated their dislike of virtual courses. Three students believed that the face-to-face course would require less effort. The results from the study revealed that administrators and teachers could not assume digital native students will automatically be attracted to online courses. The researchers stated the importance of gaining student perspectives when determining course delivery methods (O'Neill & Sai, 2014).

The International Association for K–12 Online Learning (iNACOL) published *National Standards for Quality Online Programs* to provide a set of quality standards and guidelines for online program "leadership, instruction, content, support services, and evaluation" (Pape & Wicks, 2009, p. 4). The standards and guidelines lay the foundation for a program including its mission, goals, and objectives; how the program operates; standards for online teaching and learning, and standards needed for online support services (Pape & Wicks, 2009). However, according to Dillon and Tucker (2011), virtual education still lacks a set of common quality outcome measures accepted by all. The two authors also confirmed that there is limited research on K–12 virtual learning as a whole. They determined that there is very little available data on the student outcomes from virtual learning. Hence, accountability and better monitoring methods need to be put into place and it is important to determine what measures to use and which data to collect, as well as when and how often to collect data (Dillon & Tucker, 2011).

Currently, online programs or virtual schools most often count the total of course enrollments and not the unduplicated student count. One student can enroll in multiple courses, which would account for multiple enrollments, causing a dilemma in determining the exact percentage of students participating in virtual programs (Watson et

al., 2009). Some systems do not distinguish between online or traditional courses and traditional instructional seat time, and rigid attendance policies do not fit into the virtual learning model (Dillon & Tucker, 2011). Systems need to track the quality of the program by monitoring course participation, unduplicated student counts, assessment scores, and grades to help determine outcome measurements. In addition, stakeholders need to begin collecting data on the impact of the curriculum, teacher practices, and materials on virtual learning (Dillon & Tucker, 2011).

Created in 2010, the Digital Learning Council comprises more than 50 leaders from business, government, philanthropy, technology, education, and think tanks (ExcelinEd, 2010). The council is responsible for developing the roadmap of reform for local, state, and federal lawmakers and policymakers. The members of the Digital Learning Council share a sense of extreme urgency about the need to bring digital learning to every school, every classroom, and every child (ExcelinEd, 2010). The Digital Learning Council recommended the elimination of any restrictions limiting students' access to virtual education (Dillon & Tucker, 2011; ExcelinEd, 2010). The council encourages students to choose among multiple virtual vendors and discourages limitations on class size and seat time for virtual classrooms. The council concluded that results instead of inputs should form the basis of judgments about schools (Dillon & Tucker, 2011; ExcelinEd, 2010).

As Samuelsohn (2015) noted, the rapid growth of virtual schools has brought some concern and backlash from legislators, teachers, unions, and the National Collegiate Athletic Association (NCAA). They complained about the large gap in the quality of federal and state-funded research into the benefits of online education, compared with the

existing knowledge on traditional brick-and-mortar schools (Samuelsohn, 2015). As a result, in 2012, Massachusetts passed a law limiting the growth of virtual schools to allow only three new virtual schools over the next 3 years, while also limiting the quantity of students who could enroll in the program. Illinois placed a 3-year moratorium on new virtual charter schools outside of Chicago until 2016. The Pennsylvania Department of Education rejected 14 applications for new-full time virtual schools within a 2-year period. Idaho had planned to mandate two virtual classes as a requirement for high school in 2012, but the Idaho State Board of Education put a hold on the plan (Samuelsohn, 2015).

Barth (2013) found that data collection involving virtual learning was severely lacking. The author noted that it seemed hard for many systems to keep clear, concise data on students, especially when they move back and forth between virtual providers and traditional schools. Queen and Lewis (2011) determined, of the districts that offered online learning to their students, only 70% monitored student attendance, 56% monitored students' online login activity, and 49% tracked the time that students actually spent online. Barth (2013) believed that states and districts need better structures and more staff in place to monitor online students' progression and completion of their virtual courses. States and districts need to also measure the overall effect of the online programs and hold the programs accountable (Barth, 2013). Toppin and Toppin (2016) noted that the growth and practice of virtual learning has by far out-paced the production of valid and reliable research. Hence, there is a need for the current research study in order to add to the limited available existing literature and to provide data on the strategies used to overcome the virtual program implementation barriers.

Dillon and Tucker (2011) noted that, during the past several decades, schools in the United States have used technology as a resource to help solve many of the hot topic issues in K–12 learning, and in a cost-effective manner. Until there is more focus on determining the quality of virtual learning, instead of the expansion of virtual learning, then it will not be a main leader in educational reform (Dillon & Tucker, 2011).

Conceptual Framework for the Study

Virtual Program/School as an Educational Alternative

Schools continuously search for methods to educate all students as education continues to be the conduit society uses to improve future generations (Franklin, 1992). One strategy that schools are employing to help increase student access and achievement in Georgia is the implementation of a virtual education alternative program, specifically GaVS (Barge, n.d.; Ingram, 2016; Teague, 2013).

A virtual school is an example of an educational alternative school, which is growing rapidly (Watson & Kalmon, 2005). Alternative schools refer to programs that provide a different structure and ideology than traditional schools (Franklin, 1992). The delivery methods for alternative programs consist of vocational education, compensatory education, and/or online learning (Trickett, McConahay, Phillips, & Ginter, 1985). The main characteristics of alternative schools include supportive environment, smaller size, individualized curriculum, flexible structure, alternative choices, specific services, family support, consistent evaluation, and well-defined standards and procedures (Franklin, 1992). The establishment of alternative schools emerged due to two educational movements: a reactionary movement in protest against the impersonal structure found in

public schools, and the educational reform movement designed to improve achievement of all students (Franklin, 1992).

The alternative structures and ideologies help many students find educational success (Franklin, 1992). As other states have successfully implemented virtual alternative educational programs (Greenway & Vanourek, 2006), the state of Georgia has also implemented a virtual alternative educational program, GaVS (GaDOE, 2012; Ingram, 2016). GaVS served as the basis for this study.

Virtual Learning and School Leadership

Lemke and Coughlin (1998) developed *The Seven Dimensions for Gauging Progress* as a framework for increasing the learning levels of students through the use of technology. The authors noted that the process for effective technology integration is complex, requiring new ways of thinking, teaching, and learning for all of those involved. Systems capacity, the fourth dimension detailed in the framework, includes having a vision and commitment for incorporating the technology in the schools and system, leadership and planning, ensuring capacity, and systems thinking. It is important to involve building leaders in all of these tasks if the process of teaching and learning is to incorporate and effectively use technology (Lemke & Coughlin, 1998). Effective technology leadership is a critical component in guiding the teaching-learning process necessary in preparing the students of today with the relevant knowledge and necessary skills to become productive citizens of the 21st century (International Society for Technology in Education [ISTE], 2002).

The ISTE and other national partners created six broad standards. These became known as the National Educational Technology Standards for Administrators [NETS-A]

(ISTE, 2002). The standards defined the important role played by administrators in the successful integration of technology into the teaching and learning process. The standards included vision and leadership; teaching and learning; productivity and professional practice; management, support, and operations; assessment and evaluation; and legal, social, and ethical issues. Effective building administrators needed to be proficient in using technology and understanding how it impacts the student, teacher, classroom, and school (ISTE, 2002). With technology changing at such a rapid pace, virtual schools need tech-savvy district and school leaders to move them forward. The NETS-A standards have evolved over the last few years to become visionary leadership; digital age learning culture; excellence in professional practice; systemic improvement; and digital citizenship (ISTE, 2009). The standards serve as a guide for administrators to learn how to support the digital age of learning, assist in creating environments rich in technology, and lead the educational landscape transformation (ISTE, 2009).

Administrators are important to virtual learning as they must implement program decisions based on student achievement and student needs while under the pressures of federal, state, and local accountability and fiduciary policies. Leadership in such circumstances may at times require "non-traditional" solutions (NĂSTASE & ROJA, 2013; Waters et al., 2003), also necessitating a second-order change or adaptive leadership (Heifetz, 1994; Heifetz & Linsky, 2002). Leaders need to utilize the adaptive leadership framework to diagnose, interrupt, and innovate using non-traditional approaches to assist in increasing student achievement (Heifetz, 1994; Heifetz & Linsky, 2002). The study used the concept of school leadership and the alternative virtual program framework to analyze the participants' implementation decisions and practices

and the perceived benefits in the implementation process. Examining the influences and perceptions of school administrators is crucial, as virtual learning becomes more essential in secondary education reform (Picciano, Seaman, & Day, 2011).

Cowley, Meehan, and Whittaker (2002) examined how rural students worked with their high school administrators or school counselors to gain information on postsecondary options and college entrance requirements. Davis and Niederhauser (2005) revealed the important role high school counselors play in the role of successful implementation of virtual learning. The researchers showed the influence of school counselors on students' course schedules, how they monitor the progress of the students participating in virtual courses, and the support the school counselors provide if students encounter problems. Davis and Niederhauser (2005) also noted the importance of continuous communication between the administrator and the school counselor as they work with students taking virtual courses.

Despite the increasing demand for virtual options, there is limited availability of literature and models of best practice that discuss virtual learning and the implementation of virtual programs (Cavanuagh, 2009). Cavanaugh, Maor, and McCarthy (2014) recognized that an extensive and sound literature based on school administration and virtual learning currently does not exist. The authors acknowledged that until a more robust research base exists to inform practice, system and school level administrators, virtual program coordinators, virtual program companies, and policymakers will have to continue to implement virtual learning environments without much direction and guidance from the scholarly literature. There is an evident need for additional research in this area (Cavanaugh et al., 2014).

Chapter Summary

In review of the literature provided, the development of virtual learning in the United States has been studied through multiple perspectives including Barbour and Reeves (2009), Barth (2013), Cavanaugh et al. (2009), Cavanaugh et al. (2014), Clark (2008), Dillon and Tucker (2011), LaPlante (2007), LaPrade et al. (2011), and Watson et al. (2015). Groups such as the Evergreen Education Group, the Sloan Consortium, iNACOL, and ISTE have examined an expansion of virtual education in the K–12 system thoroughly. Given the theoretical frameworks discussed as related to the experiences of the professional educators who implemented GaVS, it is evident that there is a need for a completed study.

The researcher chronicled the raging debate for and against the rise of virtual schools in Chapter 2. On the one hand, leading advocates of virtual learning contend that virtual learning will help increase student achievement and graduation rates (Brenner, 2007). On the other hand, opponents assert that virtual schools must demonstrate the same accountability standards and measurements as traditional schools, and that there should be better monitoring methods in place (Barth, 2013; Dillon & Tucker, 2011).

Inherent in the literature is the message that the evolution of education and the rise of virtual schools is now an unstoppable phenomenon that schools need to harness for the benefit of students, as well as the country's education system (Dillon & Tucker, 2011; Samuelsohn, 2015). The literature has demonstrated the progress made in virtual education, though this is still not enough to make it a more viable educational option for all students (Barth, 2013; Dillon & Tucker, 2011; Samuelsohn, 2015). To that end, this study sought to explore the journey of the professional educators as they implemented the GaVS program.

In Chapter 3, the researcher discussed the methodology used to address the research questions posed for this study.

Chapter III

METHODOLOGY

In today's economic climate, we expect students to compete globally (National Commission on Excellence in Education, 1983). Legislators are very mindful of the retention rates of college students, the dropout rates of high school students, and the increasingly lengthy time it takes students to receive a college diploma (USDOE, 2009, 2011a, 2011b). Beginning with the open letter to the American citizens in April of 1983, "A Nation at Risk: The Imperative for Educational Reform," there have been many national and state initiatives implemented to increase student achievement and graduation rates including Georgia's more recent RT3 four-hundred-million-dollar grant program (CCSS Initiative, 2012; Executive Office of the President, 2015; National Commission on Excellence in Education, 1983; USDOE, 2009, 2011a, 2011b). One strategy that schools are employing to increase student access and achievement is the implementation of an online educational program, specifically GaVS (Barge, n.d.; Ingram, 2016; Teague, 2013). School districts, especially rural districts with limited resources, have been restricted in their ability to implement GaVS effectively (Hall, 2015; Tankersley, 2006). The purpose of this study was to determine how an identified rural Georgia school district with limited resources implemented the GaVS program with the intent to increase student access and achievement by utilizing strategies to mitigate significant implementation barriers. The researcher intends for the results of the study to be informative.

This chapter describes the purpose of the study, the research questions, and the design of the study. The chapter contains information pertaining to participants, setting, data collection procedures, and data analysis.

Research Questions

The research questions below guided this study:

RQ1: What are the experiences of the professional educators who implemented the GaVS program in a rural Georgia school district and what were the lessons learned during the GaVS program implementation process?

RQ2: What implementation barriers did the professional educators in a rural Georgia school district experience while implementing the GaVS program with the intent to increase student access and achievement?

RQ3: What strategies to mitigate implementation barriers did the professional educators in a rural Georgia school district use while implementing the GaVS program with the intent to increase student access and achievement?

Research Design

Qualitative research involves participants interacting with and interpreting the environment and world around them (Merriam, 2002; Patton, 2002). Patton (2002) believed that "multiple realities [are] constructed by people and the implications of those constructions for their lives and interactions with others" (p. 96). Patton's philosophy mirrors qualitative methodology; understanding the perspective of others requires viewing the situation through their lens. Qualitative methods generally generate words as data for analysis and aim to answer questions about the 'what,' 'why,' or 'how' of a phenomenon (McCusker & Gunaydin, 2015). Using a basic

qualitative interpretive research design for this study helped the researcher understand the perceptions of the professional educators who implemented the GaVS program (Merriam, 2002) by allowing their experiences to emerge through their own voices (Maxwell, 2013). This qualitative research method is the best method to use when working with perception data and is the most common form of research used in an educational setting (Merriam, 2002). Good rapport, establishing trust, and empathetic listening are important qualities to utilize when conducting a qualitative research design (Lunenburg & Irby, 2008; Patton, 2002).

Leadership may at times require "non-traditional" solutions (Waters et al., 2003), which leaders can address with a second-order change using adaptive leadership practices (Heifetz, 1994; Heifetz & Linsky, 2002; Waters & Grubb, 2004). The researcher used this concept of leadership and the alternative virtual program framework in this basic interpretive qualitative study to analyze the participants' implementation of leadership decisions and practices, and the perceived benefits of the implementation process.

Setting

The research site for this study was a public high school in the rural SCSD located in South Georgia. Bluestone and deZeeuw (2016) noted, the SCSD is located in one of the 124 rural counties in Georgia. This rural county experienced the second largest total of job losses within the 124 rural region from 2012 to 2014, losing 772 jobs and from 2007 to 2014, the county had the largest decline, losing 3,004 jobs (Bluestone & de Zeeuw, 2016). The rural SCSD spans a total of 530 square miles (Duggan & Bolton, 1921) and had a total enrollment of 5,752 in grades Pre-K-12 at the end of the 2015–16 school year (GOSA, 2016b). There are fewer than 11 students per square mile in this rural school district (GOSA, 2016a). The district's high school had an active enrollment of approximately 1,414 students in grades 9-12 at the end of the 2015–16 school (GOSA, 2016b; SHS, 2016). The student population comprised of 53% females and 47% males, consisting of 60% white, 33% black, 4% Hispanic, and 3% Asian, Indian, and mixed. In 2015–16, 77% percent of the SCSD students were considered economically disadvantaged based on the free and reduced meal percentage and 63% at SHS (GOSA, 2016b; SHS, 2016). SHS's graduation rate in 2015–16 was 93.7% (GOSA, 2016b). SHS retained 100 traditional students at the end of the 2014–15 school year due to an insufficient amount of high school credits earned for promotion to the next grade level (GOSA, 2015). One principal, four assistant principals, and 89 teachers make up a large percentage of the faculty at SHS.

During the 2015–16 school year, 27 unduplicated SHS students enrolled into 105 GaVS courses (GaVS, 2016). During the 2016 spring semester, 138 out of 180 systems in Georgia utilized GaVS as an option for students. SHS ranked 116 out of 138 as utilizing the highest amount of GaVS courses for its students, and ranked high in comparison to the volume of GaVS courses utilized by other systems in South Georgia that have implemented the GaVS program. More than 55% of the 138 systems only utilized 20 or fewer GaVS courses during the 2016 spring semester with 65% of these only using 10 or fewer (GaVS, 2016).

The professional educators implemented the GaVS program at SHS with the intent to increase student access and achievement. They evaluated the program's effectiveness by reviewing the high school's data to compare graduation rates, grade point averages (GPAs), course completions, passage rates, and state standardized

assessment scores of students participating in the GaVS program to those of the remaining traditional high school students.

Participant Selection

The researcher used purposeful sampling strategies to identify participants for this study (Creswell, 2007). Purposeful sampling is suitable when there are a small quantity of participants or sites involved in a study (Maxwell, 2013). This strategy allowed the selection of information-rich individuals. Thus, the researcher recruited the professional educators who worked together to implement the GaVS program at SHS to participate in this study. These participants included two high school administrators (a principal and an assistant principal), two school counselors, a virtual program technician, and a GaDOE GaVS support specialist. Their individual voices were critical to the study because they were familiar with the program, the administrative structure, and the procedures of the program.

School administrators play a significant role in online learning as they act as instructional leaders, change agents, and technology leaders in their school. The SHS principal, who helped implement the GaVS program at SHS, has worked at the high school since 1992 in the role of a teacher, an assistant principal, and, for the last 2 years, as the high school's principal. She has served a total of 25 years in public education. The assistant principal participating in the study has worked at SHS since 2000. She has served in the role of a teacher and as a high school graduation coach before SHS named her as an assistant principal. She has 25 years of service in public education and has served in the administrative role for the last 6 years. As school leaders and professional

educators, these participants held perspectives on GaVS program implementation, enforcement, and assessment that were valuable to the study's findings (Dzwonek, 2007).

The school counselors serve as the program liaisons between the GaVS program and the students and their parents/guardians. Davis and Niederhauser (2005) stated that the key role of school counselors in online learning involves encouraging students to register for specific courses based on the needs of the student. The SHS counselors selected to participate in the study have both worked in the SCSD for over 20 years. They worked as teachers during the early part of their careers and as school counselors for the majority of their years of service. Because the school counselors worked directly with the students enrolled in the virtual program, their perceptions and opinions were appropriate to this study. Besides describing the barriers experienced during the implementation of the GaVS program and the strategies used to overcome the barriers, the counselors were able to discuss student progress, including motivation levels and grades. They were also able to provide essential information related to college preparedness, due to their understanding of the college acceptance process.

The virtual program technician and the GaDOE GaVS support specialist both provided rich data as participants of the study. The virtual program technician provides program and computer assistance to the SHS virtual students. The technician also coordinates and collaborates with the GaDOE GaVS support specialist if technology or program issues arise that would hinder students from progressing in their virtual courses. The virtual program technician has been with the school system since 2002. After completing an Education Specialist degree in Instructional Technology, the participant began serving as an elementary virtual teacher in 2012 and in the role of a virtual

program technician since 2015. The GaDOE GaVS support specialist worked collaboratively with the SHS professional educators to implement the GaVS program at SHS. The GaDOE GaVS support specialist is responsible for overseeing the GaDOE GaVS enrollment and withdrawal process for all participating schools in Georgia and ensuring program compliance, as well as determining any implementation barriers and the effectiveness of the program.

Instrumentation and Data Collection

The researcher is the main instrument in qualitative studies (Merriam, 2002) and the study's credibility depends on the researcher's rigor and skill to conduct the investigation (McCusker & Gunaydin, 2015; Patton, 2002). The strength of a basic interpretive study is the rich descriptions produced from the collection of data (Merriam, 2002) and qualitative research generally includes three types of data collection (Patton, 2002). The researcher used the following three sources to collect data for this study: Seidman's (2006) three-series interviews, observations, and document review. The data collected consisted of a descriptive narrative of the participants, activities, and their context (Merriam, 2002). The data collected from the participants helped relay in detail the perceptions and the barriers experienced by the professional educators during the implementation of the GaVS program and the strategies used to overcome the barriers.

The researcher's experience with virtual learning options provided the background that contributed to the understanding of the circumstance for selecting this topic for a study. Merriam (2002) and Patton (2002) stated that, in qualitative studies, a researcher's experiences and beliefs influence their perceptions of the data collected.

I was educated in a traditional brick-and-mortar school setting during my K–12 years and for my undergraduate degree. I participated in some virtual and blended courses during my master's and doctoral programs. My youngest child is currently being educated in a regular brick-and-mortar public school setting. My two oldest children have completed online college courses, but have never enrolled in a GaVS program or completed a GaVS course.

My background includes coursework in educational leadership and on-the-job training in K–12 administration responsibilities. These may have had an effect on my influence towards the analysis of the data. I have a Master's in School Counseling, and I have overseen the system's school counseling and student services departments for the past 5 years. I have helped extensively with the system's data collection for state reporting for the past 3 years. My experience in these areas may have influenced my perceptions and interpretations of the participant's responses.

My role as the researcher was unique as it enhanced trust and rapport with participants. There was continuous collaboration with the SCSD and work performed in the Student Services department at the district level throughout the research study. My professional and personal status provided positive opportunities throughout the data collection and analysis sections of the study, but it was necessary to acknowledge and keep any biases and subjectivities in check throughout the research and analysis process.

Interviews

Upon receiving Valdosta State University's (VSU) Institutional Review Board's (IRB) approval (see Appendix C), the researcher conducted semi-structured, in-depth interviews with open-ended questions with the participants using Seidman's (2006) three-

interview series. A copy of the Participant Consent Agreement approved by VSU's IRB appears in Appendix A of this study. Such interviews enabled the collection of direct quotations from the participants regarding their experiences during the implementation of the GaVS program at SHS. The first interview allowed the participants to focus on their professional and relevant personal history up until the present time. The second interview's purpose focused on the details of the participants' experiences in the topic area of study. In the third interview, the participants reflected on the meaning of their experiences (Seidman, 2006). The researcher conducted 18 interviews, with each interview scheduled to last 90 minutes (Seidman, 2006), or until the interviewees fully expressed their perceptions. This model of interviewing was useful for gaining a deeper understanding of any barriers experienced during the implementation of the GaVS program in the rural Georgia school district and strategies developed to overcome the barriers (Seidman, 2006). The researcher conducted the semi-structured interviews on dates and times convenient to the participants. Based on Seidman's (2006) interview schedule recommendation, the interviews took place 3 to 5 days apart.

The open-ended questions used in the interview correlated with previous research to gain knowledge about the participants' attitudes toward the program implementation. The research process included the audio recording and transcription of the interviews. The researcher used in-depth qualitative interviewing to gain a deeper understanding of the professional educators' perceptions in relation to the program implementation and the intent to increase student access and achievement. The researcher took memos during the interview to assist with the analysis of the data. The researcher conducted interviews until continuing the interview process produced no new information. The researcher

conducted the semi-structured interviews in the offices of the participants of the study to add to the comfort level of the participants during the interviews, with the exception of the GaDOE GaVS support specialist who responded to interview questions by phone. The researcher prepared guiding open-ended questions for each participant prior to the interviews in order to assist in framing the interview and to create a climate of trust. This format allowed the interviewees' experiences, and not my assumptions, to guide the interviews. Preparing questions ahead of time allowed the participants to have a sense of comfort knowing that there would be a certain structure to the interview. Participants knew what to expect, while also allowing the discussion to develop based on answers to the open-ended questions. Appendix B contains a list of the interview questions used as a guide for the participants' interviews. Each participant reviewed her transcripts for accuracy.

Observation

The researcher also observed the participants in their roles to help gain a better understanding of their implementation of the GaVS program. Through observation, the researcher could directly view the actions and interactions of the participants. The participants collaborated in the scheduling of observation times. The observations assisted in the researcher being able to describe the setting, behavior, and events of the study (Maxwell, 2013).

Document Review

Finally, the document review included an analysis of organizational records (Patton, 2002). The organizational records consisted of items such as the SHS's GaVS program course informational materials, enrollment data, course access and completion

data, school and program demographics, and school and program achievement data. The researcher reviewed all documents and records relevant to the implementation of the program. The examination of this information was to confirm or refute the interview data received from the interview participants.

Data Analysis

Data analysis is a process of interpreting data for meaning as perceived by the participants (Patton, 2002). According to Maxwell (2013), researchers have three main groups of analytic options: "memos, categorizing strategies [such as coding and thematic analysis] and connecting strategies [such as narrative analysis]" (p. 105). The researcher utilized all three options in the study's data analysis.

The researcher made use of memos throughout the data analysis process to track thoughts, biases, and to bridge ideas together. Maxwell (2013) suggested that the researcher should listen to the interview recordings several times before transcription occurs as a way of reflecting on the data before having to process the information. He believes that the researcher should take notes or memos throughout the process of listening to the interview recordings to retrieve information related to themes that may emerge. The researcher reviewed the recordings immediately following each interview. The researcher sent each audio recording via email to a professional transcription service company after the completion of each interview. The service returned the transcriptions to the researcher via email within a 1 to 2 day period. After retrieval of the finished transcriptions and the completion of the member checking process, the data analysis process began.

In using categorizing strategies, the researcher analyzed data to identify codes, categories and themes to help make sense and gain new understanding of the phenomenon under study (Patton, 2002). Coding is an essential qualitative strategy that helps to make sense of the collected data, and it helps to arrange the data into categories, which facilitate the development of theoretical concepts (Patton, 2002). Coding allows the researcher to fracture and reorganize data based on differences and similarities (Maxwell, 2013). First, the researcher used open coding to identify distinct concepts and categories in the data. This formed the basic units of the analysis. The data were broken down to master headings or first-level concepts, and subheadings or second-level categories (Merriam, 2002). Second, the researcher used axial coding to confirm that the concepts and categories accurately represent the responses from the interviews and to explore the relationships between the concepts and categories (Merriam, 2002). Finally, the researcher used selective coding to integrate the categories to form themes (Merriam, 2002). Analysis of the data continued until the researcher was not able to develop any new categories or themes. The final step of the data analysis process included focusing on connecting strategies that examined relationships between the categories created (Maxwell, 2013). Connecting strategies are based on the connections between parts "...rather than similarities and differences" (Maxwell, 2013, p. 106). The researcher used the constant comparative analysis methodology to compare the findings from the documents, the observation notes, and the interview transcripts throughout the data analysis process (Glaser & Strauss, 1967).

The researcher avoided allowing personal experiences to contaminate the data during the data analysis phase of the study. A peer review of the analytical procedures

helped to rule out any projected biases or subjectivities. The researcher compiled the findings into a report so that it was possible to acquire an overall understanding of the professional educators' perceptions of the GaVS program implementation. The final report includes tables and narratives with contextual descriptions and direct quotes from the participants. The results of the analysis allow for a better understanding of the professional educators' experiences and the perceptions of the barriers experienced during the implementation of the program, and the strategies used to overcome the barriers.

Issues of Trustworthiness

Validity

According to Patton (2002), qualitative researchers need to be mindful and concerned with validity, transferability, and dependability. The trustworthiness of a study depends on all three factors being in place (Patton, 2002). Research validity questions whether the findings are a true reflection of reality (Merriam & Simpson, 2000). The researcher evaluated potential biases or subjectivities throughout the study. The literature review provided the reader with an increased understanding of existing literature in the area of virtual learning and the professional educators' perceptions of the virtual program implementation, thereby producing a method to inform the reader if bias appears within the findings.

Maxwell (2013) referred to trustworthiness as how accurately the recorded research conveys the participant's intent. Lincoln and Guba (2005) proposed four criteria for evaluating qualitative findings and ensuring trustworthiness: credibility, transferability, dependability, and confirmability.

Credibility

Research credibility is the assessment of the believability of the research findings from the perspective of the study participants (Lincoln & Guba, 2005). The researcher employed the following strategies to enhance the credibility of this study: triangulation, respondent validation or member checks, and rich data.

Triangulation

Triangulation is an approach utilizing multiple data sources, methods, and informants to validate research findings (Kuzel & Like, 1991). This study utilized three sources of data (i.e., interviews, observations, document review) for triangulation. The researcher conducted interviews with the professional educators who implemented GaVS at SHS, observed the study participants in their role at SHS, and conducted a review of the GaVS program documents and data. Triangulation allowed the researcher to search for common themes and to determine if discrepancies existed. In addition, the researcher compared the data collected from the participants.

Member Checking

The participants reviewed their responses after transcription to ensure accuracy. Maxwell (2013) defined this as respondent validation or member checking. This is the best way to clear up any misinterpretations or misunderstandings and to identify any biases the researcher may have towards the phenomenon under investigation. The researcher employed member checking after transcription to give participants the opportunity to read, clarify, and edit the transcribed statements. This allowed for further assurance of the validity of the study. In addition, the chair of my research committee reviewed analytical codes, categories, and themes to enhance respondent validation and member checks.

Rich Data

Kuzel and Like (1991) defined rich data as a detailed description of the study's phenomenon. The researcher provided rich contextual descriptions to enhance the credibility of this study. This included the researcher's interpretation of the description in addition to the observed processes and context. The study contains a thorough account of the methods and procedures followed during the data collection process (Kuzel & Like, 1991). Maxwell (2013) described rich data as "...data that are detailed and varied enough that they provide a full and revealing picture of what is going on" (p. 126). Rich data for this study consisted of verbatim transcripts of the participants' interviews and detailed, descriptive notes of specific events gathered during the observations of the participants. Additionally, the researcher included a statement in the study that reveals the researcher's perspectives and possible biases influencing the study (Maxwell, 2013).

Reflection and Reflexivity

Reflection and reflexivity occurs while conducting interviews, which helps with arising subjectivities (Maxwell, 2013). The researcher designed specific questions for the interviewees due to an awareness of misperceptions through reflexivity, which helps to inform and clarify the interviewer's comprehension and understanding of the outcomes (Maxwell, 2013). The researcher monitored the open-ended questions asked during the interview to ensure they were not leading or directional, which would assist with reactivity. Reflexive research journaling and memos were used to record the details of how the interviewer may have influenced the results of the interview. These helped to sensitize the interviewer to any subjectivities and prejudices while also informing of the impact any influences may have on the credibility of the research outcomes. These

recordings also provided a documented first-hand account of any interviewer bias that may have influenced the findings in a negative way. The utilization of all these strategies helped to assure the study's credibility and trustworthiness (Maxwell, 2013).

The researcher continued to develop an ongoing relationship with the participants to enhance research credibility. This allowed trust and familiarity to continue throughout the study (Lincoln & Guba, 2005). The measures taken to ensure credibility of this study also help to ensure dependability (Lincoln & Guba, 2005).

Transferability

Transferability refers to the level of similarities between the situation of the research and the reader's situation (Lincoln & Guba, 2005). This reasonably enables individuals to consider the possibility of transferring the results to other people, places, or situations. In contextualizing the details obtained during the interviews and observations conducted for the study, a person may determine if transfer is a possibility (Lincoln & Guba, 2005).

Dependability

Dependability is the researcher's ability to account for the changing circumstances and contexts fundamental to qualitative research (Lincoln & Guba, 2005). There was limited dependability in this study because it involved a specific frame of time. Circumstances beyond my control may have changed with the passage of time as people may have forgotten or recalled events differently.

Reliability, on the other hand, refers to the repeatability of findings (Merriam & Simpson, 2000). Because researchers bring varying experiences and backgrounds which influence the interpretation of data, replicated findings may not occur in qualitative

studies (Merriam & Simpson, 2000). The findings were consistent with the emerging data and did not discredit the study (Merriam & Simpson, 2000).

Alternating the research design as new findings emerged during the collection of data helped to enhance dependability. Confirmability is analogous to objectivity and refers to the ability of others to corroborate the research findings. The researcher conducted a data audit to rule out areas of bias in order to enhance confirmability (Lincoln & Guba, 2005).

Ethical Considerations

Before the data collection process began, the researcher submitted an application to VSU's IRB requesting approval for the study. The researcher identified any documents utilized for the purpose of the study ahead of time and the IRB granted permission before the use of the documents. The researcher revealed purpose of the study to the participants and outlined the descriptive analysis of the study. The researcher thoroughly clarified the selection of the participants and the setting of the study, and fully informed them of its intent and significance. The researcher read the consent statement to all interviewees requesting agreement to participate before each interview and observation process began. Participation in the study was voluntary and participants could terminate their participation at any point during the study. The study's design posed minimal risks to the participants since they were aware of the option of terminating their involvement in the study at any time, as detailed in the consent statement revealed to the participants. The researcher used discreet pseudonyms to protect the identity of the participants in any written, recorded, or transcribed documents to enhance confidentiality. The reviewer audio recorded the interviews and then sent the
audio files to a professional service for transcription. The researcher used the assigned pseudonyms to link the transcribed interviews and coding data to protect the participants' confidentiality. The researcher will maintain the confidentiality of the data in a locked filing cabinet located in the researcher's district office for a minimum of 3 years at which time a professional shredding service will shred the collected data. Only the researcher and dissertation committee have access to the research data. The participating school district will receive a final report of this study.

Chapter Summary

Chapter 3 provided detailed descriptions of the basic interpretive research design, research setting, sampling procedures, and data collection and analysis. In addition, the chapter presented detailed validity measures to enhance credibility, trustworthiness, and dependability of the study. Finally, the chapter also presented research ethical issues. These included trustworthiness of the study and any potential biases arising during the study. Chapter 4 presents the results of the study, including an analysis of the qualitative data collected by the researcher. Chapter 5 provides a discussion of the conclusions and implications of the findings, as well as future research recommendations.

Chapter IV

RESULTS

The purpose of this basic interpretive qualitative research study was to determine how a rural Georgia school district with limited resources implemented the GaVS program with the intent of increasing student access and achievement. The researcher conducted interviews primarily face-to-face with the participants, except for one participant who participated in the interviews by phone. The researcher used an interview protocol to allow for flexible questioning and provide some standard structure during the course of each interview. The researcher often asked additional questions or probes for elaboration or clarification of items and invited the participants to review their transcripts for accuracy. The findings of the study addressed the following research question:

RQ1: What are the experiences of the professional educators who implemented the GaVS program in a rural Georgia school district and what were the lessons learned during the GaVS program implementation process?

RQ2: What implementation barriers did the professional educators in a rural Georgia school district experience by while implementing the GaVS program with the intent to increase student access and achievement?

RQ3: What strategies to mitigate implementation barriers did the professional educators in a rural Georgia school district use while implementing the GaVS program with the intent to increase student access and achievement?

The researcher conducted the data collection and analysis process of this research over a period of 3 months, using the purposeful sampling procedure to select one school principal, one assistant principal, two school counselors, one virtual program technician, and one GaDOE GaVS support specialist to participate in this study. The basis of the selection of all participants was their involvement in the implementation of the virtual learning program at one identified high school in the SCSD.

Document analysis occurred before and throughout the interviews. The researcher compared the observation and the document analysis to the participants' interview responses, and compared the interview transcripts, observations, and documents for similarities and differences throughout the process. The documents reviewed consisted of items such as SHS's GaVS program course informational materials, enrollment data, course access and completion data, school and program demographics, and school and program achievement data. After reviewing the documents, observation notes, and interview transcripts, the researcher developed a preliminary list of codes. Semi-structured, in-depth and Seidman's (2006) series of three interviews, along with observations, and a review of all relevant documents were the instruments used for data collection. The researcher used pseudonyms to protect the confidentiality of the participants. Table 2 provides a brief description of the six participants selected for the study.

Table 2

Gender	Ethnicity	Age	Years In	Current Position
			Education	
Female	White	46	25	Principal
Female	White	47	25	Assistant Principal
Female	White	48	26	School Counselor
Female	White	44	22	School Counselor
Female	White	39	17	Virtual Program
				Technician
Female	White	45	19	GaDOE GaVS Support
				Specialist
	Gender Female Female Female Female Female	Gender Ethnicity Female White Female White Female White Female White Female White Female White	GenderEthnicityAgeFemaleWhite46FemaleWhite47FemaleWhite48FemaleWhite44FemaleWhite39FemaleWhite45	GenderEthnicityAgeYears In EducationFemaleWhite4625FemaleWhite4725FemaleWhite4826FemaleWhite4422FemaleWhite3917FemaleWhite4519

Participants' Demographic Profiles

Before discussing the findings of the study, the following section provides a profile for each of the participants that details their life and work experiences, and the progression to their current professional roles.

Profiles of Participants

Christa

I first met Christa in the school district where she now serves as principal at the local high school. Christa was a rich source of data for this study because of her leadership role in the implementation of the GaVS program at SHS. I interviewed Christa in her large, very organized and welcoming office at the high school. Her office was well furnished with plush blue leather chairs and a matching sofa for her visitors to sit on. Christa had a large conference table with multiple chairs placed on the left side of her office for parent, student, and teacher meetings, as well as program planning meetings. The walls around the office were adorned with multiple bookcases containing her family and school photos. At the time of the interview, Christa was 46 years old and had been an educator going on 25 years. Christa was born in Hendersonville, North Carolina and raised in a family of public school educators. Her father not only served as a teacher and an administrator during his years as an educator, but he also coached basketball for a large majority of his career. Because of her father's coaching jobs, the family moved around the country. During her middle school years, the family permanently settled in South Georgia. Growing up, Christa recalled spending quality time at the school gym with her father. She shared, "Being at the school and gym always felt like home" She attributed her current leadership job to her father's constant encouragement to pursue a leadership degree.

As a college student, Christa increasingly became fascinated with the use of technology in education. She appreciated the "great benefit and vast opportunities that this new technology would bring to teachers, leaders, and students." She shared the following anecdote: "When I first started, computers ... were new; they were just coming out. I taught myself then how to use a computer in order to help type curriculum assignments and lessons." She explained the importance of staying in tune and up-to-date on the latest technology programs and equipment for the benefit of staff and students. Christa maintained this keen interest in computer technology throughout her career in education. She stated, "If I'm aware of what's available and the value that it can have on our school, then I'm able to put the best programs in place along with the technology support that is truly needed to help our students succeed."

Christa shared her steady education career trajectory, which she started off as a French teacher at SHS and where she led many school programs and committees,

including school improvement, school leadership, technology, professional learning, accreditation, and numerous others. After teaching French for 12 years, SHS appointed her as assistant principal. Nine years later, she followed her leadership vision of "unity, family, and teamwork," grounded in a strong philosophy aimed at "ensuring that all students graduate and become productive citizens," as she became a well-respected principal of SHS.

Throughout the interview, Christa exuded a sense of pride and accomplishment as a school leader. She was proud of her achievements helping "underprivileged and at-risk students" at her school. She valued "... relationships ... form[ed] with [her] students more than anything." In her commitment to help children, she emphasized the "...importance of creating a positive learning environment." Serving as an administrator, Christa felt "... more power to help students" and to provide resources and programs to help meet the needs of the students at her school. She spent many hours helping to address the school's truancy concerns by "...making sure that transportation was accessible..." and improving student academic achievement "... by putting a tutoring program in place." She believes that, in addition to traditional face-to-face schooling, students need an "educational alternative such as the virtual program...." which provides the "...needed flexibility in their schedules." She proudly proclaimed that her school's "... current graduation rate is the best that it has ever been and the options [we] provide to our students play a huge part in this."

During the interview, it became apparent that Christa is a very collaborative person who strongly believes in the concept of unity and teamwork. Her leadership values "... very close ... like a family" relationships with teachers, administrators, and

the community and draws in the human relationship notion of leadership (Bolman & Deal, 2008). She "knows their roles" and always works together for the betterment of the students and the school. She has "made a lot of close ties" with all her district's stakeholders and shares a common vision that reflects: "...build[ing] relationships and connections throughout the school and the system."

Kim

I first met Kim at the local high school where she now serves as an assistant principal. Kim proved to be a valuable data source for this study because of her previous knowledge of online programs and her involvement in the implementation of the GaVS program and continued role in overseeing the program. I interviewed Kim in her comfortable medium-size office at the high school. Her office was furnished with wellcrafted navy blue leather chairs and a matching sofa for her visitors to sit on. A couple of bookcases located against the walls in her office held multiple educational books along with photos of family, co-workers, and students.

Kim is a 47-year-old, 25-year veteran educator and a mother of two. She was born and raised in a rural South Georgia county where she still currently resides. She is a dedicated educator who is continuing her family's line of educators. Kim aspired to be an educator from an early age. She shared: "It's all I ever wanted to do."

Kim discovered her passion for computer programming and her love of technology while in college. Kim explained how she "…learn[ed] how to write code…" which allowed her to "…develop a computer program…." On one hand, she seriously contemplated becoming a computer engineer; on the other hand, she was reluctant to relinquish her dream of becoming a math teacher.

Kim began teaching an online math course produced by the National Science Center Foundation early in her career. The math course was offered through an Intranet source instead of the Internet. At that time, the online math course's computer technology was very limited and it only communicated online with the National Science Center. However, this teaching assignment allowed Kim to enjoy "...the best of both worlds...incorporat[ing] technology with [her] love of teaching math."

A few years later, Kim moved back to her hometown to teach math to the bottom quartile of students at SHS. She used her "...ability to work with the at-risk students in helping them to excel..." Realizing her genuine interest in online programs, the superintendent at the time asked her to fill the graduation coach role and oversee an online credit recovery program designed to help the at-risk population of students graduate. She shared that she was elated to have had the opportunity to work with computers and technology programs again in her new role.

Kim excelled in her career and was promoted to an assistant principal position at SHS. Because of her keen interest and proficiency in computer technology, her assignment was to oversee the math and science departments and all technology related programs implemented at SHS, including the credit recovery and virtual programs. She also led many of the school's committees including technology, school improvement, and new school initiatives. Kim is committed to helping "... everybody to grow and learn...," while ensuring that "...all standards are being taught" and working diligently to put programs in place to help "...increase test scores in math." Kim believed that the school's administrative team, teachers, and support staff "...all have roles..." in making sure that the school is meeting its goals.

Marjorie

Marjorie is the lead school counselor at SHS. I selected her to participate in this study because of her instrumental role in the planning and implementation of the GaVS program at SHS. I interviewed Marjorie in her office, which appeared very inviting for students, parents, and school staff. Her office was large enough to hold an L-shaped desk, a bookshelf holding school yearbooks and multiple educational and counseling resources, a filing cabinet, along with a small blue leather couch and four matching chairs. She had pictures of her family, students, and school staff on her office walls and multiple stacks of paperwork, college materials, and students' transcripts on her desk.

At the time of the interview, Marjorie was a 48-year-old veteran teacher, school counselor, wife, and mother of two children. Her mother inspired her to devote her life to educating children. She fondly shared memories as a child spending "...many hours at school with [her] mother...." The boundary between her personal life and school life was blurred as she felt like she had been "...raised at school and in the school system...." Her school environment felt like an extension of her home life. She stated, "...now even being at work feels very homey to [her] and [her] co-workers feel like family."

Marjorie recalled her first use of computers as a learning tool when she was a student at SHS. During these years, Marjorie showed a keen interest in the new technology and deliberated pursuing a career working with computers and technology. Because of her strong desire to stay connected to students, she became a teacher and a school counselor. She has integrated her passion of technology with her current career as a school counselor by utilizing technology as a communication tool to emit information, updates, and reminders to her students, parents, and school staff. Because of her ardor of

technology and her yearning to provide students with options, she welcomed the opportunity to assist with the implementation and continuance of the GaVS program.

As the lead senior school counselor at SHS, Marjorie saw the need to provide students with learning options and valued the "...flexibility ..." of a virtual program. She saw the creation of the GaVS as a great opportunity to "...provide students ... opportunity ... to graduate and to allow them the option of attending college." It soon became her mission to ensure that the students of SHS are "...made fully aware of the educational alternatives that are available to them..." including the virtual program, in order to ensure that "...every student at SHS has the opportunity to graduate and become productive citizens."

Jamie

I first met Jamie at the SCSD elementary school where she served as a school counselor. She has since transitioned to serve as a school counselor at SHS where she played important management roles in planning and implementing the SHS GaVS program. I interviewed Jamie in her warm and welcoming office furnished with an L-shaped desk, a filing cabinet, a bookshelf full of educational and counseling books, and four regular-size blue leather chairs for her visitors to sit in. She had her college diplomas hung on a wall in her office along with pictures of her family and students who attended SHS.

Jamie is a 44-year-old mother of one. She is in her 22nd year working as an educator. She was raised by her single mother in South Georgia. Her mother worked full-time out of town and was constantly away from home. Jamie felt neglected by her mother and blamed her for not being a supportive parent. She lamented that her mother

"expected [her] to go to college, but she did not show any support in helping [her] get there." She also felt neglected by the school counselors at her high school and claimed, "Nobody ever asked me about scholarships, nor told me about college." Consequently, she felt unprepared to embark on a specific career after she graduated from high school. After much reflection on the numerous possible careers, she finally decided to become a teacher. Jamie felt compelled to work with elementary kids and help make a positive impression in their lives.

Jamie found herself immersed in computers when she accepted an elementary school teaching position. At the time, her school had received funds, which allowed for the purchase of five computers for each classroom. This occurred during the time "...when computers were first coming into the classrooms...." She reflected that during that time, "...receiving the new desktop giant computers with huge monitors in the classrooms was huge." She knew that this technology would be a significant asset to students and teachers going forward, and she was very appreciative that the school gave them the opportunity to learn how to use the technology during its debut in the system.

After serving for 16 years as a classroom teacher and an elementary school counselor, Jamie transitioned to a school counselor position at SHS. Jamie shared that as a high school level school counselor, she helps to meet the academic, career, personal, and social needs of her students by providing individual counseling, group counseling, classroom guidance lessons, and responsive services. She revealed that one of her main jobs is "…helping students stay on track to graduate." Her responsibilities at the school also include leadership roles. She stated, "As school counselors, we have a lot of leadership-type responsibilities and serve in leadership type positions within the school."

Jamie appeared to be excited about her roles on the school improvement and technology committees.

Jamie is an advocate for increased computer and technology use in the classrooms. She was pleased with the convenience and efficiency that computers bring to teaching and learning. Jamie shared her enthusiasm for computer technology in the classroom: "…we were excited to have computers in our classrooms for students to use." She has since participated in the school's effort to provide computer access to every child in the school. She stated, "…now the students are exposed to a multitude of computer programs and equipment that will only help them going forward."

At a personal level, Jamie felt technology had enabled her to communicate more efficiently and effectively with the school's stakeholders including, administrators, teachers, parents, and students. She shared: "Through email, parents can communicate with us 24/7." She emphasized the enhanced ability to send multiple daily updates or notifications to the students at SHS through email and text messaging. She also shared the ease in which she now sends student reminders about signing up for nationally recognized standardized tests, such as the SAT and ACT, along with enrolling into their virtual courses. She reviews schedules, transcripts, and grades all on the student information system.

At a student level, she reported that students now use online program sites like Georgia Career Information System (GCIS) to help with career exploration. Jamie stated that the students at SHS now "…have access to so many more options and learning opportunities than ever before, including the virtual program." She is committed to ensuring that all SHS students acquire necessary computer skills essential in the current

global economy and indeed, society as a whole. She encourages her students to "...take advantage of these resources and programs, especially if they help meet their needs better." She has set a goal and is determined "...for every student to graduate and to go on to be productive citizens, whether that's by going on to college, going into the military, or going into the workforce." She is zealous about "mak[ing] sure that all of the students at SHS are prepared to pursue their elected path that will shape their future."

Andrea

Andrea is a 39-year-old veteran educator and serves as the virtual program technician for the virtual program at SHS. She hails from a small town in South Georgia where her mother served as a school secretary for the SCSD and her father owned and operated a traditional "Mom and Pop" bakery frequented by many of the residents in the community. Andrea fondly recalled growing up in a close family sharing late nights cooking together as a family with her parents and older brother at the bakery. She sadly recalled the time when the family made the decision to close the bakery due to her father's poor health and the city's purchase of the bakery to build a new community library in its place. Everyone in the family agreed that the new library would be a great asset to the community.

As a child growing up, Andrea aspired to become a teacher. She stated, "...I always knew what I wanted to do and that was to teach." Coupled with a strong desire to teach, was a passion for working with computer technology. She steadily gravitated to computers as a young child and soon became an "active member of the school's mass media team" where she "consistently earned the highest average award" in her computer tech classes. Andrea's brother also played a prominent role driving her towards her

newly found passion for computer technology. For example, he made sure the family always had the most up-to-date technology and that they had a computer and access to the Internet before most everyone else in town. Andrea was fortunate to own a personal computer to take to college, when most students her age at that time either did not have access or had limited access to a computer. She gave her brother credit for her early proficient use of computers for learning. She stated. "My brother is probably one of the reasons that I always have a drive to learn more and do more. I've always felt like I had to keep up with him."

Andrea also attributed her academic successes to her parents' high educational expectations and encouragement to earn an advanced degree. She believed that her parents' premature deaths "... made [her] very independent and motivated" as she learned to survive without them. She dedicated her academic achievements in memory of her parents.

Andrea shared her natural persuasion towards computer technology. Through her own virtual learning experience she stated, "I liked that the courses were taught online and enjoyed the online learning environment." As a full-time employee and student, she appreciated the convenience and flexibility of the online environment and vowed continued support of online educational options. She shared an anecdote about how as a new elementary school teacher she was selected to take an educational technology course that allowed her to teach her students how to access the Internet and utilize computer programs on one of the five computers that were placed in her classroom. She soon excelled in computer technology and earned a much-coveted position as an Instructional Technology Specialist at an elementary school in the SCSD.

As an Instructional Technology Specialist, Andrea became technologically savvy and helped spread computer literacy to others. She "... spent time troubleshooting classroom technology and helping teachers learn how to use the technology... and...coordinated many events through distance learning opportunities using equipment that was donated to the system...." She remembered at the time "technology was just beginning to really grow in the system." The nation-wide economic recession soon curtailed Andrea's computer initiatives, which led to a cut of her position due to a lack of funding. This did not stop her progress with electronic media as she began using a document camera and any other technology programs and equipment in addition to computers. Her classroom became the model for showing other teachers how to incorporate the available technology into their classroom instruction. "As far as dealing with technology or various technology programs, I've always been the person that people can come to for help." Even though the school commended Andrea for her exceptional use of technology in the classroom, she began to grow weary of this position and hoped for a different role within the system, one that included a much greater emphasis on technology. She had enjoyed working with the younger students, but she had begun contemplating working with older students, mainly so that she could incorporate a higher level of technology into her classes. Her true desire was to return to her previous role of being an instructional technologist. "I really enjoyed working as an instructional technologist and had hoped to one day be reassigned to this role."

Because of Andrea's previous teaching experience, her evident ability to learn new technology programs easily, and her Specialist's degree earned in Instructional Technology, she was the first choice to serve as the virtual program technician for the

students at SHS. Her instructional technologist degree coursework required her to use the LMS that the students in the GaVS program also use. She acknowledged, "This experience has greatly benefited me in assisting students in the GaVS program."

Bailey

Bailey is a 45-year-old married mother of three children and a 19-year veteran educator. She grew up in an affluent home in the state of Alabama where her father operated a real estate business and her mother worked as a school counselor. Bailey attended a local public school in a rough neighborhood in Montgomery characterized by violence and gang activities. She shared that being in "high school had become like a prison" secured with metal detectors and armed security guards.

At school, Bailey struggled with a learning disability that interfered with her reading ability. She overcame her disability, became president of several high school clubs, and graduated in the top quartile in her class. She shared her secret to success: "I had to study hard to make sure that my grades were good so that I could keep my options open." As a student, she was not impressed with her teachers and peers. She described them as "horrific" with no passion to teach and learn. She reflected that one teacher "…fell asleep while she was teaching, another read all of presentations placed on the overhead word for word, and the students in most of the classes were rude to the teachers." However, this experience motivated her to become a teacher. She stated, "I wanted to be a teacher in spite of them, and because I knew there was a better way to do it."

Bailey continued to study history at college and became a high school social studies teacher. She later decided to leave her traditional teaching job and raise her

children while working from home. In 2005, she joined GaVS as a full-time online teacher when GaDOE was first establishing the virtual school in an attempt to stay connected with student learning and teaching. Teaching online courses "…was a natural fit for [her] and came fairly easy." She regretted going into this job with minimal training, but was able to apply her stellar teaching skills and found ways to maneuver around the online platform easily. She soon received a promotion to a full-time GaDOE GaVS support specialist position where she still enjoyed the flexibility and convenience of working from home.

Coding and Themes

This chapter provides the findings and themes that emerged after continuous and careful review of the interview transcripts, the observation notes, the document analysis, and the review of memos. I used Glaser and Strauss' (1967) constant comparative method to determine similarities and differences across the participants, and ultimately developed analytical codes and categories (Cho & Trent, 2009). Using the categorical process, open coding allowed me to analyze data line by line and assign codes to specific data points. I used axial coding to confirm that the concepts and categories accurately represented the responses from the interviews and to explore the relationship between the concepts and categories (Merriam, 2002). Finally, I used selective coding to integrate the categories to form themes (Merriam, 2002).

I used Seidman's (2006) recommended three interview series for the participant interview process. The first interview represented a detailed life history of the study's participants, including their childhood experiences, K–12 experiences, undergraduate, and graduate experiences, current family status, work experiences, and the progression to

their current role, as shared in the first part of this chapter. The remainder of the chapter contains data primarily from interviews two and three, which focused on the details of the participants' experiences and reflections, and the meaning of those experiences (Seidman, 2006).

After conducting the initial readings of the transcripts, I reread the transcripts line by line and placed codes beside segments of the participants' text based on the transcript content. During the early stages of the data analysis, I allowed the research questions to provide guidelines for the portions of the data that were relevant.

After thoroughly reviewing the interview transcripts, observation field notes, and supplemental documentation, I established a preliminary set of codes. Once I had accumulated several sets of codes, I began to merge the coded data into more general categories. I used two-letter abbreviations, to which had been determined during the reading of content of the transcripts. Two of the underlying concepts of the study served as the initial codes. These were expanding educational opportunities for students [EO] and integrating resources and support [RS]. I remained open to new codes while reading the transcripts. For example, if I had labeled a participant's comment relating to the SHS GaVS program as EO during the initial transcript readings, I may have revised it to EA for educational alternative, PF for program flexibility, and SA for student achievement after subsequent readings of the interview transcripts. An example of this occurred when Andrea said, "Our high school students are provided with options that allow for the flexibility that some students needed based on their schedules and life issues." I initially coded this quote as EO for expanding educational opportunities for students, since she was referring to the flexibility of the program provided to students who need it based on

their schedules and life issues. I changed the codes of the relevant data from *EO* to *PF*. I also changed other participants' quotes related to program flexibility from *EO* to *PF*.

Another example of how I changed the codes based on the readings of the transcripts occurred when Kim shared that Christa, as the leader and principal of SHS, makes it a priority to ensure that student and technology support is available for the users of the virtual program. She stated, "Making sure the virtual program support is provided is a priority to Christa. She's willing to get anyone any kind of additional support they need." Since the quote related to providing resources and support, I initially coded it as *RS*. However, as I noticed additional quotes from the participants about the administrators' role and support in the program, I used *AS* (administrative support) as the coding of the quotes. Thus, I remained open to revising the codes based on the meanings derived from the participants' comments. I kept a running list of the codes to help preserve consistency and repeated the line-by-line readings and code revisions for each transcript. See sample codes in Table 3.

Table 3

	Initial Codes Used			
	Expanding Educational Opportunities (EO)			
Code	Code Description			
EA	Educational Alternative – the virtual program is offered as an option or choice			
	for students			
PF	PF Program Flexibility – the program allows for modifications in a student's			
	schedule			
SA	Student Achievement – refers to the percentage of completed credits, course			
	grades, test scores, access to the program, and the graduation rate			
	Integrating Resources and Support (RS)			
Code	Code Description			
AS	Administrative Support – refers to the administrative leadership provided			
	during the planning, implementation, and continuation of the program			

Examples of Some of the Initial Codes Used

- ST Student and Technology Support this includes the technology that is required to run the program and the technology assistance given to students along with the program support provided to students
- CE Communication Efforts refers to the communication to all stakeholders about the program and the communication between the team members

The coding process continued until my emergent codes became saturated, demonstrating consistently the establishment of a repetition of codes. I then linked the codes to categories where they had relationships, and delineated these into a broader set of themes covering multiple codes. Finally, I linked the emergent themes and sub-themes to the research questions proposed for this study.

Each theme and sub-theme provides extensive and relevant quotes from each participant to capture their individual experiences. Additionally, I compared and matched their experiences with the other participants' experiences to connect and illustrate the shared experiences of the group. The data from the study resulted in two major themes and three sub-themes for one of the major themes. The major themes highlighted include expanding educational opportunities for students and integrating resources and support. Within the theme of integrating resources and support, I identified the sub-themes of school leadership and the GaVS program, virtual school counseling and technical support, and ensuring compliance of State virtual learning mandates and GaVS oversight. See Table 4 for the two major themes that emerged from the study with supporting commentary.

Table 4

Themes with Supporting Commentary

Themes

Participant Supporting Commentary

Expanding Educational Opportunities for Students	Christa	I think the biggest advantage is the flexibility. It allows students to work at their own pace.
		Every student is different, and every student's situation is different. We have some students with physical health issues. Others experience anxiety issues and stress from attending school. The virtual program meets the needs of these students for different reasons.
	Andrea	The virtual program allows students to work at their own pace. This builds independence in a student and it teaches them that they have to be responsible.
	Marjorie	Students have the flexibility that they need. The students can set their own pace and schedule. good for learning technology
	Bailey	GaVS offers many more classesthat's all we focus on. For smaller counties, it might be really expensive and too hard to create [their] own online program to allow the flexibility that a student may or may not need.
Integrating Resources and Support	Christa	Besides the counselors' support, we also have a school level virtual program technician that provides support. She contacts parents. She monitors students' progress, and she's able to troubleshoot if they're having any technology issues.
	Jamie	Having a virtual program technicianto help monitor and provide program and technical support to our virtual students has been a huge help.

	help provide tutoring for the virtual students
Marjorie	have tutoring available for the virtual students.
Kim	Parent involvement is critical to help ensure the virtual student's success in mastering the program and completing the virtual courses. Parents need to help monitor their child's progress in the virtual courses. It can be a challenge to make parents realize this.

Note. These serve as extracts of themes that emerged from the study.

Descriptions of the Themes

My study's purpose, my orientation and knowledge, and the meanings of the participant's perspectives served to develop the study's themes (Merriam, 2002). Two major themes emerged when analyzing the data. These included: expanding educational opportunities for students and integrating resources and support. Within the theme of integrating resources and support, I identified the sub-themes of school leadership and the GaVS program, virtual school counseling and technical support, and ensuring compliance of State virtual learning mandates and GaVS oversight. The sections below present descriptions of the themes and sub-themes.

Expanding Educational Opportunities for Students

The USDOE (2011a) described expanding educational opportunities for students as the possible implementation of a virtual learning program that provides students with an alternative approach to academics, as well as allowing students to have access to a wide variety of course selection and flexibility in completing the course. The notion of expanding educational opportunities for students reinforces Foley and Pang's (2006) research in that virtual learning grants students the opportunity to succeed. Blomeyer (2002) also affirmed that online learning can effectively complement, enhance, and expand educational options for K–12 students. Rural schools have limitations and constraints regarding expansion. In this study, expansion was constrained by limited resource funding. This was very much the case when it came to the provision of technology. This rural school district had a limited revenue base compared to the more influential urban areas. Kollie (2007) and McCabe (2011) confirmed this notion of a constraint in funding. These limitations however did not prevent SHS from expanding its educational options from traditional to virtual. The participants of the study expressed the importance of expanding educational opportunities, specifically for the students at SHS.

All participants confirmed the GaVS program's main implementation intent was to expand the educational opportunities for the students at SHS. They believed that students needed the opportunities to help increase student achievement and the graduation rate. This is very relevant to the rural school districts that have seen a decline in enrollment due to poverty and mobility rates (Johnson et al., 2014). For example, Christa explained that the implementation and availability of the program was important and advantageous in keeping students from dropping out, which helped to maintain enrollment numbers, and also increasing the graduation rate. In line with this view, she stated, "...the program was implemented to give students an alternative to dropping out...it's a win-win for both the student and the school." Christa's view is perfectly aligned with SHS's mission, which explicitly emphasizes the importance "... for every student to graduate." In addition, she stressed that virtual learning should "always be an

option" for any student at SHS. Andrea also emphasized the connection between expansion and increased graduation rates. She stated:

Any alternative that we can provide, the wide array of experiences that we do provide for students, only helps to increase our graduation rate. When students know that they are not stuck to the traditional path, that they do have an alternative way to complete their high school career, they are less likely to dropout. If we continue to monitor the student's progress in the virtual courses and make sure that they are aware of the tutoring opportunities offered on campus, then the virtual program will continue to help increase student achievement and the graduation rate.

Jamie shared Christa's view about the importance of implementing the virtual program. She stated that the virtual program, GaVS, "...offer[s] a lot more opportunities for students." Jamie attributed the current program expansion to the opportunities availed by the GaVS program. Jamie felt that the virtual program also served "...at-risk students...who are thinking about dropping out with an option that provides the needed flexibility to help the student graduate." She argued that the provision of expanded learning opportunities availed by the GaVS program has ultimately "...help(ed) the graduation rate by keeping our dropout rate from increasing." She believed this to be "extremely important." Marjorie agreed with Jamie in that "virtual learning can be an effective way of reaching students at risk of failing." Kim also believed the program "...offered a good way to reach students who were struggling academically." Andrea offered a different view of the district's effort to expand virtual learning. For her, expansion meant providing students the flexibility and convenience to "...work at their

own pace... complete their work basically at any time..." She noted, "The virtual program provides an alternative for students who cannot function in a daily school schedule."

Christa believed that the virtual learning program could actually be an opportunity for the district to improve the quality of education offered to students. She stated that the program could help "... customize their schedule as much as they need or want. So if a student wanted to take full-time or part-time virtual courses, they would need to talk to their counselor and work out what schedule fits best for them." Christa expressed the importance of providing the virtual courses as an option to the students to help them be better prepared for the future. She believed that not allowing students to have access to virtual courses "...put(s) them at a disadvantage." She felt that when students graduate from rural school districts, they should have received the same high quality education and be just as prepared if not more, than students from larger, urban districts. Her priority focused more on making sure that she was exposing her students to every possibility available to help them become college and career ready. She commented: "when students get ready to go to college, we want them to already have experience with virtual learning, so when they go into their first online college class, they're ready."

Bailey agreed with this by sharing:

Virtual learning allows students to acquire new skills sets that will be beneficial if they decide to pursue college or a career. If you are a virtual student then you have already obtained the skills that workforce and colleges are looking for in a student or an employee.

Bailey also mentioned that that virtual learning provides "...a different way of educating..." and it is a good alternative for students who have "...been bullied...on hospital homebound...have recently moved...have different lifestyles and feel like they they don't fit in." Bailey elaborated by sharing that the "...online environment is great for these kinds of students to finish up because it takes away that social aspect that may be getting in the way of their learning."

While Christa valued the opportunity to expand learning opportunities for students, she was also fully cognizant of the prohibitive costs of the GaVS program implementation. Kollie (2007) and McCabe (2011) also confirms the ideal of limited funds accessibility in a rural school district. However, she believed that the value of the GaVS program superseded the cost of expansion. For her the program is "…certainly worth the cost, if you're talking about possibly losing a student to dropping out. The costs are going to be far greater if they don't get a high school diploma, so it's an investment that's worth it." She reiterated the main program implementation goal "…for every student to graduate…" and for convenience and flexibility, "…the virtual program is always an option…"

In this section, I explored the notion of expanding learning opportunities for students. The participants' beliefs in expanded opportunities demonstrate a keen awareness of the need to transform access to education in a poor rural district. The six participants who played key program implementation roles also exhibited acute awareness of possible financial impediments that may slowdown the main goal of reaching out and availing a diverse virtual curriculum to every child in the district. It was

not surprising to find that the expansion of learning opportunities is important to every one of the participants.

Integrating Resources and Support

This theme explores the vital integration of resources and support in the implementation of the GaVS program at SHS. The word *integrated* refers to the technical and pedagogical integration in virtual learning (Irvin et al., 2009; Lee et al., 2011; Watson et al., 2015). As Lee et al. (2011) and Watson et al. (2015) noted, the amount of support a student receives influences the performance of the virtual learner. Lee et al. (2011) reported technical problems as the leading component in creating challenges and determining student satisfaction in online learning environments. Irvin et al. (2009) confirmed that course completion and retention in the virtual program improves if schools offer a facilitator, other than the online teacher, to provide support services to the virtual students. Such support services may include offering technical assistance for technical issues that students may face in online courses (Irvin et al., 2009). The implementation of the GaVS program at SHS required an increase in technical integration and support to assist in increasing student access and achievement. Different professionals endowed with varied skill sets collaborated on the same program. Six participants in this study reflected on the integration of a variety of tools and skills they used to support the multiple functions of the GaVS program, which included communication, collaboration, learning, and management. The idea of virtual resources and support includes this notion of integration (Irvin et al., 2009; Lee et al., 2011; Watson et al., 2015). For example, Christa and Kim, the current school administrators, had to fulfill administrative functions: overseeing the program implementation and determining

the effectiveness of the program through continued program monitoring. Marjorie and Jamie, as the school counselors, were an important part of the lead team and provided valuable assistance to students, along with managing resources and course enrollments and completion rates. Andrea, as the virtual program technician resolved technology incidents and requests, documented solutions and maintained equipment inventory. Finally, Bailey, the GaVS support specialist, worked with SHS's parents and students to ensure that they received information on the opportunities and options that GaVS offers. This is a broad theme that encompasses three main sub-themes: school leadership and the GaVS program, virtual school counseling and technical support, and ensuring compliance of State virtual learning mandates and GaVS oversight.

School Leadership and the GaVS Program

Waters et al., (2003) determined that school leaders play a key role in creating an environment where innovation flourishes, while maximizing student achievement. The theory of adaptive leadership used to frame this study explores the strategies by which leaders diagnose, interrupt, and innovate using non-traditional approaches to assist in increasing student achievement (Heifetz, 1994; Heifetz & Linsky, 2002). Davis and Niederhauser (2005) also noted the importance of continuous communication between the administrator and the school counselor as they work with students taking virtual courses.

Christa and Kim's views of leadership were closely aligned with the notions of Irvin et al. (2009), Lee et al. (2011), Waters et al. (2003), and Watson et al. (2015) on the importance of creating a positive learning environment and promoting effective communications to aid learning. Reflecting on her roles and responsibilities as the

principal of SHS, Christa felt empowered by her office to "...help the students...." She took charge of the everyday running of the school and was often "...on the front end of things...taking advantage of every opportunity and using it to the fullest in order to benefit the students." She was, however, cognizant of the power of collaboration and conceded that she "...can't do it all by [her]self..." and that she relied heavily on her team, "...having the right people in place and putting a system and process in place for implementing, monitoring, and evaluating." Christa also whole-heartedly believed in Collins's (2001) idea of having the right people on the bus to motivate and manage the GaVS implementation process. She stated, "Certainly, not all of us can be an expert in all of it, but we can all be experts in pieces of it, so that together we've got what we need." She envisioned "...virtual learning to be a very beneficial opportunity for [her] students" and to "...make sure that all students had access to it." As the principal of SHS, she was in a leadership position "...where she can make it happen..." and she wants to be able to "...see where the program can go." Her vision is for "...every student to graduate...." She believed that she plays an instrumental role in "...helping [her students] earn their diploma by providing as many available options as possible."

Managers monitor and regulate how efficiently and effectively an organization and its members are performing the activities necessary to achieve organizational goals (Miles, 2012). Christa constantly monitored and evaluated implementation processes. She shared her awareness of this process "... I monitor the process and correct along the way." Although she was not directly involved with the use of the virtual program, she still desired to know how the technical personnel and program were operating. She stated, "I may not have to use it, but I need to know what it is, what it does, who's using

it, and how it benefits the students." Christa felt the GaDOE's decision to make GaVS available for schools as an alternative choice demonstrates that the state wants to ensure that students are provided with the best educational options. She shared: "I think the fact that GaDOE supports GaVS, that, to me, is a stamp of approval, and it means that our students are getting a quality education utilizing the virtual program."

Kim instead played a supportive role to facilitate the implementation process. Working side by side with Christa, she shared: "... it is very important for the principal to be supportive because if not, then the program won't work." Kim had high regard for her administrative boss. She respectfully referred to Christa as being "...instrumental..." in getting the GaVS program implemented. She shared Christa's vision of increasing high school graduation rates in the school and stated her wish to see "... all of the students ... earn a high school diploma."

Christa and Kim used their leadership positions to expand convenience and flexibility in education through the implementation of GaVS for many students attending SHS. This is in keeping with Cavanaugh (2009) and Dillon and Tucker's (2011) views of the benefits of flexibility and expansion in learning times. She stated "... not everybody is a traditional student, [we] ... help find ways to work with these [virtual] students, too." She was committed to avail all the benefits of virtual learning to the students at SHS. She mentioned several times "...some students need the flexibility that the virtual program offers."

Christa reflected the tenets of leadership empowerment by giving front-line employees the authority to make decisions once reserved only for administrators. She generally ran the school with a less authoritarian-style management and encouraged the

employees involved in the implementation of GaVS to become actively involved in the process. Jamie corroborated this aspect of Christa's leadership style. She stated:

She has been supportive of the GaVS program. She sees all of the benefits that it brings. I believe that having her support has been 100% positive as far as making sure the program was implemented and carried out correctly.

Communication was the life-blood of the GAVS implementation process. Participant anecdotes of their typical school days and my observations revealed numerous communication activities. Kim consistently communicated overall school goals to the teachers through observed conversations, emails, and during staff and departmental meetings as noted on the meeting agendas. She stated:

... our teachers need more information ... sometimes our teachers are our best sales people. We need to make sure that everybody knows what opportunities we offer and that the virtual program is one of these. Basically all of our plans will succeed if we communicate with each other and let each other know what's happening.

Through observations and a review of documents, which included school event notifications, school flyers, and website postings, it was apparent that Christa communicated extensively with her staff, students, parents, and other stakeholders at various levels through phone, conferences, email, social media outlets, the school's website, newsletters, school events, and during the multitude of various school-related meetings. She acknowledged that her school could benefit from communication that is more interpersonal. She conceded:

... even though we probably felt like it at the time that we communicated enough, I think we can certainly communicate more. Communicate more effectively within the school as to what options are available, communicate more to our students, parents and teachers....I think we still have a long way to go...so that everyone knows what we're doing and offering.

School leaders are critical in developing an innovative learning environment where student achievement can be maximized (Waters et al., 2003). Effective and continued communication plays a key role in sustaining this type of environment (Davis & Niederhauser, 2005; Waters et al., 2003). The adaptive leadership (Heifetz, 1994; Heifetz & Linsky, 2002) portrayed paired with the continuous, effectual communication and collaboration efforts allowed for the successful implementation of the GaVS program at SHS.

Virtual School Counseling and Technical Support

I construe virtual school counseling and technical support to refer to the roles and responsibilities and interests exhibited by the SHS school counselors and the virtual program technician. These include strong technology skills, excellent communication skills, customer-focused approach, high degree of flexibility (virtual and face-to-face), and collaboration with other school stakeholders; a type of concern which is clearly aligned with the American School Counselor Association [ASCA] (2012). According to ASCA, school counselors promote access and equity to rigorous educational experiences for all students through leadership, collaboration, and advocacy along with supporting a safe learning environment (ASCA, 2012). This notion of serving as a school counselor to students participating in a virtual program does not start at 7:30 a.m. and end at 3:30 p.m.

School counselors serving students in this role do not have the same restrictions—a physical day or a physical building—as in a traditional school setting. This posed serious constraints giving the limited resources and personnel available, which is typical of a rural school district. Typically, there are many more applicants available to fulfill available roles in urban school districts and the jobs are more specialized. Whereas, in rural school districts, applicants, especially those seeking an administrator role, may be required to possess the skills and knowledge of a generalist, knowing a little about everything (Kollie, 2007). Jamie and Marjorie's perceptions of school counseling goes beyond 'narrow' traditional school counseling to include the delicate balance between virtual and face-to-face counseling activities. Jamie shared that with the virtual students at times it "...feels like we are on call 24 hours a day seven days a week...." These students have grown accustomed to communicating online at their convenience. Marjorie shared: "...a student may email late in the afternoon or at night to let us know that they may be having academic or technical difficulties and at times they may need the issue resolved right away due to assignment due dates....." From a virtual school perspective, this constitutes a hybrid form of counseling involving online and traditional face-to-face techniques (Osborn, Peterson, & Hale, 2014).

As documented in the SCSD's school counselor's job description and evaluation instrument, the SHS school counselors' job functions consist of facilitating and implementing delivery of counseling services in the areas of academic, career, personal, and social issues to facilitate academic achievement. SHS school counselors adhere to the established policies and procedures in responding to crises, maintaining confidentiality, and maintaining appropriate professional boundaries with students,

parents, and staff, while abiding by the code of ethics. In addition, the school counselors lead counseling and skill groups and conduct individual counseling sessions; make referrals to outside agencies; conduct classroom guidance lessons; meet with students who have failing grades, documenting conferences and plans for improvement or retention; develop annual and weekly calendars; analyze student data; and provide information to students and parents on important school-related information and events. Marjorie reflected: "Our days are always consumed with an array of school counseling activities. These include meeting with students about their academic, career, and personal and social needs; participating in parent conferences; conducting classroom guidance lessons; and holding school events and informational sessions, such as helping students fill out their Free Application for Federal Student Aid (FAFSA), virtual program information sessions, Freshman and Senior Parent Night, and college and career fairs to name a few."

During my observations of Marjorie and Jamie, it was evident that they fulfilled their job responsibilities and maintained compliance with local and state board policies, as well as regulations and all state and federal laws, including staying abreast of all state regulations relating to being a mandated reporter. Jamie shared that "...SHS has a comprehensive school counseling program and plan in place...we all receive crisis, code of ethics, and mandated reporter trainings on an annual basis to stay abreast of any new rules or regulations that have been passed or approved." "School counselors in both the brick and mortar and virtual/online environments develop and deliver comprehensive school counseling program supporting and promoting student achievement and standardizing the measurement of program effectiveness" (ASCA, 2017, p. 4). Both

school counselors had a steady traffic flow of students in and out of their offices during the school day as corroborated through a review of their daily calendars and school counseling activity records. They met with students on a variety of topics and issues including: preparing for the national and state standardized tests, how to handle test anxiety, teen pregnancy, parent relationships, home issues, reportable physical and sexual abuse incidents, failing grades, and high school graduation credits and plans. In addition to meeting with students who were interested in enrolling in the virtual program and their parents, they also participated in student, parent, and teacher conferences.

An integral part of the school counselor's role entails individual student academic program planning. This involves ensuring that students are enrolling in the program and courses that best fit their needs and that will lead to course completion and high school graduation (ASCA, 2012). Kim reiterated: "The counselors do most of the work involved in the virtual program, such as explaining the program to students, showing them how to get signed up for the courses, monitoring their progress, and communicating with the students and parents."

Jamie and Marjorie also worked with school teams to identify and help families access school and community resources, while also addressing the academic, career, and social/emotional developmental needs of their students through relevant prevention and intervention programs that help make up their comprehensive school counseling program (ASCA, 2014). "Comprehensive school counseling programs in both the brick and mortar and virtual settings ensure equitable access to opportunities and rigorous curriculum for all students to participate fully in the educational process" (ASCA, 2017, p. 1).

Marjorie shared that the school counselors provide support to the virtual students by "...continuously monitoring their course completion progress..." and communicating with the "...students and parents when it appears the students are struggling in their virtual courses." The counselors "...help determine the cause and if additional resources or supports are needed."

Counselors facilitated and coordinated tutoring services for students in need of extra help. Marjorie communicated with parents and students, providing information regarding the availability and schedules of "...tutoring services that are provided...." Andrea explained that the "...students are made aware..., all they have to do is ask..., and...it can be arranged..." Kim confirmed that "...tutoring is made available on campus..." and also mentioned "...peer tutoring groups are available through the GaVS program."

The school counselors are also responsible for ensuring that all of the high school students receive college and career information, as confirmed in the SHS school counselors' job description and HB 400, also known as the Building Resourceful Individuals to Develop Georgia's Economy (BRIDGE) law (GaDOE, 2011). Jamie confirmed, "State legislators passed the BRIDGE Act in 2010 to ensure that students in sixth – twelfth grade were made aware of available college and career options and that every eighth grade student creates an individual graduation plan."

Jamie explained that for their virtual students, they set up individual meetings to review their college and career interests and share college and career information. She shared that the virtual students "...still have the opportunity of being exposed to college and career information, just like all of the other students here on campus." She included
that "...GaVS also offers a lot of online career and college information for their students." Marjorie shared that in order to ensure that the virtual students have "...continued access to college and career information, we post the available resources online and share them through our social media outlets. We also send out reminders about school events concerning anything school or college and career related." I confirmed this through the document review and observations of the school counselors.

Serving as a school counselor to virtual students presents its own unique challenges, but there are rewards as well. From observing the school counselors, the analysis of documents, and reviewing the interview transcripts, I found that school counselors interacted with the virtual students and their parents through many different means of communication including email, instant messaging, telephone, and text message, as well as face-to-face with other traditional school students. In the beginning, the school counselors felt overwhelmed by additional GaVS program responsibilities. They both confirmed that the addition of the virtual program added to their already overloaded workload, which resulted in longer working hours on many occasions. As Jamie shared: "We struggled enough to keep up with the students that were enrolled in a traditional course on campus, let alone try to remember to monitor the students in the virtual program." Jamie also shared:

We were learning how to work the program in the beginning. Initially, I did not know how to pull up the students' grades in the program, so I was not communicating with the virtual students and the students were not communicating with us on whether or not they needed help. We had to spend time learning how the program works. It was so new to us. We knew the students could see their

grades and progress, but we were not sure about the parents. We have since learned the program and have increased our communication with the students and parents.

In addition, Jamie believed that parent involvement and support was a critical piece in helping to ensure the success of virtual students who "…certainly need parent support for the virtual program…." Jamie explained how parents can stay involved and help monitor their child's coursework:

The parent can log into GaVS and check their child's progress in the course, the amount of time spent in each course, and the course content. They can see if their child has submitted assignments and the times of the submissions. We all strongly encourage parents to monitor their child's virtual courses, so that they can help make sure that their child is not getting behind in their work.

Marjorie explained the school counselor's role in assisting students in the GaVS enrollment process. She shared:

The students always meet with the counselor first and we discuss their courses and the number of credits that they need to graduate. We look at what courses are available online and then we enroll them into the virtual courses that they need. Next, they have to do an online tutorial to gain access to their courses.

Bailey corroborated that the virtual students have to complete an "online orientation course" before they gain access to their academic virtual courses. This "...provides the students an opportunity to learn how to use the GaVS program and the LMS prior to beginning their coursework."

Andrea, the virtual program technician, helped to reduce the burden on school counselors, the virtual students, and their parents, especially in the area of program support and technology. She was "...the first line of contact for technology support...." Christa shared that SHS offers technology assistance to the virtual students when needed. The virtual program technician "...is very knowledgeable about the GaVS program and the technology used to access the program. She helps to monitor the students' course progress and is able to troubleshoot if students are having any technology issues."

Jamie mentioned "…having a virtual program technician to assist with the implementation, monitoring, and providing program and technical support to our virtual students has been a tremendous help." Christa shared:

If a virtual student is getting behind in their work, the counselors contact the students to determine if they are having a technical problem, a content problem, or a lack of motivation problem. If they have issues with content, we have tutoring available. If they are having problems working the virtual program or having computer problems, our virtual program technician will help with these issues. The virtual students are made aware to reach out to a counselor, administrator, or the virtual program technician if support is needed, and we will provide the help they need.

The participants discussed in this sub-theme played different roles in ensuring that the program received sufficient resources and support. The school administrators (i.e., Christa and Kim) were more concerned about providing the administrative support needed to ensure the program's success. The two counselors (i.e., Marjorie and Jamie) paid particular attention to issues pertaining to student enrollment in the virtual program,

making sure the students were enrolled in the required virtual courses needed for graduation, and monitoring their students' progress in the courses. Finally, Andrea added a great benefit in providing the desperately needed technology support within the technology-based virtual program. However, all staff members had a common goal geared towards the success of the program and all felt the same as Kim when she stated that it was imperative to "...make sure that you have the appropriate resources and supports in place to help your students excel." They also agreed with Christa when she reiterated, "If students have a hard time accessing the program and their courses, then their success rate in the mastering of the program and the completion of the courses greatly diminishes."

Ensuring Compliance of State Virtual Learning Mandates and GaVS Oversight

In the following section, I focused on the implementation roles and responsibilities of the GaVS support specialist. The passing of the Georgia Online Learning bill in 2012 helped to reshape the landscape for online learning. The Georgia legislature desired for all students to have the opportunity to experience online learning (Klein, 2012). Barge (n.d.), Ingram (2016), and Teague (2013) noted that any Georgia public school student may now participate in GaVS free of charge unless the student has signed up for more courses than would equate to a regular school day, or the student elects to participate in the summer session courses.

School districts must allow students to take an online course even if the local district offers the course. In her role as a GaVS support specialist, Bailey was responsible for working with local schools, parents, and students to ensure that they were well informed of the opportunities and options that GaVS offered. I analyzed the strategies she adopted to ensure compliance with state policies during implementation.

Here, compliance with state policies refers to the facilitation, serving as a liaison, and other managerial functions used to shape the GaVS program at SHS. These organizational management aspects created the context within which education occurred within the school. Bailey understood her responsibilities working with SHSand In working with parents and students to ensure that they were well informed of the opportunities and options that GaVS offers.

Bailey's concerns about public schools' effectiveness made her well suited for the job of enforcing state regulations for the GaVS program at SHS and for safeguarding students and parents' interests regarding education. She complained about the disarray in the public school she attended as a child. She described her childhood public school experience as being 'horrific' and a place where teachers did not care about their jobs and students did not value education. She was convinced that parents and students might well escape this horror through virtual schools that would work to meet their needs. She stated:

... if a parent requests an online class, even if the school offers it in the face-toface, the student cannot be denied enrollment as long as it's part of the school day. The law does not share how many classes are allowed nor does it say where the student has to take the online course. These decisions are left up to the district and schools.

Bailey was committed to "... communicate with parents and make sure that they know their rights and their students' rights..." as detailed in SB 289. She revealed that some parents and students are not aware of their virtual options. This is especially important in rural schools that may not be aware of the possibilities due to the lines of

communication serving as a barrier. Parents tend to rely on the school as the main source of information pertaining to the educational needs and opportunities for their children. Possibly based on her personal poor experiences at public schools, Bailey emphatically blamed some public schools for not providing parents and students information about the alternative education program. She complained: "...some schools and counties do not tell the parents about GaVS because they fear that it's going to take jobs away from their teachers, who want to make sure they are able to earn a living and still have their career." She continued: "Some school systems are going to want to use it and some aren't. Until we convince the ones that aren't using GaVS of the program's benefits, then this will continue to be a challenge."

Bailey was keenly aware of several factors constraining the state's efforts to expand virtual education to as many students as possible. She conceded that a shortage of financial resources was probably the biggest impediment. She lamented:

...GaVS is limited by the budget. We would like to expand our courses, but we can't let the other courses not be re-evaluated every couple years because they do need to be updated. This requires money. The other thing is we have to have qualified teachers. I think that if we could pay our teachers more, we would be able to ensure a higher quality of teacher. When the economy is good and the budget's made bigger by the governor and the legislators, then we can do more, but right now there are money limitations.

Representing the interests of all virtual school stakeholders meant serving as a liaison. She served as "...the liaison between districts and schools and GaVS and GaDOE." She thus worked to establish and maintain communication for mutual

understanding and cooperation among the GaVS virtual teachers and the students and parents at SHS. She described her role at SHS as follows: "...customer support, troubleshooting, getting schools set up in the GaVS system and assisting them along the way." She also helped to ensure that SHS followed the state rules and policies put into place regarding GaVS. In addition, she provided support by helping to work out issues that may arise between parents, students, and the Georgia certified GaVS teachers. She cautioned, "One of the hardest things to deal with is when you have teachers who are not doing their job. They're not supporting their students or the schools....this can be detrimental to the growth of the program...we have policies in place for this reason."

Although Bailey was not a strong advocate of public schools, she pointed out that GaVS should not be perceived as a threat to the traditional high school. She instead felt that the GaVS program was created to support the traditional school rather than compete with it. She stated, "... we're not really trying to compete with the schools. We are really there to help support the schools." However, this issue remains open to debate as opponents of virtual schools argue the latter (Dillon & Tucker, 2010; Samuelsohn, 2015). Bailey countered this argument and fired back by stating that the GaVS program also has an entire special education department in place to support students with special needs. She stated, "They are set up to support students with special needs and are diligent in making sure that students' Individualized Education Plans (IEPs) and 504s are being followed by the virtual teachers."

Bailey enforced steep accountable measures set by the state to ensure that students and parents conformed to strict rules and regulations provided in the GaVS student online handbook. She held students accountable and required them to abide by the handbook,

along with completing the online orientation before they can gain access to their virtual courses. Once they had completed these steps, they would then log in to access their courses on a consistent basis. She then went on to explain:

We suggest that students print their course schedule. They can then begin working through the course content and start turning assignments in. Each course is different. Some have more audio, others have more reading. Math obviously has more computation. Students should be spending at least 2 to 3 hours a day online completing their coursework. It is up to the schools to monitor their students' individual progress in completing the courses.

Bailey earnestly advocated for online learning. She argued that virtual learning provided "...flexibility and opportunity..." in education that students may not have otherwise. Counter to her argument that the virtual school is not meant to weaken the traditional school, she acknowledged that as time goes on schools may begin losing more students and courses. She shared that "...some schools are becoming more willing to allow each student to take more than one GaVS course" which will help the program to grow. She explained:

If you have a small school with a minimal number of students who want to take German, Japanese, or an AP course, GaVS gives them this ability...especially in rural schools. A small or rural school may not be able to find a qualified teacher or they can't afford an AP course with such few students. It's nice that GaVS can provide more educational options for students in Georgia.

Bailey played an important role in providing program support to the schools and ensuring compliance in the promotion and usage of the GaVS program. It was also

within her realm of responsibilities to assist in the progression of the program and to help it flourish and grow. She did this by providing, as Marjorie stated, "…impeccable customer support…" to the school.

Chapter Summary

In this chapter, I have analyzed the varying conceptualizations of the implementation of a virtual school program within one high school located in a rural school district based on the interviews, documents reviewed, and my observations. The analysis showed that, although all participants demonstrated a strong commitment to expanding and strengthening virtual education, there are also fundamental differences in implementation strategies, and in their views regarding the trending debate between online and face-to-face education. The differences between participants are in part based on their social backgrounds and professional roles. They also had to contend with the constraints or challenges specific to rural school districts such as poverty, limited funding, administrator and teacher retention, and technology deficits (Kollie, 2007; McCabe, 2011). Despite these challenges, Christa and Kim's focus was to ensure that students had educational alternatives that would help promote student success. As school counselors, Jamie and Marjorie's primary role was to assist students in selecting the school program that would best meet their needs, whether traditional or virtual. Andrea, as a virtual program technician, believed that her technology knowledge and skills assisted with the effective provision of the technology-enabled learning environment, and felt that students embraced the combination of learning while utilizing technology. Bailey, as a GaDOE GaVS support specialist, felt that the virtual program serves as a

superior educational choice and helps to answer the cry of many parents and students demanding an alternative to traditional school.

Chapter 5 will provide a discussion of findings from the study as they relate to previous literature and the conceptual frameworks. Additionally, there will be a final discussion of the research questions, the study's limitations, conclusions, and recommendations for future research.

Chapter V

DISCUSSION AND CONCLUSIONS

Beginning with the open letter to the American citizens in April of 1983, "A Nation at Risk: The Imperative for Educational Reform," there have been many national and state initiatives to increase student achievement and graduation rates including Georgia's more recent RT3 four-hundred-million-dollar grant program (CCSS Initiative, 2012; Executive Office of the President, 2015; National Commission on Excellence in Education, 1983; USDOE, 2009, 2011a, 2011b). One strategy that schools are employing to increase student access and achievement is the implementation of an online educational program, specifically GaVS (Barge, n.d.; Ingram, 2016; Teague, 2013). The purpose of this basic interpretive qualitative research study was to determine how a rural Georgia school district with limited resources implemented the GaVS program with the intent of increasing student access and achievement. I conducted the study at a public high school in a rural Georgia school district. Six professional educators, who worked together to implement the GaVS program at SHS, were recruited to participate in this study. My intent was to generate shared themes derived from the participants' experiences and perspectives in implementing virtual learning. The research questions proposed for this study are as follows:

RQ1: What are the experiences of the professional educators who implemented the GaVS program in a rural Georgia school district and what were the lessons learned during the GaVS program implementation process?

RQ2: What implementation barriers did the professional educators in a rural Georgia school district experience while implementing the GaVS program with the intent to increase student access and achievement?

RQ3: What strategies to mitigate implementation barriers did the professional educators in a rural Georgia school district use while implementing the GaVS program with the intent to increase student access and achievement?

I used Seidman's (2006) three-series interviews, documents, along with observation notes and memos to collect data (Maxwell, 2013). Participants reviewed their transcripts to enhance credibility and validity of the study (Lincoln & Guba, 1985; Maxwell, 2013; Seidman, 2006). The documents examined for this study included SHS's GaVS program course informational materials, enrollment data, course access and completion data, school and program demographics, and school and program achievement data.

My data analysis utilized Glaser and Strauss's (1967) constant comparative method, focusing on comparing and contrasting the interview transcripts, observation notes and memos, and all relevant documents throughout the analysis process. Using the categorical process for data analysis, open coding allowed me to analyze data line by line and assign codes to specific data points (Merriam, 2002). I used axial coding to confirm that the concepts and categories accurately represent the responses from the interviews and to explore relationship between the concepts and categories (Merriam, 2002). Finally, I used selective coding to integrate the categories in order to develop themes (Merriam, 2002). Two major conceptual themes emerged from the data. These included expanding educational opportunities for students and integrating resources and support. Integrating resources and support was divided further into three sub-themes: school leadership and the GaVS program, school counselor and program technician support, and ensuring compliance of State virtual learning mandates and GaVS oversight.

In my literature review section, I evaluated and developed a Virtual Program/School as an Educational Alternative and Virtual Learning and School Leadership critique of program implementation frameworks by analyzing participant responses to gain insights about virtual education in a rural school district. In order to examine the implementation strategies of GaVS, I analyzed the roles and responsibilities of six key professionals who were responsible for implementing the program at SHS: the school's administrators (principal and assistant principal), school counselors, a virtual program technician, and a GaDOE GaVS support specialist. The literature review focused on how these key personnel perceived their implementation roles.

In this chapter, the themes and sub-themes were discussed in relation to the relevant literature and framework of the study. Finally, at the end of the chapter, the study's limitations, implications, and recommendations for future research were highlighted.

Discussion of the Themes

The two administrators (principal and assistant principal), two school counselors, one virtual program technician, and a GaDOE GaVS support specialist in this study affirmed several issues. First, the participants raised the notion of expanding educational opportunities for high school students in a rural school district. Participants in this study

exhibited a keen awareness of the educational challenges facing the United States and indeed rural school districts (Alliance for Excellent Education et al., 2015; Johnson et al., 2014; Kollie, 2007; McCabe, 2011). For example, Christa was worried that without providing educational options and flexibility, the student dropout rate would worsen the plight of most rural school districts (Kollie, 2007; McCabe; 2011). She stated, "...by implementing the program we were able to improve our graduation rate while keeping students in school." Christa's concern validates the disappointing data reports on the United States' educational performance compared with other developed nations (Obama, 2011, May 27). There have been numerous initiatives put into practice at the national and state levels as an attempt to increase student achievement and graduation rates (CCSS Initiative, 2012; Executive Office of the President, 2015; National Commission on Excellence in Education, 1983; USDOE, 2009, 2011a, 2011b). One of these initiatives is the implementation of an online educational program, specifically GaVS (Barge, n.d.; Ingram, 2016; Teague, 2013). School districts, especially rural districts with limited resources, have been restricted in their ability to implement GaVS (Hall, 2015; Tankersley, 2006). Although a rural school district's federal and state funds are augmented by local funds, they still experience large amounts of inequality compared to larger urban school districts in total funding (Kollie, 2007; McCabe, 2011).

Christa, the high school principal, regarded the SHS GaVS program as an opportunity to make a small but significant contribution geared at expanding educational access for many students in her district. She envisioned expanding educational options by implementing the GaVS program at SHS as a way to ensure rural high school graduates were able to compete favorably with the urban school students. As

recommended by Edwards and International Association for K-12 Online (2015), she assessed the educational needs of her community and determined a need for an alternative virtual education program to complement the existing traditional school system within her district. She commented:

Any time we look at a need for a program, we identify needs in the school. We're looking at data all the time and trying to decide where our deficits are and what the needs of the students are. We knew that we needed to move forward with technology. We don't ever want to lag behind what's happening in the rest of the world.

These sentiments reflect Edwards and International Association for K-12 Online (2015), Smith, Dombek, Foorman, Hook, Lee, and Cote (2016) and Smither, Houston, and McIntire's (2016) views about strategic planning. According to Smither et al., strategic planning helps leaders document actual problems and deficiencies. With the needs assessment in hand, leaders can describe and verify current situations, and explain how the program will address the identified needs. In accordance with the tenants of strategic planning, Christa saw a need that the virtual learning program could fulfill in providing educational flexibility in course scheduling and the integration of technology into the coursework at SHS.

While Christa initiated the planning and implementation of the GaVS program, Kim deferred decision-making responsibilities to her administrative senior and was willing to be the follower. She stated:

Once it was said that this was something we were going to do and we wanted to try it, we all just jumped in and did whatever part we needed to play in it. I could

see where possibly if some other system wanted to implement the program, they might need more of a top-down approach, but once we heard about it we all pitched in and did whatever it took to make it successful.

Kim's hesitancy to play a bigger role in decision making within the high school, reflects the restrictions associated with a typical bureaucratic hierarchical school district's organizational structure. Such organizations typically require the assistant principal to defer decision-making responsibilities to the principal (Bolman & Deal, 2008). The SCSD is highly structured with the principal at the top of the school leadership hierarchy. In turn, power trickles from the principal to other individuals down the power structure. Thus, the principal answers to the system's superintendent and is therefore responsible for the overall management and decision-making that encompasses the school. This high organizational structure at SHS may help understand Kim's preference to concede authority to Christa. It is therefore Kim's duty to help support Christa's vision to implement and carry out programs at SHS. In addition, in rural school districts, there is a strong sense of family and community. This, in combination of Christa and Kim's longstanding friendship, helps to explain Kim's understanding of her role in the implementation of the GaVS program and acknowledging Christa as the leader and ultimate decision-maker of the school (Bolman & Deal, 2008; Kollie, 2007).

In this section, I have drawn attention to the traditional school organizational structures that may have influenced Christa and Kim's behaviors in their efforts to implement GaVS. Principles of power bases determine levels of leadership roles (Bolman & Deal, 2008). In this case, Christa had more legitimate power than Kim, her assistant principal. This theme demonstrates how people within highly formal

organizational structures might adapt to their roles and collaborate towards a common purpose.

Second, the participants reflected on the importance of integration of resources and support in the implementation of the GaVS virtual program at SHS. Participants understood integration of resources to mean integrating personal skills and technologies. The school counselors in this study relied on the principal and assistant principal to create a positive learning environment conducive to the successful implementation of a virtual program. When asked about the virtual school environment, Jamie responded:

...it's very important to have the support of the administration...if you have the leaders of the school dismiss it or act like it's not important, then nobody else is going to think it's important. I think it's imperative for the leaders to buy into the program, confirm their support of the program to others, and be supportive of those implementing the program.

This sentiment shows Jamie's awareness of the interdependence among the virtual program staff required for smooth implementation processes. Palus (2009) eloquently elaborated the idea of interdependence in his characterization of an organization developing an interdependence leadership culture, which he defined as a "collaborative" culture. He explained that other traits associated with interdependent cultures include: "the widespread use of dialogue, … horizontal networks, valuing of differences, … focus on learning…the ability to work effectively across organizational boundaries, openness and candor, multifaceted standards of success, and synergies being sought across the whole enterprise" (p. 6). Freethinking, strategizing, and transforming are synonymous with possessing an interdependence leadership culture within an organization (Palus,

2009). Jamie shared her appreciation of the support she received from her principal: "I think having her support has been 100% positive as far as making sure the program was implemented correctly." Marjorie confirmed the same view: "During the implementation phase, we had to collaborate together to ensure the success of the program, especially in the beginning when we were all learning how the program could benefit our students the most." In rural school districts, there is a strong sense of community and the need to collaborate due to the dense relationships formed among staff members and stakeholders working and residing in a rural region (Kollie, 2007).

Jamie provided another example of integration concerning virtual and face-to-face teaching and learning at SHS. The flexibility provided by the GaVS program allowed students to attend the traditional classes at SHS, while also participating in courses offered through an online learning environment. She stated, "It's important ... to offer ... the hybrid program where some of the students can come and participate in elective courses here on campus that may not be offered through the virtual program. This helps to make the program beneficial and it's providing the flexibility that the students need." Ingram (2016) and Teague (2013) reiterated the idea of integrating virtual programs into traditional school systems to mean that technology and the GaVS program can support and enhance learning opportunities available to any student, at any time, and at any location. Furthermore, they contended that programs like GaVS provide students with the option of being a full-time or part-time virtual student. Part-time students complete courses in the traditional school setting while also accessing one or more virtual courses online (Ingram, 2016; Teague, 2013).

More integration was evident in the technologies used in the program, including computers, the virtual program's LMS, and Internet access made available to all of the virtual students at SHS, giving exposure to the students who reside in a sheltered and sparse community, particularly for conservative rural communities. The technology made available gave the students the ability to explore the outside world. In order for students to participate in the virtual program, they needed a computer and Internet access to connect to the virtual program's LMS and to be able to communicate with their virtual teachers through asynchronous and synchronous learning. With the integration of the technology, students were able to communicate with SHS's school counselors and the virtual program technician through online communication means such as, email, instant messaging, social media, and video chat programs, to request support in utilizing the virtual program or receive assistance for other school related matters. As Marjorie stated:

In order to help make virtual learning an option for all students, we supplied the students with a computer and allowed them to stay on campus to access the school's Internet. Providing these items and options to the students helped to increase the modes of communication between the students and [the school counselors] including email, text, social media, virtual chats, and instant messaging.

In this broad theme, I have tried to show the complex integration between individual skills and technologies. These factors show the intricate ways in which personalities and technologies vary, depending on the problem at hand.

The following sub-themes school leadership and the GaVS program, virtual school counseling and technical support, and ensuring compliance of State virtual

learning mandates and GaVS oversight emanate from the more encompassing idea of integrating resources, including technologies and support. It is important not to treat the sub-themes as conceptual isolates, but as overlapping concepts.

The first sub-theme regarding school leadership and the GaVS program can be understood within the adaptive leadership framework. This framework provides a conceptual lens in which leaders use non-traditional approaches to diagnose, interrupt, and innovate, while working to increase student achievement (Heifetz, 1994; Heifetz & Linsky, 2002). Christa and Kim reflected adaptive leadership traits by organizing, planning, motivating and inspiring the GaVS program personnel. Kouzes and Posners' (2007) Five Practices of Exemplary Leadership model further helps to explain adaptive leadership. This model provides a context in which one may understand Christa's leadership behaviors including modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart. In light of Kouzes and Posners' (2007) model, Christa and Kim provided leadership that empowered and inspired the two school counselors and the virtual program technician's authority to make decisions pertinent to the implementation processes. Jamie, Marjorie, and Andrea corroborated Christa and Kim's adaptive and exemplary leadership styles as follows: Jamie shared: "Christa is not only the leader of the school but also a leader in the community. She is empowered by the tradition of [the] rural community and is regarded as a community leader. Everyone looks up to the school principal and looks to her as the decision-maker."

Jamie explained further about Christa and Kim's leadership behaviors:

Christa and Kim allow us to do our job without being micromanaged. They have faith and trust in our competence and abilities. They know that we are all working towards the same goal and vision in making sure the program is a success and that our students reap the benefits that the program has to offer.

Marjorie revealed, "Christa and Kim see us as school counselor leaders. As school counselor leaders, we are effective managers of the school's resources and programs." Andrea noted, "It was very innovative on Christa's part to make the program available to the students and for Kim to oversee the successful implementation and continuation of the program."

In conclusion, Christa and Kim utilized adaptive and exemplary leadership styles to implement the GaVS program. These leadership styles proved to be very effective given the unique nature of the virtual environment in rural school districts. Virtual program leadership, unlike traditional school leadership, requires technological dexterity, the ability to convey the vision and mission, overcoming barriers imposed by interaction in an online environment, more cohesive groups and communities, authenticity and transparency (NĂSTASE & ROJA, 2013).

Virtual school counseling and technical support is the second sub-theme discussed. Based on data obtained from interviews, the document reviews, and observations, I found that the school counselors were critical elements of the implementation process. Jamie and Marjorie's traditional school counseling duties consist of developing and implementing a comprehensive school counseling program to address the academic, career, social and emotional needs of the traditional and virtual students and the goals of the school (ASCA, 2014; ASCA, 2017). Virtual school counseling

requires school counselors to interact with students and virtual teachers via video chat programs, online instant messaging, email and other electronic mediums. However, school counseling for participants in this study served both traditional and virtual school students. This is a challenge especially in a rural school districts where the schools must continue the work regardless of financial and staff limitations (Kollie, 2007; McCabe, 2011). Despite these difficulties, they were able to integrate traditional and virtual school counseling practices into their daily work routines. Thus, in addition to traditional school counseling roles such as providing individual student academic program planning, virtual school counseling required the school counselors to organize resources and information that can be accessed online to help students focus on organization, time management, stress and study skills due to virtual learning being self-initiated and requiring disciplined time management skills. This confirms Osborn et al.'s (2014) notion of school counseling for virtual students, which includes the majority of the duties of a traditional counselor, but with counselors delivering advising and communication through non-traditional means, such as text, email, video chats, and instant messaging.

The third sub-theme of the study, ensuring compliance of State virtual learning mandates and GaVS oversight, deals with the roles and responsibilities of the GaDOE GaVS support specialist working with local schools, parents, and students to ensure that they are well informed of the opportunities and options that GaVS offers. Bailey took it upon herself to help make sure that schools adhered to the state and program regulations and ensured that schools received the program support they needed to implement the program effectively. Bailey's devotion and commitment to the virtual program may be a consequence of her prior experiences as a public high school student. This kind of

support is very important in a rural context where people are exposed to limited policy information by virtue of residing in a rural community. Bailey's serves as a valuable resource to the rural districts more so than the urban districts due to the limited revenue and resources that rural districts possess as compared to urban districts. As a student, she was dissatisfied with teachers and students' behaviors, which she directly connected with poor academic performance. This view was confirmed by Day and Sammons (2016) who argued that the climate of a school, the quality of the teachers, and the school's leadership have a significant impact on student performance.

In this section, I highlighted the role of policy enforcement. Although local school leaders make implementation decisions, state regulations still constrain them and they often defer to seek advice from government representatives.

Research Questions: Final Discussions Summary

In this section, I aligned my research questions with a summary of the findings discussed within the two main themes and three sub-themes. RQ1: What are the experiences of the professional educators who implemented the GaVS program in a rural Georgia school district and what were the lessons learned during the GaVS program implementation process? All SHS GaVS program staff involved in this study reported positive and negative experiences. All shared a common vision of expanded learning opportunities offering flexibility and convenience. The school principal and assistant principal were committed to providing a competitive, high quality, flexible and convenient education for their students. The administrators were committed to closing the gap between urban and rural students by providing a competitive program at SHS. Christa and Kim suggested that adaptive and exemplary leadership help to empower

people and prepares them to embrace the changes that may occur during program implementation. These types of leadership helped shape their professional practices and experiences at SHS. Throughout the study, the administrators shared a common vision of making virtual learning a reality for all high school students in their local district. For example, Christa and Kim had to modify and expand their leadership roles to serve as virtual and traditional educational leaders. This type of leadership reflects a sense of family and unity within the school serving as the lifeline to the rural community (Kollie, 2007). Similarly, Jamie and Marjorie had to step beyond their traditional school counseling boundaries and serve the unique needs of the virtual students.

Although all participants expressed satisfaction and a large degree of success with the implementation of the program, they also reflected on issues they could have done differently. For example, they felt that more preparation and planning could have helped them overcome some implementation problems they experienced in the beginning. Christa regretted not having enough support initially to meet the needs of the virtual students. She shared: "We did learn from the implementation of the virtual program to make sure that we have enough support in place for the students who are using the program." Andrea, on the other hand, felt that an increase in program monitoring might have boosted students' success rates. These problems suggest the need for thorough planning of resources and support before implementation, which reflects some of the unique needs of a rural school district.

Uniquely, their approaches of implementation align with the *Virtual Program/School as an Educational Alternative* framework that highlighted the following: alternative programs/schools, such as GaVS, may improve student achievement while

providing a flexible structure, supportive environment, alternative choices, family support, specific services, well-defined standards and procedures, and an individualized curriculum (Franklin, 1992). The establishment of alternative programs/schools emerged due to two educational movements: the educational reform movement designed to improve achievement of all students, and a reactionary movement in protest against the impersonal structure found in public schools (Franklin, 1992).

Franklin (1992) determined that the alternative structures and ideologies helped many students find educational success. As other states have successfully implemented virtual alternative educational programs (Greenway & Vanourek, 2006), the state of Georgia has also implemented a virtual alternative educational program, GaVS (GaDOE, 2012; Ingram, 2016). GaVS served as the basis for this study.

RQ2: What implementation barriers did the professional educators in a rural Georgia school district experience while implementing the GaVS program with the intent to increase student access and achievement? As with many rural school districts, SHS had serious constraints because of the unequal funding provided to urban schools versus rural schools (Kollie, 2007; McCabe, 2011). All six participants expressed different barriers with funding associated with successful implementation. First, the two counselors (Jamie and Marjorie) regretted not having sufficient preparation to balance their roles as traditional and virtual school counselors. This confirms Kollie (2007) and McCabe's (2011) argument that limited resources in rural districts created problems across the board, constraining recruitment and retention of qualified individuals to share increased responsibilities of the virtual program. Jamie lamented:

I felt in the beginning that we needed more training on the program. We had also not anticipated the amount of extra time that needed to be devoted to our virtual learners, including communicating with the students to determine their needs through email, virtual chat, instant messaging, online reminders, text, and website postings along with monitoring their progress in the virtual program. Marjorie shared:

Cyberbullying is an issue that unfortunately some of our virtual and traditional students may face. However, because our virtual students are online for a large portion of the school day, they may be more susceptible to encounter it. It's our job to help ensure that our students feel protected and sheltered from harm.

Based on the findings of this study, virtual school counseling posed unique challenges in the delivery of school counseling practices and provision of a safe and secure online learning environment.

Second, during the early implementation of the virtual program, the virtual participants struggled with an acute shortage of computer devices and Internet access. These students did not have access to personal computers during the early stages of program implementation. However, students in need of computers could checkout older computers from the school library for use at home to access their virtual courses. Because the computers were outdated, students could not access some of the virtual course content due to the limited capability of the computers' hardware. This very pressing issue limited student access to course materials through the online LMS. Therefore, having use of a computer and Internet access, which were needed to allow the student to access the course in its entirety, was a necessity for the success of the virtual

learning program, a problem that rural schools struggle with on a daily basis (Kollie, 2007).

Third, utilizing electronic media in a rural context, all participants expressed communication problems at different levels. Christa and Kim felt that the communication lines between the virtual students, their parents, and the school counselors were limited during the initial launch of the program. They felt that this was a result of perhaps limited program knowledge on the part of the students, parents, and school counselors. Jamie complained that many times students elected not to respond to her emails and phone calls in a timely manner. Because of this, she often felt a sense of despair and frustration. Marjorie felt that initially students were not communicating to the school counselors or to Andrea, the virtual program technician, if they were having difficulties in using the program. Andrea shared that although the school had communicated the virtual program option to the students and parents sufficiently, she consistently learned that many parents and students were still unaware that GaVS was an available option for the students at SHS. Bailey believed that some systems in Georgia

Fourth, the school counselors' communication was constrained by their inability to contact virtual teachers directly to discuss students' concerns. In a traditional school organization, the school counselors have the freedom to interact directly with teachers on issues pertaining to student work. In contrast, in the virtual program, there were limited discussions that occurred between the SHS school counselors and the GaVS virtual teachers involving students' specific learning problems.

RQ3: What strategies to mitigate implementation barriers did the professional educators in a rural Georgia school district use while implementing the GaVS program with the intent to increase student access and achievement? The problem of ill-prepared virtual school counselors' led to several initiatives to support the school counselors. A virtual program technician, Andrea, was added to provide support and help relieve some of the pressure that the school counselors were feeling. She assisted with the technology issues and helped monitor the students' progress and the online learning environment.

The second barrier involved limited technology and computer devices for the virtual students to access, coupled with Internet accessibility issues. To deal with these issues, the school was able to supply all of the virtual students with Chromebook computers purchased through funds received from a grant awarded by GOSA. SHS applied for and received a GOSA blended learning scaling grant, which allowed for the purchase of the Chromebooks computers for the students at SHS. The Chromebook computers allowed students to save and access off-line portions of assignments, which reduced the lack of Internet access barrier. Additionally, the virtual students could participate in their online classes on the school campus and access the school's Internet services. Because of the increase in Internet users at SHS, the infrastructure and high-speed broadband connection services were updated and additional wi-fi routers and access points were installed.

Christa shared:

Having the Chromebooks available for students, allows more students the opportunity to participate in the virtual program. The Chromebooks also help with the limited Internet access that some students experience. It has the

capability of allowing students to work off-line while completing a portion of their virtual assignments. Students also have the option of remaining on the school's campus to access the school's Internet while completing their virtual courses.

The third barrier revolved around communication problems. To help increase the awareness of the virtual program to others, the school counselors conducted additional informational sessions and posted the virtual program information on the school's website and social media. They also created flyers and placed them in the school counselors' main office at SHS. The school counselors, students, and parents of the virtual students received instruction on how to access and monitor the students' usage of the program, and students were made aware of to whom to reach out if problems arose in their use of the program.

The last barrier addressed involved the lack of connection with the GaVS teachers. The school counselors felt constrained by their inability to communicate directly with the virtual teachers face-to-face. The inaccessibility of virtual teachers prohibited them from sharing student information necessary to make informed advisement decisions. As a result some students who were not computer literate and in need of close supervision fell behind in their course work. WestEd (2007) argues that virtual students require continuous support to avoid feelings of isolation. To resolve this barrier and ease the frustration of the school counselors, the school put measures in place for the school counselors to communicate with the GaVS teachers through email, phone, and a virtual chat program. The school counselors received training on how to access the contact information for the virtual teachers through the GaVS program. Gaining access

to this information allowed the school counselors to build relationships with the GaVS teachers, which contributed towards student success.

Marjorie shared:

Learning how to access the GaVS' teachers' contact information and where this information is located within the GaVS program, helped tremendously by allowing us to begin forming relationships with the GaVS teachers, which greatly benefits our students. We are able to email, call, or video chat with the teachers if we determine that the student is struggling in the virtual courses and find out how we can best support the student in the online learning environment.

In this section, I have addressed the research questions proposed for this study. I discussed the barriers that the professional educators experienced while implementing the GaVS program, along with the strategies that they used in mitigating the barriers to allow for an increase in student access and achievement at SHS in the rural SCSD. It was evident that the school counselors felt that training and additional technical support were needed during the early stages of implementing the program. The school addressed these issues by providing the school counselors with instruction on how to utilize the virtual program. Andrea was also assigned the role of providing the technology support needed for the virtual program.

Christa and Kim determined that the lines of communication needed to increase between the school counselors, students, and parents with regard to academic struggles experienced by the virtual students. Andrea assisted in the dissemination of the available technology devices that students needed in order to access the virtual program.

Implications of the Study

Although this study focused on the implementation of a virtual program at a high school in the rural SCSD with limited resources, it has broader implications for many rural high schools seeking to implement similar programs in South Georgia. Rural school districts should not be considered incapable of providing a high quality education because they do not have as many competitive resources as urban districts. Rural school districts have the burden of finding other sources of funding, such as applying for grants or seeking donations, to help provide the needed resources by virtue of the limited local tax base (Kollie, 2007; McCabe, 2011). Kollie (2007) revealed that it costs more to educate students experiencing poverty, which is a typical characteristic of students attending a rural school district. These districts need additional funding to provide the additional resources and support needed to educate low-income students (Johnson et al., 2014; Kollie, 2007; McCabe, 2011). The funding needs of rural districts as compared to urban districts need to be considered so every student is allowed the same opportunities to receive a high quality education along with any needed additional resources and support.

I discussed the key implementation roles and responsibilities played by all participants in this study, and described the integration of resources and technologies, which schools may use to implement similar virtual programs. Without providing accessible resources and supports, including the necessary technology needed to utilize the virtual program, virtual programs will not be successful (Irvin et al., 2009; Lee et al., 2011; Watson et al., 2015). Compared to urban school districts, rural schools are still lagging in access to technology because of funding (Kollie, 2007).

Another striking feature of this study is the notion of resources and support. This idea encompassed leadership and school counseling concepts along with policy

compliance. It is important to note that the implementation of a virtual program requires special leadership. In this case, the leaders used adaptive and exemplary leadership to address the unique needs of implementing a virtual program in a rural school district. For example, Christa sometimes found herself relying more on electronic communication rather than face-to-face. At the beginning of the program, she had to determine the needs of her school, district, and community, and create a vision in which technology played a key role.

The school counselors in this study appeared to have insufficient preparation to equip them with necessary skills required for virtual counseling. Administrator and the school counselors' struggles with sufficient training to meet the demands of program implementation suggest that prospective program leaders train personnel before implementation process begins. At the beginning of the virtual program implementation at SHS, Jamie and Marjorie felt overwhelmed in having such limited knowledge about the usage of the GaVS program at the same time that they were also having to explain the basics of the program to students. Marjorie shared: "It seemed to be a 'learn as you go' type of program implementation in the very beginning."

Limitations of the Study

Identifying the limitations of the study provide more credibility and trustworthiness to qualitative research (Patton, 2002). In this study, I utilized a purposeful sampling procedure and, although it can provide "in-depth understanding," the lack of quantity limits the generalization of the study's results (Patton, 2002, p. 46). However, the rich data collected from each of the interviews met the goal established for this study, which was to provide literature on the experiences of the study's participants

(Patton, 2002). The study's sample consisted of two administrators (a principal and an assistant principal), two school counselors, a virtual technician, and a GaDOE GaVS support specialist. These professional educators were responsible for implementing the GaVS program at the secondary school level and did not reflect middle or elementary school perspectives. The study did not address teacher or student perceptions regarding the implementation of the GaVS program at SHS. I collected data for the study over a three-month period. The conclusions of this study referred to an identified virtual program implemented at a public high school located in the rural SCSD in South Georgia. The primary goal of this qualitative study was to determine how a rural Georgia school district with limited resources implemented the GaVS program with the intent to increase student access and achievement. I assumed that the professional educators who participated in the interviews gave thorough and honest responses, and recalled information and facts as accurately as possible.

Only one of the participants did not participate in face-to-face interviews. This participant, the GaDOE GaVS Support Specialist, responded to interview questions via phone. Seidman (2006) stated, "A phenomenological approach to interviewing by telephone... can work" (p. 113). The phone interviews consistently provided rich data for analytical purposes. Therefore, I am certain that the type of communication mode between the GaDOE GaVS support specialist and myself did not affect the data collected from the phone interviews.

The fact that my employment is within the same school system as the participants is also a limitation as a researcher. My leadership position may have influenced some participants to speak more positively than they truly felt. My interaction with the

participants may have influenced what they chose or failed to share. I ensured that all participants were aware that all information obtained for the study is confidential and that their participation was strictly on a volunteer basis. I also acknowledged that negative information is just as helpful as positive information in detailing the experiences of the implementation of the GaVS program.

As the researcher, I continuously checked and addressed any subjectivity that arose during the study. To help address any biases experienced during the study, I wrote memos to capture my thoughts during and after the interviews and during the data analysis and reflection (Maxwell, 2013). Despite these limitations, this study provides instructive data for schools attempting to establish a GaVS program. While acknowledging that no two schools are alike in every way, the data collected from the study may still be useful for other rural school districts that are considering establishing a GaVS program.

Recommendations for Future Research

Several recommendations regarding possible future research opportunities emerged as a result of reviewing the findings from this study. This study focused on six participants. Although this met the requirements of purposeful sampling, future studies may benefit from having a broader sample of more participants that could include other stakeholders, such as parents, students, and teachers in different grade spans, including elementary, middle, and high school. It would also be possible to conduct a narrative study on the students electing to participate in the virtual programs in order to gain their perspectives, which are relevant to the expansion and continuation of the program going forward. Additionally, future research could include the perspectives of students,

teachers, and other professional educators on the benefits of virtual learning compared to blended learning.

Other areas of future research could include determining the benefits and perspectives of all stakeholders if policy is put into place requiring all high school students to take a virtual course as a graduation requirement. The researcher could use the states that have already established policy in requiring a virtual course as a graduation requirement as data and sample sources. A quantitative research may seek to determine the effect of virtual learning on graduation rates or achievement levels. There is limited literature base on the academic achievement of K-12 virtual students and it is important to do more to develop the curricular and teacher training programs (Pennucci, 2016). Of equal interest would be to explore in detail the type of student who participates in virtual programs, along with the turnover, academic struggles, and successes of this population (Pennucci, 2016).

Final Conclusions

Implementation of the GaVS program into SHS provided an important advantage to a rural school district with limited resources. This plays off the fact that the high school is at the center of the rural community's identity and the administrators are seen as community leaders (Kollie, 2007). Virtual learning technology offers a low-cost means to upgrade classes, expand course offerings, and give students access to highly qualified teachers (Lipps, 2010). Use of technology for educational purposes presents a host of effective and economical opportunities to help rural school districts close the resource gap they experience due to their remoteness and funding status.

Despite the funding and technological barriers faced during the implementation of the GaVS program at SHS, participants in the study reported successes in expanding new learning opportunities and promoting use of technology for the SHS high school students. Their success may be attributed to a variety of factors including a strong sense of community that allowed the implementation team to rally together towards a common cause. These communal bonds enabled the GaVS implementation team to overcome financial and technological constraints to provide their students with a reputable virtual program that competes favorably at a national level. SHS mastered the art of applying for grants and raised enough money to purchase much needed computers for student use. The school administrators hemmed in by local politics and community traditions were able to incorporate a new virtual learning program into the traditional school system (Kollie, 2007). Many beneficial findings emerged from the study that might assist prospective high schools located in a rural school district seeking to implement a GaVS program. The data from the study resulted in two major themes: expanding educational opportunities for students and integrating resources and support. The theme of integrating resources and support produced three sub-themes: school leadership and the GaVS program, school counselor and program technician support, and ensuring compliance with State virtual learning mandates and GaVS oversight. The study's frameworks enabled the examination of these themes and sub-themes. The combination of the conceptual and the theoretical frameworks may help prepare schools with the planning and implementing of the GaVS program.

The participants of this study reported beliefs about the benefits of expanding educational opportunities for their students by providing the virtual learning program,
GaVS, as an educational alternative. Through this study, I was able to determine the barriers hindering a smooth implementation of the GaVS program and I identified the effective strategies utilized to overcome them. It also brought to light the importance of providing resources and support to allow for program and student success. The findings of the current study closely align with those of current literature indicating the importance and benefit of expanding educational opportunities for students by offering virtual learning as an option. Research (Irvin et al., 2009; Lee et al., 2011; Watson et al., 2015) further confirms that providing resources and support, including technology and technical support, to those participating in virtual learning further enhances their ability to succeed in the program.

The planning stage is a critical component of program implementation. Based on the analysis of the data derived from this study, the planning stage that occurred before implementing the program was not sufficient. This emerged from the school counselors' complaints of not feeling fully prepared to assist students in the enrollment and utilization of the virtual program. This also became apparent when Andrea voiced her concerns of not having enough computers initially for the virtual students to use. The planning stage allows schools to think through these types of issues and put measures into place before the implementation gets underway.

The study brought to light the importance of communication on many different levels. The school counselors had to adapt their traditional counseling techniques to include communicating with their virtual students through different modes of delivery, such as email, social media, text, and video chats. It was critical for effective communication to occur between the administrators and the school counselors to ensure

170

the program's success. It was the responsibility of the school counselors to keep the administration informed of the status of the program, including the percentage of participants, along with the number of virtual courses utilized and completed.

Going into this study, I used adaptive leadership as a conceptual framework. Based on the analysis of the data, it is apparent that the implementation of the virtual program requires a leadership style that goes beyond adaptive leadership. The analysis determined that exemplary leadership is also necessary for the implementation of the virtual program. With exemplary leadership, the leader inspires others. As Christa revealed, she had a vision for her students and the school. She talked about buying into the vision and the importance of sharing the vision with others.

I feel that people often assume a leader can lead any type of program, such as believing that a principal should not have any trouble leading a virtual school or program. The belief that a principal can be uprooted and placed in a different situation and function effectively, I feel, is misguided. I think the virtual platform requires special leadership styles that may not be as significant in a traditional setting. The same applies to school counseling. This type of program requires special counseling techniques for this type of student. From this, I believe that the study helped prove that there needs to be special training for school leaders and school counselors for implementing this type of program. The study's participants rose above the challenges of funding and technology barriers typically found in rural school districts (Kollie, 2007; McCabe, 2011) to allow for a successful GaVS program implementation at SHS.

171

REFERENCES

- Abdoli Sejzi, A., & Aris, B. (2012). Constructivist approach in virtual universities. *Procedia – Social and Behavioral Sciences, 56*, 426–431.
- Allen, I. E., & Seaman, J. (2013). Changing course: Ten years of tracking online education in the United States. *Sloan Consortium*, 1–47.

Alliance for Excellence Education, America's Promise Alliance, Civic Enterprises, & Everyone Graduates Center. (2015). *Progress is no accident: Why ESEA can't backtrack on high school graduation rates*. Retrieved from http://all4ed.org/wpcontent/uploads/2015/11/NoAccident.pdf

- American School Counselors Association. (2012). The ASCA national model: A framework for school counseling programs (3rd ed.). Alexandria, VA: American School Counselors Association.
- American School Counselors Association. (2014). ASCA mindsets & behaviors for student success: K-12 college- and career-readiness standards for every student.
 Alexandria, VA: American School Counselors Association.
- American School Counselors Association. (2017). The school counselor and comprehensive school counseling programs. American School Counselors Association, 1-4. Retrieved from: https://www.schoolcounselor.org/asca/ media/asca/PositionStatements/2017.pdf
- Archambault, L., & Crippen, K. (2009). K–12 distance educators at work: Who's teaching online across the United States? *Journal of Research on Technology in Education, 41*(4), 363–391.

- Archambault, L., Kennedy, K., & Bender, S. (2013). Cyber-truancy: Addressing issues of attendance in the digital age. *Journal of Research on Technology in Education*, 46(1), 1–28.
- Badertscher, N., & McWhirter, C. (2010, August). Race to the top means \$400 million for Georgia. *The Atlanta Journal-Constitution*. Retrieved from http://www.ajc.com/news/news/local/race-to-the-top-win-means-400-million-forga/nQjdH/
- Barbour, M. K., & Reeves, T. C. (2009). The reality of virtual schools: A review of the literature. *Computers and Education*, 52(2), 402–416.
- Barge, J. D. (n.d.). *The history of Georgia Virtual School*. Retrieved from https://docs.google.com/document/d/1Y8742ve0yc5LGiTT xo5vJuG9-wgj5ckxK1Q7n-xoufo/edit
- Barth, P. (2013). Virtual schools: Where's the evidence? *Educational Leadership*, 70(6), 32–36.
- Barlett, C. P., Gentile, D. A., & Chew, C. (2016). Predicting cyberbullying from anonymity. *Psychology of Popular Media Culture*, 5(2), 171-180. doi:10.1037/ppm0000055

Beattie-Moss, M. (2011). Probing question: What does computer literacy mean these days? Penn State University. Retrieved from http://news.psu.edu/story/ 141880/2011/07/12/research/probing-question-what-does-computerliteracy-mean-these-days

Berge Z. L., & Clark, T. (Eds.) (2005). Virtual Schools: Planning for Success. New York: Teachers College Press.

- Berge, Z. L., & Muilenburg, L. Y. (2003). Barriers to distance education: Perceptions of K–12 educators. Proceedings of the Society for Information Technology and Teacher Education International Conference 2003 (256–259). Chesapeake, VA: AACE.
- Blaschke, L. (2014). Using social media to engage and develop the online learner in selfdetermined learning. *Research in Learning Technology*, 22. Retrieved from http://www.tandfonline.com/doi/full/10.3402/rlt.v22.21635
- Blaylock, T. H., & Newman, J. W. (2005). The impact of computer-based secondary education. *Education*, 125(3) 373–384.
- Blomeyer, R. (2002). Virtual schools and e-learning in K–12 environments: Emerging policy and practice. *NCREL Policy Issues*, *11*, 1–11.
- Blomeyer, R. L., & Cavanaugh, C. (2007). *What works in K–12 online learning*? International Society for Technology in Education [ISTE].
- Bluestone, P., & de Zeeuw, M. (2016). Jobs in Georgia's urban and rural regions and counties: Changes in distribution, type, and quality from 2007 to 2014. Andrew Young School Center for State & Local Finance, Georgia State University.
 Retrieved from http://www.cslf.gsu.edu
- Bolliger, D. U., & Erichsen, E. (2013). Student satisfaction with blended and online courses based on personality type. *Canadian Journal of Learning and Technology*, 39(1), 1–23.
- Bolman, L. G., & Deal, T. E. (2008). *Reframing Organizations: Artistry, Choice, and Leadership*. San Francisco, CA: Jossey-Bass.

- Bransford, J. D., Brown, A. L., & Cocking, R. R. (1999). How People Learn: Brain, Mind, Experience, and School. Washington, DC: National Academy Press.
- Brenner, S. (2007). Distance education in the public high school. *Distance Learning*, *4*(4), 29–34.
- Brown, M. D. (2006). Virtual high schools: Part I: The voices of experience. *Education World*. Retrieved from http://www.educationworld.com/a_tech/tech/tech052. shtml
- Cakir, H., Delialioglu, O., Dennis, A. & Duffy, T. (2009). Technology enhanced learning environments for closing the gap in student achievement between regions: Does it work? *AACE Journal*, 17(4), 301–315.
- Cardinal, R. (2015). *Six management styles and when to use them*. The Huffington Post. Retrieved from http://www.huffingtonpost.com/rosalind-cardinal/6-managementstyles-and-when-to-use-them_b_6446960.html
- Carver, D. & Kosloski, M. F. (2015). Analysis of student perceptions of the psychosocial learning environment in online and face-to-face career and technical education courses. *The Quarterly Review of Distance Education*, 16(4), 7–21.
- Cavanaugh, C. (2009). Effectiveness of cyber charter schools: A review of research on learnings. *TechTrends*, *53*(4), 28–31.
- Cavanaugh, C. S., Barbour, M. K., & Clark, T. (2009). Research and practice in K–12 online learning: A review of open access literature. *International Review of Research in Open & Distance Learning*, *10*(1), 1–22.
- Cavanaugh, C., Maor, D., & McCarthy, A. (2014). K–12 mobile learning. In R. E. Ferdig & K. Kennedy (Eds.), *Handbook of Research on K–12 Online and Blended*

Learning (pp. 391–414). Retrieved from http://press.etc.cmu.edu/

content/handbook-research-K-12-online-and-blended-learning-0

- Chingos, M. M. (2013). Questioning the quality of virtual schools. *Education Next*, 13(2), 1–7.
- Cho, J., & Trent, A. (2009). Validity criteria for performance-related qualitative work toward a reflexive, evaluative, and co-constructive framework for performance in/as qualitative inquiry. *Qualitative Inquiry*, 15(6), 1013–1041.
- Christensen, C., Johnson, C. W., & Horn, M. B. (2008). Disrupting Class: How Disruptive Innovation will Change the Way the World Learns. New York, NY: McGraw-Hill.
- Clark, T. (2001). Virtual schools: Trends and issues A study of virtual schools in the United States. San Francisco, CA: Western Regional Educational Laboratories.
 Retrieved from http://www.wested.org/online_pubs/virtualschools.pdf
- Clark, T. (2007). Virtual and distance education in North America schools. In M. G.
 Moore (Ed.) *Handbook of Distance Education* (pp. 673–699). Mahwah, NJ:
 Lawrence Erlbaum Associates, Inc.
- Clark, T. (2008). Online learning: Pure potential. *Educational Leadership*, 65(8). Retrieved from http://www.blackboard.com/resources/k12/ascd_online_ learning_pure_potential.pdf
- Collins, J. C. (2001). Good to Great: Why Some Companies Make the Leap ... and Others Don't. New York, NY: HarperBusiness.
- Common Core State Standards Initiative. (2012). *Implementing the common core state standards*. Retrieved from www.corestandards.org

- Cowley, K. S., Meehan, M. L., & Whittaker, D. (2002). *Comparison of non-rural versus rural middle-school students' academic aspirations*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Creswell, J. W. (2007). *Qualitative Inquiry & Research Design: Choosing among Five Approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Davis, N., & Niederhauser, D. S. (2005). Socio-cultural analysis of two cases of distance learning in secondary education, *Education and Information Technologies*, 10(3), 249–262.
- Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes.
 Educational Administration Quarterly, 52(2), 221.
 doi:10.1177/0013161X15616863
- Dillon, E., & Tucker, B. (2011). Lessons for online learning: Charter schools' successes and mistakes have a lot to teach virtual educators. *Education Next*, *11*(2), 50–57.
- Duggan, M. L. & Bolton, E. B. (1921). Educational Survey of Thomas County Georgia. Georgia Department of Education. Retrieved from https://archive.org/details/ educationalsurve00geor10
- Dzwonek, B. R. (2007). South Dakota high school principals' perceptions of high school distance learning courses [Dissertation]. Retrieved from ProQuest Digital Dissertations.
- Education Superhighway. (2015). 2015 state of the states: A report on the state of broadband connectivity in America's public schools. Retrieved from www.educationsuperhighway.org/stateofthestates

- Edwards, D., & International Association for K-12 Online Learning (2015). Planning and designing for K-12 next generation learning. Retrieved from http://files.eric.ed.gov/fulltext/ED561325.pdf
- ExcelinEd. (2010). Bush and Wise convene digital learning council. *Foundation News*. Retrieved from http://www.excelined.org/news/bush-and-wise-convene-digital-learning-council/
- Executive Office of the President. (2015). Every student succeeds act: A progress report on elementary and secondary education. Retrieved from https://www.whitehouse.gov/sites/whitehouse.gov/files/documents/ESSA_Progre ss_Report.pdf
- Ferdig, R. E. (2010). Understanding the Role an Applicability of K–12 Online Learning to Support Student Dropout Recovery Efforts. Lansing, MI: University of Michigan Press.
- Foley, R., & Pang, L. (2006). Alternative education programs: Program and student characteristics. University of Nebraska Omaha. Retrieved from http://digitalcommons.unomaha.edu/slcestgen/62
- Franklin, C. (1992). Alternative school programs for at-risk youths. *Social Work in Education, 14*(4), 239–250.
- Friedman, H. H., & Friedman, L. W. (2011). Crises in education: Online learning as a solution. *Creative Education*, 2(3), 156–163.
- Georgia Department of Education. (2011). *What is the Bridge Law?* Retrieved from https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/ Documents/BRIDGE-separate-card.pdf

Georgia Department of Education. (2012). *Georgia Department of Education report for Senate Bill 289*. Retrieved from https://gosa.georgia.gov/sites/gosa.georgia.gov/ files/SB289_Report.pdf

Georgia Department of Education. (2015). *Georgia's graduation rate increases significantly*. Retrieved from https://www.gadoe.org/External-Affairs-and-Policy/communications/Pages/PressReleaseDetails.aspx?PressView=default&pid =395

- Georgia Partnership for Excellence in Education. (2012). *Student achievement*. Retrieved from http://toolbox.gpee.org/fileadmin/files/PDFs/Student_ Achievement_july_19.pdf
- Georgia Virtual School. (2016). 2016 spring semester data [Data file]. Georgia Department of Education.
- Glaser, B. G., & Strauss, A. L. (1967). Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago, IL: Aldine.
- Gordon, D. (2011). Rural schools: Off the beaten path. *T.H.E. Journal*, *38*(9), 18–20. Retrieved from http://eric.ed.gov/?id=EJ955197

Goss, M. (2011). Georgia virtual school. *Distance Learning*, 8(3), 41–45.

- Grady, S., Bielick, S., & Aud, S. (2010). Trends in the use of school choice: 1993 to 2007. U.S. Department of Education. Retrieved from https://nces.ed.gov/ pubs2010/2010004.pdf
- Greenway, R., & Vanourek, G. (2006). The virtual revolution: Understanding online schools. *Education Next*, 6(2), 34–41.

Griffin, D., & Sherrod, B. (2005). Technology use in rural high schools improves

opportunities for student achievement. Southern Regional Education Board. Retrieved from http://www.sreb.org/

Growth in Distance Learning. (2005). Gifted Child Today, 28(3), 6-7.

- Hall, A. (2015). Virtual schools a growingly popular option for both Glynn and students statewide. *The Brunswick News (GA)*. Retrieved from http://goldenisles.news/virtual-schools-a-growingly-popular-option-for-bothglynn-and/article_d6d6dd8f-98a7-584a-9bbf-1fbaed665fbe.html?mode= image&photo=
- Hanushek, E. A., Peterson, P. E., & Woessmann, L. (2012). Achievement growth: International and U.S. state trends in student performance. Boston, MA: Harvard Program on Education Policy and Governance.
- Hassel, B. C., & Terrell, M. G. (2004). How can virtual schools be a vibrant part of meeting the choice provisions of the no child left behind act? U.S. Department of Education Secretary's No Child Left Behind Leadership Summit Increasing options through e-learning, 1–13.
- Hawkins, A., Graham, C., Sudweeks, R. R., & Barbour, M. (2013). Academic performance, course completion rates, and student perception of the quality and frequency of interaction in a virtual high school. *Distance Education*, *34*(1), 64–83.
- Heifetz, R. A. (1994). *Leadership without Easy Answers*. Cambridge, MA: Belknap Press of Harvard University Press.
- Heifetz, R. A., & Linsky, M. (2002). Leadership on the Line: Staying Alive through the Dangers of Leading. Boston, MA: Harvard Business School Press.

- Hill, J. (2006). Flexible learning environments: Leveraging the affordances of flexible delivery and flexible learning. *Innovative Higher Education*, 31(3), 187–197.
- Horn, M. B., & Staker, H. (2011). *The rise of K–12 blended learning*. Mountain View, CA: Innosight Institute.
- Horrigan, J. B., & Duggan, M. (2015). *Home broadband 2015*. Pew Research Center. Retrieved from http://www.pewinternet.org/2015/12/21/home-broadband-2015/
- Howley, A., Wood, L., & Hough, B. (2011). Rural elementary school teachers' technology integration. *Journal of Research in Rural Education*, 26(9), 1–13.
 Retrieved from http://jrre.psu.edu/articles/26-9.pdf
- Hunt, S. L., & Sanders, F. (1996). The communication of educational reform: "A Nation at Risk." *Communication Education*, 45(4), 271–292.
- Illinois State Board of Education. (n.d.). *No Child Left Behind*. Retrieved from http://www.isbe.net/nclb/htmls/highlights.htm
- iNACOL. (2011). The online learning definitions project. Retrieved from http://www.inacol.org/wp-content/uploads/2015/02/iNACOL_Definitions Project.pdf
- Ingram, V. (2016). Georgia virtual school: Student success in a computer-generated world. *Distance Learning*, *13*(1), 33–39.

Intercultural Development Research Association. (2014). *Types of dropout data defined*. Retrieved from http://www.idra.org/images/stories/Types%20of%20 Dropout%20Data%20Defined%20IDRA_eBook.pdf

International Society for Technology in Education. (2002). ISTE national educational technology standards (NETS) and performance indicators for

administrators. *International Society for Technology in Education*. Retrieved from http://opsb.us/wp-content/uploads/2012/10/NETS-A-Overview2.pdf

- International Society for Technology in Education. (2009). ISTE standards administrators. *International Society for Technology in Education*. Retrieved from http://www.iste.org/standards/ISTE-standards/standards-for-administrators
- Irvin, M. J., Hannum, W. H., Farmer, T. W., de la Varre, C., & Keane, J. (2009). Supporting online learning for Advanced Placement students in small rural schools: Conceptual foundations and intervention of the facilitator preparation program. *Rural Educator*, 31(1), 29–37.
- Jegede, O., Taplin, M., Fan, R. Y. K., Chan, M. S. C., & Yum, J. (1999). Differences between low and high achieving distance learners in locus of control and metacognition. *Distance Education*, 20(2), 255–273. doi:10.1080/0158791990 200206
- Johnson, J., Showalter, D., Klein, R., & Lester, C. (2014). Why rural matters 2013– 2014: The condition of rural education in the 50 states. *The Rural and Community Trust.* Retrieved from http://www.ruraledu.org/user_uploads/file/ 2013-14-Why-Rural-Matters.pdf
- Kim, J. (2005). The effects of a constructivist teaching approach on student academic achievement, self-concept, and learning strategies. *Asia Pacific Education Review*, 6(1), 7–19.
- Klein, A. (2015). No Child Left Behind: An overview. *Education Week*, 34(27). Retrieved from http://www.edweek.org/ew/section/multimedia/no-child-leftbehind-overview-definition-summary.html

- Klein, M. (2012). Taking shackles off Georgia's digital learning virtual school. Georgia Public Policy Foundation. Retrieved from http://www.georgiapolicy.org/2012/03/ taking-shackles-off-georgias-digital-learning-virtual-school/
- Kollie, E. (2007). Examining the characteristics of rural school districts. School Planning & Management. Retrieved from: https://webspm.com/articles/ 2007/10/01/examining-the-characteristics-of-rural-school-districts.aspx
- Kouzes, J. M. & Posner, B. Z. (2007). *The Leadership Challenge* (4th ed.) San Francisco, CA: Jossey-Bass.
- Kuzel, A. J., & Like, R. C. (1991). Standards of trustworthiness for qualitative studies in primary care. In P. G. Norton, M. Stewart, F. Tudiver, M. J. Bass, & E.V. Dunn (Eds.). *Primary Care Research: Traditional and Innovative Approaches* (pp.138–158). Newbury Park, CA: Sage.
- LaPlante, J. R. (2007). Virtual schools: For some, the future of education. *Flint Hills Center for Public Policy*, *4*(4).
- LaPrade, K., Marks, A., Gilpatrick, M., Smith, D., & Beazley, J. (2011). Walking through online classrooms: A study in best practices. *Review of Higher Education & Self-Learning*, 3(9), 24–30.
- Lee, S. J., Srinivasan, S., Trail, T., Lewis, D., & Lopez, S. (2011). Examining the relationship among student perceptions of support, course satisfaction, and learning outcomes in online learning, *The Internet and Higher Education*. doi: 10.1016/j.iheduc.2011.04.001
- Lemke, C., & Coughlin, E. C. (1998). *Technology in American schools: Seven dimensions for gauging progress*. Santa Monica, CA: Milken Exchange on

Education Technology.

- Lesgold, A. (2004). Contextual requirements for constructivist learning. *International Journal of Educational Research*, *41*(6), 495–502.
- Lincoln, Y., & Guba, E. (2005). *The Sage Handbook of Qualitative Research* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Lipps, D. (2010). How online learning is revolutionizing K–12 education and benefiting students. *The Backgrounder*. Retrieved from http://www.heritage.org/ technology/report/how-online-learning-revolutionizing-k-12-education-andbenefiting-students
- Liu, F., & Cavanaugh, C. (2011). Success in online high school biology: Factors influencing student academic performance. *Quarterly Review of Distance Education*, 12(1), 37–54, 71–72.
- Lunenberg, F., & Irby, B. (2008). Writing a Successful Thesis or Dissertation: Tips and Strategies for Students in the Social and Behavioral Sciences. Thousand Oaks, CA: Corwin Press.
- Marsh, R. M., Carr-Chellman, A., & Sockman, B. R. (2009). Selecting silicon: Why parents choose cybercharter schools? *TechTrends*, 53(4), 32–36.
- Maxwell, J. A. (2013). *Qualitative Research Design* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- McCabe, M. (2011). *Rural America. Education week*. Retrieved from http://www.edweek.org/ew/issues/rural-education/
- McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion*, *30*(7), 537–542.

doi:10.1177/0267659114559116

- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies. U.S. Department of Education Office of Planning, Evaluation, and Policy Development Policy and Program Studies Service. Retrieved from http://files.eric.ed.gov/fulltext/ED505824.pdf
- Merriam, S. B. (2002). *Qualitative Research in Practice: Examples for Discussion and Analysis.* San Francisco, CA: Jossey-Bass.
- Merriam, S. B., & Simpson, E. L. (2000). *A Guide to Research for Educators and Trainers of Adults* (2nd ed.). Malabar, FL: Krieger Publishing Company.
- Miles, J. A. (2012). Management and Organization Theory: A Jossey-Bass Reader. San Francisco, CA: Jossey-Bass.
- Miron, G., & Gulosino, C. (2016). Virtual schools report 2016. National Education Policy Center. Retrieved from http://nepc.colorado.edu/files/publications/RB-Miron%20Virtual%20Schools.pdf
- Miron, G., & Urschel, J. (2012). Understanding and improving full-time virtual schools: A study of student characteristics, school finance, and school performance in schools operated by K12, Inc. National Education Policy Center. Retrieved from http://nepc.colorado.edu/publication/understanding-improving-virtual
- Muilenberg, L. Y., & Berg, Z. L. (2005). Student barriers to online learning: A factor analytic study. *Distance Education*, *26*(1), 29–48.
- NÅSTASE, M. & ROJA, A. I. (2013, November 7-8). *Leadership in virtual organizations*. Paper presented at the Proceedings of the 7th International

Management Conference "New Management for the New Economy." Bucharest, Romania, 331. Retrieved from http://conferinta.management.ase.ro/archives/ 2013/pdf/39.pdf

National Commission on Excellence in Education. (1983). A nation at risk: The imperative for educational reform. Retrieved from http://www2.ed.gov/pubs/NatAtRisk/index.html

- National Conference of State Legislature [NCLS]. (2013). *School vouchers*. Retrieved from http://www.ncsl.org/research/education/school-choice-vouchers.aspx
- National School Climate Center. (2014). *School climate*. Retrieved from http://www.schoolclimate.org/climate/
- No Child Left Behind (NCLB) Act of 2001, 20 U.S.C., Pub. L. No. 107-110 § 6319 (2002). Retrieved from http://www2.ed.gov/policy/elsec/leg/esea02/107-110.pdf
- North American Council for Online Learning (NACOL) & the Partnership for 21st Century Skills. (2006). *Virtual schools and 21st century skills*. Retrieved from http://www.p21.org/storage/documents/VSand21stCenturySkillsFINALPaper.pdf
- Obama, B. (2011, May 27). *A letter from the President*. Retrieved from http://www2.ed.gov/policy/elsec/leg/blueprint/publication_pg2.html#part2
- Oliver, K., Osborne, J., Patel, R., & Kleiman, G. (2009). Issues surrounding the deployment of a new statewide virtual public school. *Quarterly Review of Distance Education*, 10(1), 37–49.
- O'Neill, D. K., & Sai, T. H. (2014). Why not? Examining college students' reasons for avoiding an online course. *Higher Education, 68*, 1–14.

- Organization for Economic Co-Operation and Development [OCED]. (2001). *Understanding the digital divide*. OCED Publications. Retrieved from https://www.oecd.org/sti/1888451.pdf
- Osborn, D. S., Peterson, G. W., & Hale, R. R. (2014). Virtual school counseling. *Professional School Counseling*, 18(1), 179-190.

Pape, L., & Wicks, M. (2009). National Standards for Quality Online Programs.
 iNACOL, Retrieved from http://www.inacol.org/wp-content/uploads/2015/
 02/national-standards-for-quality-online-programs.pdf

- Partnership for 21st Century Skills. (2009). *P21 Framework Definitions*. The Partnership for 21st Century Skills. Retrieved from http://www.p21.org/storage/documents/ P21_Framework_Definitions.pdf
- Patrick, S. (2008). Future issues in online learning. *Threshold*, 28–31.
- Patton, M. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Palus, C. (2009). Interdependent leadership cultures: What leaders do together. MiL Institute, 1-21. Retrieved from http://www.leadingeffectively.com/leadershipexplorer/wp-content/uploads/2012/01/Interdependent-leadership-cultures-MiL-Conference-2009.pdf

Pennucci, S. S. (2016). Qualitative case study on the perspective of Pennsylvania superintendents on distance education in K–12 public school districts.
[Dissertation]. Retrieved from ProQuest Digital Dissertations.

Peterson, P. (2010). *Saving Schools: From Horace Mann to Virtual Learning*. Cambridge, MA: The Belknap Press of Harvard University Press.

- Picciano, A. G., & Seaman, J. (2007). K–12 online learning: A survey of U. S. school district administrators. The Sloan Consortium. Retrieved from http://www.onlinelearningsurvey.com/reports/K-12-online-learning.pdf
- Picciano, A. G., & Seaman, J., Day, S. (2011). Online Learning in Illinois: A study of the views of high school principals. Retrieved from http://files.eric.ed.gov/ fulltext/ED535142.pdf
- Pigliapoco, E. Torrisi, G., Messina, M., & Bogliolo, A. (2008). LoL classroom: A virtual university classroom based on enhanced chats. *European Journal of Open, Distance and E-learning* (EURODL), 1–9.
- Proserpio, L., & Gioia, D. A. (2007). Teaching the virtual generation. Academy of Management Learning & Education, 6(1), 69–80.
- Queen, B., & Lewis, L. (2011). Distance education courses for public elementary and secondary school students: 2009–10 (NCES 2012-008). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Quillen, I. (2010). Analysis notes virtual education priorities in RTT winner. *Education Week, 30*(3). Retrieved from http://www.edweek.org/ew/articles/2010/09/07/03 online_ep.h30.html
- Repetto, J., Cavanaugh, C., Wayer, N., & Feng, L. (2010). Virtual high schools: Improving outcomes for students with disabilities. *Quarterly Review of Distance Education*, 11(2), 91–104.
- Roblyer, M. D., Davis, L., Mills, S., Marshall, J., & Pape, L. (2008). Toward practical procedures for predicting and promoting success in virtual school students. *The American Journal of Distance Education*, 22(2), 90–109.

- Ross, T. (2015). *When students can't go online*. The Atlantic. Retrieved from http://www.theatlantic.com/education/archive/2015/03/the-schools-where-kidscant-go-online/387589/
- Samuelsohn, D. (2015). Virtual schools are booming. Who's paying attention? *Politico*. Retrieved from http://www.politico.com/agenda/story/2015/09/virtual-schoolseducation-000227
- Schroeder, U., & Spannagel, C. (2006). Supporting the active learning process. *International Journal on E-Learning*, 5(2), 245–264. Retrieved from http://library.valdosta.edu:2048/login?url=http://search.proquest.com/docview/21 0331418?accountid=14800
- Seidman, I. (2006). Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences (3rd ed.). New York, NY: Teachers College Press.
- Sener, J. (2015). *Updated e-learning definitions*. Retrieved from http://onlinelearningconsortium.org/updated-e-learning-definitions-2/
- Smith, K. G., Dombek, J. L., Foorman, B. R., Hook, K. S., Lee, L., & Cote, A. (2016).
 Self-study guide for implementing high school academic interventions. REL
 2016-218. Regional Educational Laboratory Southeast.
- Smith, R., Clark, T., & Blomeyer, B. (2005). A Synthesis of New Research on K–12 Online Learning. Naperville, IL: Learning Point Associates.
- Smither, R., Houston, J., & McIntire, S. (2016). *Organization Development: Strategies* for Changing Environments. 2nd ed. New York, NY: Routledge.

Snyder, T. D., & Dillow, S. A. (2012). Digest of education statistics 2011. National

Center for Education Statistics. U.S. Department of Education.

Retrieved from http://nces.ed.gov/pubs2012/2012001.pdf

- Soehner, D., & Ryan, T. (2011). The interdependence of principal school leadership and student achievement. *Scholar-Practitioner Quarterly*, *5*(3), 274–288.
- Southern High School. (2016). Southern high school: School improvement plan. Southern County School District.
- Stewart, Q. (2001). History of instant messaging. The University at Texas of Austin Graduate School of Library & Information Science. Retrieved from https://www.ischool.utexas.edu/~lis312qs/restrict/im/im1.html
- Swan, K., & Shea, P. (2005). The development of virtual learning communities. In S. R. Hiltz & R. Goldman (Eds.), *Asynchronous Learning Networks: The Research Frontier* (pp. 239–260). New York, NY: Hampton Press. Retrieved from https://pdfs.semanticscholar.org/6bae/ea9a6885dd3a535e6b018cd919f1 0458c58c.pdf
- Tankersley, W. J. (2006). Distance education in Georgia's public school districts:
 Baseline data on utilization and the perceived barriers to implementation and expansion [Dissertation]. Retrieved from ProQuest Digital Dissertations.

Teague, C. (2013). Learning at Georgia virtual school. Distance Learning, 10(4), 15-21.

- The Governor's Office of Student Achievement. (2015). *K–12 public schools report card*. Retrieved from https://gaawards.gosa.gov/analytics/K12ReportCard
- The Governor's Office of Student Achievement. (2016a). *Eligibility: Georgia rural AP STEM initiative*. Retrieved from https://gosa.georgia.gov/eligibility

- The Governor's Office of Student Achievement. (2016b). *K–12 public schools report card*. Retrieved from https://gaawards.gosa.gov/analytics/K12ReportCard
- The Rural School and Community Trust. (2013). It's complicated: Why what's rural matters. *Rural Policy Matters*, *15*(7) Retrieved from: http://www.ruraledu.org/user_uploads/file/rpm/RPM15_07.pdf
- The Wallace Foundation. (2013). *The school principal as leader: Guiding schools to better teaching and learning*. Retrieved from http://www.wallacefoundation.org/ knowledge-center/Documents/The-School-Principal-as-Leader-Guiding-Schoolsto-Better-Teaching-and-Learning-2nd-Ed.pdf
- Thomas, J., & Brady, K. (2005). Chapter 3: The Elementary and Secondary Education Act at 40: Equity, accountability, and the evolving federal role in public education. *Review of Research in Education, 29*, 51–67.
- Toppin, I. N. & Toppin, S. M. (2016). Virtual schools: The changing landscape of K–12 education in the U.S. *Education & Information Technologies*, 21(6), 1571. doi:10.1007/s10639-015-9402-8
- Trickett, E. J., McConahay, J. B., Phillips, D., & Ginter, M. A. (1985). Natural experiments and the educational context: The environment and effects of an alternative inner city public school on adolescents. *American Journal of Community Psychology, 13*, 617–643.
- Treetops School International (2011). *Charter school information*. Retrieved from http://www.treetops.org/Page/40
- Tucker, B. (2007). Laboratories of reform: Virtual high schools and innovation in public education. Washington, DC: Education Sector Reports. Retrieved from

http://docplayer.net/731444-Laboratories-of-reform-virtual-high-schools-andinnovation-in-public-education.html

- U.S. Department of Education. (2005). *Toward a new golden age in American education: How the internet, the law and today's students are revolutionizing expectations* (National Education Technology Plan 2004). Retrieved from http://files.eric.ed.gov/fulltext/ED484046.pdf
- U.S. Department of Education. (2009). President Obama, U.S. Secretary of Education Duncan announce national competition to advance school reform.
 Retrieved from www2.ed.gov/news/pressreleases/2009/07/07242009.html
- U.S. Department of Education. (2011a). A *blueprint for reform: The reauthorization of the Elementary and Secondary Education Act*. Retrieved from http://www2.ed.gov/policy/elsec/leg/blueprint/publicationtoc.html
- U.S. Department of Education. (2011b). *Race to the top*. Retrieved from http://www2.ed.gov/programs/racetothetop/index.html
- Wallace, P. (2009). Distance learning for gifted students: Outcomes for elementary, middle, and high school aged students. *Journal for the Education of the Gifted*, 32, 295-320.
- Wang, C., Shannon, D., & Ross, M. (2013). Students' characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning. *Distance Education*, 34(3), 302–323.
- Waters, T., & Grubb, S. (2004). Leading schools: Distinguishing the essential from the important. Aurora: CO: Mid-continent Research for Education and Learning.

Waters, J. T., Marzano, R. J., & McNulty, B. A. (2003). Balanced leadership: What

30 years of research tells us about the effect of leadership on student achievement. Aurora, CO: Mid-continent Research for Education and Learning.

- Watkins, T. (2005). Exploring e-learning reforms for Michigan: The new education (r)evolution. Retrieved from http://www.inacol.org/wp-content/uploads/2015/ 02/the-new-education-revolution.pdf
- Watson, J., Gemin, B., Ryan, J., & Wicks, M. (2009). Keeping pace with K–12 online learning: A review of state-level policy and practice. (6th ed.) Evergreen, CO: Evergreen Education Group. Retrieved from http://www.mivu.org/Portals/0/2_ KeepingPace09-fullreport.pdf
- Watson, J., & Kalmon, S. (2005). Keeping pace with K–12 online learning: A review of state-level policy and practice. (2nd ed.) Naperville, IL: Learning Point Associates. Retrieved from http://www.learningpt.org/pdfs/tech/Keeping_Pace2.pdf
- Watson, J., Murin, A., Vashaw, L., Gemin, B., & Rapp, C. (2010). Keeping pace with K–12 online learning: A review of state-level policy and practice. (7th ed.)
 Evergreen, CO; Evergreen Education Group. Retrieved from http://www.kpk12.com/wp-content/uploads/KeepingPaceK12_2010.pdf

Watson, J., Murin, A., Vashaw, L., Gemin, B., and Rapp, C. (2012). *Keeping pace with K–12 online and blended learning: An annual review of policy and practice.* (9th ed.) Evergreen, CO; Evergreen Education Group. Retrieved from http://kpk12.com/cms/wp-content/uploads/KeepingPace2012.pdf

- Watson, J., Murin, A., Vashaw, L., Gemin, B., and Rapp, C. (2013). *Keeping pace with* K–12 online and blended learning: An annual review of policy and practice (10th ed.). Evergreen, CO; Evergreen Education Group. Retrieved from http://kpk12.com/cms/wp-content/uploads/EEG_KP2013-lr.pdf
- Watson, J., Pape, L., Gemin, B., & Vashaw, L. (2015). *Keeping pace with K–12 digital learning: An annual review of policy and practice*. (12th ed.) Evergreen, CO; Evergreen Education Group. Retrieved from http://www.kpk12.com/wp-content/uploads/Evergreen_KeepingPace_2015.pdf
- Watson, J., Pape, L., Murin, A., Gemin, B., & Vashaw, L. (2014). *Keeping pace with K–12 digital learning: An annual review of policy and practice*. (11th ed.)
 Evergreen, CO; Evergreen Education Group. Retrieved from http://www.kpk12.com/wp-content/uploads/EEG_KP2014-fnl-lr.pdf
- WestEd. (2007). Connecting students to advanced courses online. Washington, D.C.: U.S. Department of Education. Retrieved from https://www.wested.org/wpcontent/files_mf/1418857642ED499392.pdf
- Wicks, M. (2011). *A national primer on K–12 online learning: Version 2*. Vienna, VA; iNACOL.
- Winoguard, K. (2002). ABCs of the virtual high school. *The Technology Source*. Retrieved from http://technologysource.org/article/abcs_of_the_virtual_high_school/
- Woodworth, J. L., Raymond, M. E., Chirbas, K., Gonzales, M., Negassi, Y., Snow, W., &
 Van Dongle, C. (2015). *Online charter school study*. Stanford, CA: Center for
 Research on Education Outcomes. Retrieved from https://credo.stanford.edu/pdfs/

OnlineCharterStudyFinal2015.pdf

APPENDIX A:

Participant Consent Agreement

VALDOSTA STATE UNIVERSITY Consent to Participate in Research

You are being asked to participate in a research study entitled *"Professional Educators' Perceptions of Implementing Virtual Education in a Rural Georgia School District"* which is being conducted by Lisa Williams, a student at Valdosta State University. The purpose of this study is to determine how an identified rural Georgia school district with limited resources implemented the Georgia Virtual School program with the intent to increase student access and achievement. This interview is anonymous. No one, including the researcher, will be able to associate your responses with your identity. Your participation is voluntary. You may choose not to participate in the interview, to stop responding at any time, or to skip any questions that you do not want to answer. You must be at least 18 years of age to participate in this study. Your completion of the interview serves as your voluntary agreement to participate in this research project and your certification that you are 18 or older.

Questions regarding the purpose or procedures of the research should be directed to Lisa Williams at <u>Idixon@valdosta.edu</u>. This study has been exempted from the Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-259-5045 or <u>irb@valdosta.edu</u>.

APPENDIX B:

Interview Guide and Questions

Interview Guide and Questions

First Interview: Demographic information and background

- 1. What is your name, date of birth, gender, race, and years of professional educational experience?
- 2. What factors influenced your decision to choose a career in education?
 - a. Describe your background in terms of your childhood, home life, and upbringing.
 - i. Family background and dynamics
 - ii. Family's geographic and living environment
 - iii. Socioeconomic background
 - iv. Educational attainment of members in your family (grandparents, parents, siblings)
 - b. Do any other members in your family have a career in education?
 - c. How was education viewed in your family?
- 3. Describe your educational background.
 - a. What K–12 schools did you attend? Were they public or private and how was this decision made? How did these schools influence your choice of becoming an educator?
 - b. Discuss your selection of post-secondary schools that you attended.
 - i. How did your choice of the post-secondary school(s) influence your choice of becoming of an educator?
 - ii. Were there any motivating factors that influenced you to obtain a graduate degree and how did you determine your area of concentration?
 - iii. What were your experiences in using distance learning, online courses, or any other technological programs during your K–12 and college

years, including graduate level work? How do you feel these experiences affected your ability to incorporate the use of technology into your current work?

- 4. Describe your current family make-up and dynamics and how these relationships influence your career and work decisions.
 - a. Educational attainment of members in family (spouse, children)
 - b. Socioeconomic status
 - c. Current geographic and living environment
- 5. Describe how you wound up in your current role and in the SCSD.
- 6. What leadership opportunities did you participate in or experience during your K–12 and college years?
- 7. How has technology influenced your K–12, post-secondary, and professional educational experiences, include your teaching and leadership experiences?

Second Interview: Perceptions of the participants

- 8. Describe your current role.
- 9. Describe a typical workday for you.
- 10. Describe your relationship with your administration team and your staff.
- 11. In what ways do you communicate items of importance to your staff?
- 12. How have you incorporated the use of technology programs and equipment into your daily routine?
- 13. In what ways are students at SHS using technology?
- 14. How has your role at SHS allowed for the implementation of the GaVS program?
- 15. Describe the GaVS program.

- 16. How was it decided that there was a need for a virtual program at SHS?
- 17. How do you feel like GaVS compares to other virtual programs and how was the decision made to select GaVS as the program to implement at SHS?
- 18. Describe the planning and implementation process of GaVS.
- 19. What role did you play in the planning and implementation of GaVS and how important was your role to the process?
- 20. Describe the relationship between the SHS GaVS program implementation team members.
- 21. What impact did leadership have on the effective implementation of the GaVS program at SHS?
- 22. How well did the professional educators collaborate and communicate with each other through the planning and implementation of the virtual program and what impact did this have on the program's success?
- 23. What personnel is needed to offer the GaVS program at SHS?
- 24. How does the typical day of a virtual student differ from the day of a traditional student?
- 25. What options are made available at SHS for students choosing to enroll into virtual courses (full-time, part-time)?
- 26. What role do parents play for students electing to take virtual courses? How important is parent involvement for the virtual program?
- 27. What was the most difficult part of implementing GaVS at SHS?
- 28. What do you feel the advantages and disadvantages of the virtual program are for your students?

- 29. How did the planning and implementation of the GaVS program compare to other programs that have been implemented at SHS?
- 30. How are students made aware of the virtual program being offered at SHS?
- 31. What are the GaVS program enrollment procedures for your students?
- 32. How well does the GaVS program meet the needs of your students? Student support? Technology? Course availability? Course rigor?
- 33. How do the GaVS courses compare to the traditional courses at SHS?
- 34. What are some of the reasons your students elected to participate in the GaVS program?
- 35. What support measures, if any, are set up to help students who may be struggling in their GaVS courses?
- 36. What are some of the reasons that a student may not be able to participate in the virtual program and are there any measures put into place for these students if they have a desire to participate in the program?
- 37. What action is taken if a student is not successful in the virtual program?
- 38. How important is monitoring the virtual students' progression in the courses?
- 39. How do you determine if the program is effective?
- 40. What level of technical support is provided to virtual students and how does this affect the student's level of participation and success in the program?
- 41. What role does the virtual program play, if any, in preparing students for the 21st century and to be college and career ready?
- 42. Describe your leadership skills and how they were used in the planning and implementation phases of this program.

- 43. What role do the counselors play in the GaVS program? Administrators? Support personnel?
- 44. How do online courses affect a student's high school transcript?
- 45. How do learning outcomes of a GaVS course compare to the learning outcomes of a traditional course?
- 46. What type of student do you feel is best suited to enroll in the GaVS program?
- 47. How does your school encourage student participation in the GaVS program?
- 48. What obstacles may prevent future growth in the GaVS program?
- 49. What concerns, if any, do you have about the GaVS program?
- 50. How do you provide support for virtual students who may be struggling in their course work?
- 51. How do you provide support for students participating in the virtual program and who receive services based on an IEP or 504 plan?
- 52. What challenges have you experienced during the implementation of the GaVS program and how were they addressed?
- 53. Should completion of a virtual course be a requirement at your high school? In Georgia? Nationwide?
- 54. What role do teachers play in a virtual course?
- 55. What influence do your traditional teachers at SHS have on student participation in virtual courses?
- 56. How does the virtual program impact your traditional teachers and courses at SHS?
- 57. How do students benefit from having virtual courses offered at SHS?
- 58. Describe the impact of the implementation of the virtual program on SHS.

Third Interview: Reflections of the participants

- 59. What advice would you give other schools or systems that were thinking about implementing the GaVS program?
 - a. What is most important?
 - b. What is least important?
 - c. What is absolutely necessary to ensure the success of the program?
- 60. How do you feel the lessons learned from the implementation of the program will be beneficial going forward with the continuation of the program or the implementation of other programs?
- 61. What changes would you have made in the planning or implementation if you had it to do over again?
- 62. What changes, if any, will you make or have you made already to the program going forward?
- 63. What role will you play in the GaVS program going forward?
- 64. How you feel your past experiences, personal and professional, influenced the implementation of the program?
- 65. How do you feel your past experiences, personal and professional, with online learning and your knowledge of technology influenced the implementation of the program?
- 66. Would you encourage other systems to implement a virtual program in their schools? Why or why not?
- 67. Would you recommend GaVS as the virtual program of choice? Why or why not?

- 68. How has your view of virtual programs and the usage of technology impacted your influence on the implementation of the virtual program?
- 69. What were some of the positive and negative experiences gained from the program implementation?
- 70. How has the implementation of the virtual program impacted your school?
- 71. How did the experience of implementing the virtual program in SHS influence or impact your view of the traditional teaching style and courses taught at SHS?
- 72. How has your involvement in the virtual program influenced your viewpoint towards encouraging others to participate in the virtual program?
- 73. Describe how you plan to encourage student participation in the virtual program and what impact this will have on your school.
- 74. Are there any aspects of your school environment or procedures that need to be changed to allow for greater student participation in virtual courses? If so, what are they?
- 75. How influential is the principal's role in your viewpoint to ensure for an effective program implementation?
- 76. How do you feel like your role and your background have influenced the program's implementation and effectiveness?
- 77. How do you feel like the other team member's roles and their professional backgrounds have impacted the program's implementation process and effectiveness?
- 78. How do you feel like the program's continuation will affect your school environment going forward?
- 79. How do you see your role changing going forward? Where do you see yourself in the future and what role do you see yourself serving in?
- 80. What influence did your involvement in the virtual program play on this decision?
- 81. Do you foresee the virtual program influencing your decision to implement any other technology-based programs at SHS? If so, what are they?

APPENDIX C:

Institutional Review Board Approval



Institutional Review Board (IRB) for the Protection of Human Research Participants

PROTOCOL EXEMPTION REPORT

PROTOCOL NUMBER:	03425-2016	INVESTIGATOR:	Lisa Williams
PROJECT TITLE:	Administrator Perceptions of Virtual Education: An Option for K-12 Students		

INSTITUTIONAL REVIEW BOARD DETERMINATION:

This research protocol is **exempt** from Institutional Review Board (IRB) oversight under Exemption **Category 2**. You may begin your study immediately. If the nature of the research project changes such that exemption criteria may no longer apply, please consult with the IRB Administrator (<u>irb@valdosta.edu</u>) before continuing your research.

ADDITIONAL COMMENTS:

- Upon completion of your research all data must be kept securely (locked cabinet/password protected computer, etc.) for a minimum of 3 years.
- Audio taped interviews must include Investigator reading consent statement to participants as part of the informed consent process.

☑ If this box is checked, please submit any documents you revise to the IRB Administrator at <u>irb@valdosta.edu</u> to ensure an updated record of your exemption.

Elizabeth W. Olphie 11/17/2016

Elizabeth W. Olphie, IRB Administrator Date

Thank you for submitting an IRB application. Please direct questions to <u>irb@valdosta.edu</u> or 229-259-5045.

Revised: 06.02.16