STATE-LED VIRTUAL SCHOOL SENIOR LEADERS: AN EXPLORATORY STUDY

by

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ABSTRACT

MARK JOSEPH SIVY. State-led virtual school senior leaders: An exploratory study. (Under the direction of DR. CHUANG WANG)

The purpose of this study was to explore the role-related characteristics, factors, and requirements that can influence state-led virtual school senior leaders' leadership qualities, attributes, beliefs, and approaches. Semi-structured interviews with six senior leaders were used to gather research data. The research design used a qualitative constructivist grounded theory methodology that would ultimately lead to the rise of thematic associations.

The findings from this study resulted in the emergence of 11 categories of factors that have bearing on a state-led virtual school leader's role: (a) leader education, experience, and professional growth, (b) leader profile, (c) curriculum and instruction, (d) the learner, (e) human capital, (f) work environment, (g) internal communications, (h) external communications, (i) capital resources, (j) governance, and (k) operational logistics. Within these categories are 59 sub-themes that provide a concise window on the specific factors that surfaced.

The significance of this study lies in its potential to inform professional development offerings, certification agendas and university preparatory programs that are seeking to produce knowledgeable and effective state-led virtual school senior leaders. Additionally, it provides a base of information for current and future virtual school leaders as well as scaffolding and suggestions for future research.

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CHAPTER 1: INTRODUCTION

Made possible by the public availability of the World Wide Web in 1991, the digital facilitation of web-based education was born, giving eventual rise to online learning and virtual schools. Within three years, an event known as the Virtual Summer School (VSS) for Open University hosted a web-based undergraduate psychology course. The earliest recognized web-based high school curriculum was made available through CALCampus which began its operations in 1994-1995. Shortly thereafter the first virtual school, titled Virtual High School, was launched in 1996 and is still in operation today. In 1997, Florida established the first statewide, web-based virtual public high school, which recently served an estimated 240,000 students in the 2012-2013 school year (Watson, Murin, Vashaw, Gemin & Rapp, 2013).

Clark (2000) defined a virtual high school as "a state approved and/or regionally accredited school that offers secondary credit courses through distance learning methods that include Internet-based delivery" (p. i). Extending the definition beyond the high school level, United States virtual schools now offer curriculum, programs, and services for all K-12 grades. The operation of these virtual schools does not take place within a traditional "brick and mortar" educational facility, but rather through electronically connected students, teachers, administrators, parents and communities who are separated by geographic location and/or time. Clark and Berger (2003) identified six types of virtual schools based upon to the founding organization: university-based, state-led,

consortium, local education agency, charter school, and private school. Of particular interest to this study, state-led virtual schools (SLVSs) are described as those that are authorized at the state level by a state agency or legislature.

Since their debut in 1997 with the Florida Virtual School, these SLVSs have had notable increases in terms of the number of schools and their course enrollments. According to Watson, Murin, Vashaw, Gemin, and Rapp (2013), state-led virtual schools existed in 26 states in the 2012-2013 school year and supplied 740,000 course enrollments. Based upon Watson, Murin, Vashaw, Gemin, and Rapp's previous annual course enrollment numbers, this is an increase of over 19% compared to the 2011-2012 school year, over 38% compared to the 2010-2011 school year, over 64% compared to the 2009-2010 school year, and over 131% compared to the 2008-2009 school year. For the 2007-2008 academic year, Picciano and Seaman (2009) estimated over one million K-12 students used an online course, which was a 47% increase over the estimate was made two years prior. Based upon current rates, Mincberg (2010) projected that it is possible by 2020 for 50% of all high school classes to be delivered online.

The need to improve learning outcomes and to address educational standards and policy have been important motivators in the development of SLVSs. Since 1997 when the first SLVS was started in Florida, an important driver in the growth of SLVSs has been the requirement that they to support local school districts and students with an array of course offerings and related services that otherwise would not be available or that would not fit into the usual school or student schedule (Patrick, 2007; Russell, 2004). At the national level, the expansion of SLVSs has been encouraged by the advent of two policies, the 2001 No Child Left Behind Act (NCLB) and the 2004 National Educational

Technology Plan (NETP) (Archambault, Crippen, & Lukemeyer, 2007). Since then other proclamations concerning U.S. education such as the 2010 National Educational Technology Plan and the Common Core State Standards have continued to motivate the growth and acceptance of SLVSs (Watson, Murin, Vashaw, Gemin & Rapp, 2011). Currently, most SLVSs offer courses that supplement traditional school offerings, with learners being accounted for as members of their home school rather than the virtual school.

The desire and necessity to document and address the many challenges, issues, and requirements of SLVSs has resulted in a budding body of related academic research on topics such as pedagogy, communications, students, policy, technologies, funding, leadership, learning outcomes, and teacher professional development. Due to the relative infancy of SLVSs and the fact that they are undergoing fairly rapid adaptation and evolution as they mature, the body of research on these topics is in its formative stages. Saba (2005) described the condition of distance education research as a whole to be "one of confusion". In the specific realm of virtual school research, there is currently a similar condition and a recognized need for a much better developed base of research (Archambault & Crippen, 2009; Barbour, 2010; Searson, Jones, & Wold, 2011). On the subject of SLVS senior leadership, the topic of study of this dissertation, there is a scarcity of research findings.

Statement of the Problem

Well-trained and skillful educational leaders capable of leveraging the uses of technology by making sound decisions and effecting commensurate organizational change are needed to lead public schools (Davis & Rose 2007; National Education

Technology Plan 2010; National Technology Plan 2004). These leaders must adapt their leadership approaches to the unique attributes of technology-enhanced and technology-facilitated online learning. Given that a SLVS's operational and educational contexts are heavily dependent upon technology and virtual interactions, many new and unique tasks, challenges and issues face the senior leader. Based upon a review of literature, significant gaps were found in academic studies pertaining to the topic of virtual school leadership. For SLVS senior leadership in particular, directly related studies were extremely limited in quantity and scope. Additional research is needed to better understand the parameters that define and impact the SLVS senior leadership role and how SLVS senior leaders can best address their responsibilities.

Purpose and Significance of the Study

In a traditional school, the abilities of the principal to successfully lead the school in meeting its academic objectives is directly related to higher student achievement (Bottoms & Fry, 2009; Leithwood & Jantzi, 2008; Waters, Marzano, & McNulty, 2004). This success is in part due to the education, preparation and experiences of the senior leader in that school, which are scaffolded by the knowledge and lessons from decades of cumulative research. In the case of SLVS senior leaders, the opportunities for education, preparation, and experience, and the availability of research directly related to that role are extremely limited. According to Beck and France (2012), there is a growing number of virtual leaders who require preparation, training, and development and research is needed to develop these opportunities. The vast majority if not all current SLVS senior leaders never planned an intentional path to virtual school leadership, but rather their position was an outcome of their personal motivations and interests to transform

traditional education through innovation (Brown, 2008). Given the aforementioned limited availability of research, the purpose of this study was the discovery and presentation of findings related to the role characteristics, influential factors, and requirements that can impact SLVS senior leadership qualities, attributes, beliefs, and approaches. The significance of this research is that it informs the creation of professional development offerings, certification agendas and university preparatory programs that are seeking to produce knowledgeable and effective SLVS leaders. Additionally, it provides scaffolding and direction for future research by the researcher and others.

Guiding Questions

This study was exploratory with the research goal being to discover those elements that determine the characteristics, disposition, and actions of a SLVS senior leader. To accomplish this the researcher interviewed the senior leaders of six SLVSs, with the interview questions and discussion being guided by the following questions:

1. What are current SLVS senior leaders' thoughts related to the qualities, attributes and beliefs of successful SLVS senior leaders?
2. What are current SLVS senior leaders' thoughts related to senior leader approaches to SLVS leadership?

These questions gave purpose to the literature review, which resulted in the development of a set of interview questions that led to the emergence of factors that gave insight into the leadership role.

Delimitations

The employed research methodology was aligned with the constructivist grounded theory approach as described by Charmaz (2009), which is an extension of

Glaser and Strauss's (1967) seminal work on grounded theory. In their book, *The Discovery of Grounded Theory*, Glaser and Strauss explain that grounded theory results from data collection and analysis, application of the constant comparative method, construction of codes and categories, determination of category relationships and gaps, and active theory development. This classic grounded theory process is an objective and strategic formula of data analysis that leads to the discovery of a theoretical truth by the researcher in accordance with the realist ontology.

Based upon four decades of additional research, Charmaz approaches grounded theory in a subjective manner that acknowledges that a participant's responses are determined by their unique social context and what that context means to them. This constructivist epistemology reveals how the participants interpret and contend with their circumstances, with the data being the result of a mutual process between the interviewer and interviewee. Charmaz's approach is aligned with the relativist ontology, accepting that truth is variable and dependent upon the social construction of one's reality (Charmaz, 2009).

This dissertation research focused on senior leaders of state-led virtual public schools in the United States. State-led virtual schools are those K-12 schools that are a direct result of state legislation or direction and funding that is primarily from legislative appropriations. The senior leader of a SLVS is that individual who has full responsibility for the school, with a title such as executive director, chief executive officer, principal or superintendent. An interview process was used to gather the information from the senior leaders. Since the senior leaders are from various SLVSs, the interviews were conducted remotely. Analysis of the data led to the emergence of categorical information concerning

the various personal and professional criteria that have a bearing on successful SLVS senior leadership. The outcomes of this exploratory research were a broad range of findings concerning SLVS leadership that can inform and guide leadership preparation efforts and future research.

Definition of Terms

This dissertation involves the use of terminology as associated with virtual schools. The following terms are defined within the context of the study:

1. At-a-Distance – interaction between individuals occurring over a geographic or time separation, usually technology mediated.
2. Digital – technology that uses discrete values to transmit and process data.
3. Distance Education – the use of teaching methods and media (whether audio, visual or digital technology) to produce learning when instructors and students are not physically present in the same location at the same time.
4. Distributed Leadership – at-a-distance leadership.
5. Educational Technology – technology for teaching and learning purposes that has been selected and implemented in accordance to educational theory.
6. E-Learning – electronically supported and mediated teaching and learning, usually being computer or web-based.
7. Full-time Program - these virtual school programs provide courses to student who are enrolled primarily or only in the virtual school.
8. Home School – the physical school at which a student is an enrolled member.
9. Instructional Technology – refers to the use of specific technologies to facilitate instruction.

10. Leader - an individual who inspires or influences an individual or group of individuals to accomplish common goals and tasks.
11. Leadership – the ability of an individual to guide or direct a group of individuals.
12. Leadership Approach – the manner in which an individual provides guidance, direction, and influence to lead an educational organization.
13. Online – a state of connectivity that exists via the Internet and that is accessed through a digital processor-based technology such as a computer or mobile device.
14. Online Education –a major subgroup of distance education that uses the Internet for teaching and learning.
15. Personalized Learning – developing curriculum and instruction that enables learners to progress at their own pace, within limitations and as gauged by mastery of learning objectives.
16. Role – a connected set of functions, obligations, or expected behaviors related to a particular organizational position.
17. Senior Leader – the person who has the primary responsibility for the operation, function, and outcomes of an educational institution.
18. Standard – a practice that is widely recognized and used.
19. State-led Virtual Schools – virtual schools that are authorized by a state-level governing body that often structures the school, determines policy, and provides a financial model.
20. Supplemental Program (Part-time Program) – these virtual school programs

provide supplemental courses to student who are enrolled full-time in a school other than the virtual school.

21. Technology-facilitated – using technology in a manner to help bring about a desired outcome.
22. Traditional School – a school housed and operated within a physically constructed space.
23. Traditional School Leader – the senior leadership figure in a traditional school.
24. Virtual - an existence or extension of existence that is created, simulated, presented, or experienced using interconnected computers via networks and related technologies.
25. Virtual Education – teaching and learning that occurs through interconnected computers via networks and related technologies.
26. Virtual School – an educational organization that entirely offers its courses and services for students who are at-a-distance via the Internet using web-based content, tools and methods.
27. Web-based – that which uses the attributes and resources of the World Wide Web.
28. World Wide Web – the global system of interlinked hypertext documents that are accessed through the Internet and viewed using a web browser.

Summary

Over the past decade there have been noteworthy increases in the number of SLVSs and their enrollments. Indications are that these trends will continue into the

future. Society as a whole and the education community in particular will need to be prepared for and be able to adapt to this relatively new learning environment and modality. Crucial to this adaptation and to the success of SLVSs will be the availability of educated, experienced, and capable senior leaders. By using an exploratory research strategy, this study provides a basis upon which to continue building a body of knowledge concerning SLVS senior leadership.

The remaining chapters of this dissertation present a review of literature, describe the research methodology, present the findings, and then offer a discussion. Chapter 2 presents a review of the literature that examined the major constructs related to this study, including topics associated with virtual schools, traditional schools, leadership, and leader preparation. Chapter 3 discusses the research methodology, comprising the study's framework, design, trustworthiness, limitations, and the researcher's role. Chapter 4 offers the findings of the study. Chapter 5 summarizes the research and discusses the key findings and their implications for future research and SLVS senior leaders.

CHAPTER 2: REVIEW OF RELATED LITERATURE

Both the number of virtual schools and their online enrollments have exhibited escalating growth over the past several years, with this being a trend that is expected to continue (Horn & Staker, 2011; Picciano & Seaman, 2009; U.S. Department of Education, 2010; Watson, 2007; Watson, Murin, Vashaw, Gemin, & Rapp, 2010, Wicks, 2010). As found by Brown (2008), the leaders of these virtual schools did not arrive in their position as a culmination of an intentional journey through virtual school-related formal education and professional development experiences. No studies were discovered during this review that directly address the personal, professional, and functional parameters affecting the success of SLVS senior leaders, or the intentional preparation of them through means such as succession planning, formal education, or professional development.

As mentioned previously, the theoretical and analytical framework of this dissertation follows the constructivist theoretical perspective that is described by Charmaz (2009) in her work concerning the emergence of grounded theory. In keeping with this research methodology, the review of literature was guided by a constructivist approach. As such, this review was performed in a manner that sought research-based information that not only informed this study, but that also enabled the emergence of patterns and connections between related research findings in the literature. Using the available information and the constructivist processes of analysis and reflection, the

review enabled the researcher to develop an informed understanding of the topic.

In accordance with the guiding questions of this study, the purpose of this chapter was to present a synthesis of research-based findings and information that are associated with the characteristics and other defining parameters of the SLVS senior leader. Since there was little to no specific research-based information about the various aspects of their roles or what they need to know and do to succeed, information was drawn from related fields of study. As a result, this review of literature examined virtual schools, traditional school leadership, traditional school leadership for instructional technology, traditional school leadership standards, virtual leadership, leadership style in a virtual setting, virtual school leadership, virtual school senior leadership development, and online teaching standards. This was not intended to be an exhaustive review of the literature for each of these topics, but rather was an inspection of literature with the purpose of discovery of research that was related to the topic of this dissertation and that would inform the researcher.

Virtual Schools

For the purposes of this dissertation, a virtual school refers to an educational organization that offers its courses and services for students at-a-distance via the Internet using web-based content, tools and methods (Archambault, Crippen, & Lukemeyer, 2007; Barbour & Reeves, 2008; Robyler, 2006) . Even though virtual schools share many common elements with their traditional brick and mortar counterparts, they differ from a traditional school in the combinations of media and methods of process and interaction that link administrators, teachers, parents, students, and community. This results in functional and operational differences that require unique or specialized preparation,

skills, resources, and strategies at all levels of the institution. Given their differences, learning outcomes comparisons between the traditional school settings and virtual school settings have concluded that even though there could be variability in specific instances, overall one does not outperform the other (Bernard et al., 2004; Cavanaugh, Gillan, Kromrey, Hess, & Blomeyer, 2004).

Origins and Evolution

The origins of the virtual school concept can be traced back to an early accounting of distance learning in colonial America in a reference to a mail-based correspondence course found in an advertisement in the March 20, 1728 issue of the Boston Gazette. In this advertisement, it was stated that "Persons in the Country desirous to Learn this Art [shorthand], may by having the several Lessons sent weekly to them, be as perfectly instructed as those that live in Boston" (Battenberg, 1971). Mail correspondence continued to be the medium of choice until evidence of technology-enhanced distance education began to appear in the early 1900s when educators began using inventions such as the radio, slide projector, motion picture, and television to produce learning. The application of modern digital technology was first noted with the use of computers to form an organized and connected system of learning known as PLATO (Programmed Logic for Automatic Teaching Operations) in 1960 at the University of Illinois.

The first virtual high school in the United States, aptly named Virtual High School, exemplifies many of the practical aspects of current virtual schools. Funded by a 1996 Technology Innovation Challenge Grant Program award, the Virtual High School project created a national consortium of schools that expanded its members' curricular offerings through shared network-based courses that support reform. The initial

intentions of this project were to develop a scalable model for online delivery, to offer high quality sharable courses and to demonstrate how online media could benefit teaching and learning. Anderson & Dexter (2003) stated that the most pronounced outcome of the program was that it offered teacher-led courses to students who would not have been able to take them otherwise.

Since the Virtual High School's initial year, virtual schooling has been one of the most rapidly expanding areas in the realm of K-12 education (Robyler, 2006). Archambault, Crippen, and Lukemeyer (2007) state that two national policies, the 2001 No Child Left Behind Act (NCLB) and the 2004 National Educational Technology Plan (NETP), played important roles in the expansion of virtual schools throughout the United States. With the purpose of improving student achievement, NCLB contributed to the focus on virtual schools by establishing the need for school choice and alternatives to traditional schools. The NETP played a role through its encouragement of integrating advanced technologies into curricula, instruction, and reform. More recently, Watson, Murin, Vashaw, Gemin and Rapp (2011) contend that the Common Core State Standards are helping to accelerate the trend of online learning by allowing content to be created and shared at a national level. They also reported in the *2011 Keeping Pace* review that 30 states had full-time, multi-district virtual schools and that 40 states had a state virtual school or similar state-led initiative.

Even though virtual schools and online learning are historically associated with the United States and Canada (Cavanaugh, 2006); there is now an international community of interest and development. This global expansion is motivated by the openness and sharing of existing North American expertise, North American schools

offering courses internationally (such as Florida Virtual School), and governments in other countries seeing the value of developing their own virtual schools. Online learning and virtual school development and implementation differs from country to country due to factors such as population, politics, culture, communication infrastructure, Internet access, government support and economics (Barbour et al., 2011; Beldarrain, 2006; Russell, 2006). This globalization is providing a catalyst for increased and accelerated research and discovery concerning virtual schools and related topics.

Virtual School Policy

Policy has and is playing an important role in the adoption and evolution of virtual schools. Fulton and Kober (2002) recommend that during the process of designing and developing virtual school policy, policymakers should develop indicators that not only can be used to guide virtual schools, but that can also be used in the evaluation of virtual education.

Based upon the Digital Learning Council's 2011 *Digital Learning Now! Roadmap for Reform* report, policy should address and support student success, the availability of quality learning options, and a digital learning infrastructure. Student success can be facilitated by ensuring equal access, removing access barriers, personalizing learning, and cultivating learning achievement and advancement (Digital Learning Council, 2011; Fulton & Kober, 2002; Rapp, Eckes, & Plurker, 2006; Rice, 2009). In terms of quality learning options, considerations must be made for high quality content, instruction, choices, programs and interactions (Digital Learning Council, 2011; Fulton & Kober, 2002; Rapp, Eckes, & Plurker, 2006). This involves upholding the rigor of said elements and establishing and maintaining a means of assessment and accountability. Finally,

digital learning infrastructure focuses on the virtual school's underpinnings and the factors that contribute to sustainability. These include funding, stakeholder input, technology infrastructure and its reliability, support, training, research, and evaluation (Digital Learning Council, 2011; Fulton & Kober, 2002; Rapp, Eckes, & Plurker, 2006; Rice, 2009).

Types of Virtual Schools

Different virtual school and online learning models or categories were found in the literature. These are based upon level of authorization, level of administration, geographic reach, extent of a student's enrollment in courses, the number of students enrolled, point of delivery, content developers, and financial responsibility (Cavalluzzo, 2004; Clark, 2001; Watson, Winograd, & Kalmon, 2004). Descriptions of different existing models and categorizations found in the literature resulted in the virtual school types presented in Table 1.

Table 1: Types of virtual schools

Category	Description of Operation	References
District	Local education agencies meeting their specific needs. Usually with part-time student enrollments and from within the district.	Cavalluzzo, 2004; Clark, 2001; Watson, Winograd, Kalmon, 2004
Multi-District (Consortium)	A group of local education agencies collaborate through common design standards, bartering or compensation to offer courses, Usually with part-time student enrollments and from within the collaborating districts	Cavalluzzo, 2004; Clark, 2001; Watson, Winograd, Kalmon, 2004
Cyber-Charter	These are authorized under charter school legislation and are offered through districts, universities, not-for-profit providers or commercial providers. Part-time and full-time student enrollments with geographic diversity.	Cavalluzzo, 2004; Clark, 2001; Watson, Winograd, Kalmon, 2004
State-Level	These are sanctioned by a state governing body which can be responsible for financing and developing courses that are either free or at a cost to districts or students. Part-time and full-time student enrollments with geographic diversity. The students are typically enrolled in a traditional school district, but this is changing.	Cavalluzzo, 2004; Clark, 2001; Watson, Winograd, Kalmon, 2004

Benefits of Virtual Schools

Even though there is no definitive evidence that virtual schools consistently result in better learning outcomes, there are many possible advantages of virtual schools. These include access to courses not offered in a traditional school, availability of credit recovery courses, access to well-designed courses, educational choice, accessibility to subject matter expertise, schedule flexibilities, mobility, scalability, and improving student outcomes (Anderson & Dexter 2003; Barbour & Reeves, 2009; Berge & Clark, 2005). Another benefit is the potential cost savings that are afforded by virtual schools, yet this

will depend on factors such as the curriculum, the location of central operations, number of students served, type of students served and whether or not the program is full-time or part-time (Anderson, Augenblick, DeCescre, & Conrad, 2006; Ash, 2009).

School-Level Challenges

As virtual schools continue to grow in the number and breadth of course offerings, so will the challenges and issues they face. In addition to contending with many of the same challenges and issues that exist in traditional schools, there are additional or extended ones that are frequently encountered when education occurs within a web-based school environment. Most of these are centered on teachers and learners and stem from the unique concerns that are inherent with the technologies and geographic separation within a virtual school. Common challenges faced by virtual schools are high start-up costs, access issues, approval or accreditation, teacher support, student readiness and student retention (Berge & Clark, 2005). To begin to provide viable solutions to the challenges and issues, research is needed that provides greater perspective into the complexities of the field and the leadership strategies that can overcome them.

Specific issues that are faced by a typical traditional school are compounded by the virtual setting. The reduction in typical face-to-face contact can limit and complicate communication and exchanges, particularly for those members of the virtual school community who are familiar and comfortable with in-person involvements (Rice, Dawley, Gasell, & Florez, 2008; Russell, 2004; Vanourek, 2006). The issues created by at-a-distance communications are that they can limit interactions, lead to misunderstandings, be more time consuming, and require specialized skills and tools. Student and teacher integrity must also be addressed since the lack of visible monitoring

and verification of performance increases the opportunities for dishonesty, cheating, and habits that result in lower performance (Rice, Dawley, Gasell, & Florez, 2008). Additionally, there is the need for valid and reliable assessment instruments that monitor and report the strengths and weaknesses of students, teachers, content and curriculum, technology, courses, and other areas of study (Black, Ferdig, & DiPietro, 2008).

Teachers. To attain expected virtual school outcomes, the challenges and barriers associated with teaching must be overcome. Providing adequate virtual school teacher professional development is crucial and this has been identified as an area that is in need of more research and support (Compton, Davis, Correia, 2010: Davis & Roblyer 2005; Davis et al., 2007; DiPietro, Ferdig, Black, & Preston 2008; Rice & Dawley, 2008). Specifically this involves the proper preparation of teachers to work in online environments using specialized technologies and strategies (Rice, Dawley, Gasell, & Florez, 2008; Russell, 2004; Vanourek, 2006)

Students. For students, challenges include a lack of immediacy in teacher support, technical issues or limitations, tendency for off-task behavior, time management, self-pacing, and self-motivation (Barbour, McLaren, & Zhang, 2008; Bulgakov-Cooke & Baenen, 2008; Oliver, Osborne, Patel, Holcomb, & Kleiman, 2008). Learner preparation and support for online learning skills and for accessing and using to the appropriate technologies are foundational to their success in a virtual school (Roblyer & Davis, 2008; Russell, 2004; Vanourek, 2006). There is also a challenge resulting from the need to develop a common and consistent means of measuring learning outcomes (Pape, Revenaugh, & Wicks, 2006).

Another set of obstacles that is being addressed by virtual schools pertains to the

diverse student body and providing equity. In addition to highly motivated students seeking to enhance their study plans with additional or more challenging courses, virtual schools also include students with unique circumstances such as those who are homebound; have academic, behavioral, or physical challenges; are home-schooled; have dropped out; have been expelled; have been incarcerated; or are otherwise considered at-risk (Barbour 2009; Cavalluzzo, 2004; Muller, E., 2009; Rapp, Eckes & Plurker, 2006). Archambault et al. (2010) state that for at-risk students to be successful in online courses, it is essential for virtual schools to develop programs that accommodate their unique needs. Rose and Blomeyer (2007) stress the importance of developing and adjusting virtual programs based upon student demographic data and creating policies that ensure equal access and accommodations for special needs. Additionally, Cavanaugh, Barbour, and Clark (2009) state that researchers need to improve upon what is known about supporting students to be successful in a virtual school and how to provide remediation to develop the needed skills. As is the case with traditional schools, individual student's needs should be met in the virtual setting as well.

Traditional School Leadership

Throughout the history of American education, the responsibilities of the school senior leader have evolved and become more complex. Despite the importance of this role when compared to other aspects of schools and district-level administration, relatively little historical research has been done on this position (Kafka, 2009; Rousamaniere, 2007).

Until the early 1980s, school leaders had been viewed as managers of operations and programs (Boyd, 1992; Irwin, 2002; Kafka, 2009; Rousamaniere, 2007). In 1983

with the release of *A Nation at Risk*, new demands and a greater emphasis were placed on the role of the school senior leader. With this publication calling for major school improvement efforts, the traditional roles of leaders began rapidly evolving to meet the additional responsibilities and pressures of reform that were being placed on school senior leaders. With the introduction of the No Child Left Behind (NCLB) legislation in 2001, there was the additional expectation for school senior leaders to provide strong instructional leadership.

Since the NCLB legislation, research has supported the assertion that increased effectiveness of school senior leadership is directly related to higher student achievement (Bottoms & Fry, 2009; Leithwood & Jantzi, 2008; Waters, Marzano, & McNulty, 2004). Research has also indicated that only the classroom teacher has a greater impact on traditional school success (Robinson, Lloyd, & Rowe, 2008). In the case of the school leader, how they execute their leadership can also influence their effectiveness. Mitello, Fusarelli, Alsbury, and Warren (2013) determined that there are three categories of leadership practice that are most prevalent in achieving intended school outcomes – collaboration focus, policy focus, and vision focus.

Based on different researchers' analyses of data from the Learning from Leadership project, Wahlstrom (2008) identified four emergent themes that influence leader success when facilitating reform with the goal of improving student achievement:

- School context is key in any attempt to view and manage leadership.
- Relationships between leaders and those being led are neither linear nor uni-dimensional, meaning a more distributed and lateral distribution of responsibility and power.

- Belief systems, such as efficacy and trust, appear as powerful factors to enable leadership efforts to take hold.
- Most effects of educational leadership on student achievement are indirect. (p. 593)

Additionally, the success of academic reform efforts and the adaptation to educational changes and innovations depends largely on local leadership being effective in gaining cooperation and in providing support (Bottoms & Fry, 2009; Leithwood, Seashore Louis, Anderson, & Wahlstrom, 2004; Murphy & Datnow, 2003). Bottoms and Fry (2009) found that senior leaders who were most effective in implementing reform were empowered to do such and able to work collaboratively with a district office that loosely controlled the process.

Traditional School Leadership for Instructional Technology

Given the proliferation of technology in traditional schools, it is a responsibility of the contemporary senior leader to embrace and support the thoughtful incorporation of technology into the learning space. In today's learning environments, educational leaders play a crucial role in the ability of the school community to adopt and adapt to the purposeful use of technology in the classroom as well as in online learning venues (Anderson & Dexter, 2005; Crow, 2006; Davis, 2010; Shuldman, 2002; Timperly, Wilson, Barrar, & Fung, 2007; Wang, 2009). Recent focus has been placed upon this by the 21st Century Skills movement that is centered on ensuring that students acquire the academic, cognitive and technological skills necessary for a post-industrialist globalized society. Jones, Fox, and Levin (2011) highlighted four educational strategies that are necessary to prepare students for life in this new world setting: building a 21st century

infrastructure for equity, innovation, and improvement; supporting educator effectiveness; developing and scaling innovative learning models; and preparing all students for college and 21st century careers. For traditional school leaders these strategies involve tasks such as maintaining a required technology infrastructure, facilitating educational communities of practice, enabling online and blended learning, and supporting project-based collaborative learning.

Technology Infrastructure

Without an adequate technology infrastructure, the intentional use of technology for learning could be an exercise in futility and frustration. A school senior leader must plan for and fund technology infrastructure, including hardware, software, online systems and digital connectivity. This requires having technical staff that can provide services ranging from system repair to individual user assistance. The leader must also safeguard that this technology infrastructure parallels the learning infrastructure by ensuring that the use of technology helps in establishing, maintaining, and supporting learning contexts, learning content, and a facilitative school culture (Lemke, 1998; Jameson, 2013).

Teacher and Staff Professional Development

Senior leaders are also responsible for developing the professional capacity of their school in relation to the use of technology. Teacher and staff preparation, ongoing professional development, and support are essential in developing a successful learner-centered technology-infused environment. Pape (2007) found that administrators who are interested in developing online programs often fail to recognize the necessity for preparing teachers to teach online. School leaders should also acknowledge that this preparation should incorporate initial training, ongoing communities of practice, and

developmental checkpoints. Owen and Demb (2004) stated that because of both internal and external pressures to incorporate technology in education, leaders would have to commit to the professional development of teachers to ensure a learning environment and pedagogical practices that make effective and meaningful use of technology.

School Senior Leader Professional Development

It is not only important for leaders to be aware of the implications and responsibilities associated with good teacher professional development, but leaders themselves must also be sufficiently familiar with online learning technologies. To ensure this, senior leader professional development opportunities related to the various aspects of learning technologies are essential (Hope, Kelley, & Kinard, 1999; Dawson, 2003). Whale (2003) found that principals who had received technology training were better at optimizing the use of technology for learning and were stronger leaders in general. This development is better done over time since it involves not only the acquisition of skills, but also the changing of attitudes and beliefs with respect to technology's role in enhancing educational processes. Macaulay and Wizer (2010) determined that senior leaders move through a hierarchy of skills that develop gradually based upon experience and that training should occur accordingly and in support of these stages. This hierarchy relies upon individual technology knowledge and abilities that must be transitioned through the development of a skill set which empowers the leader to facilitate teaching and learning, management, and assessment.

Technology Planning

A school administrator who is properly trained should be able to effectively create both short-term and long-term plans for the implementation of instructional technologies,

online learning, and associated learning models. These plans would incorporate sequenced and paced rollouts that are scalable, adaptive, and sustainable. Jones, Fox, and Levin (2011) stated that successful planning will help to address education priorities, yet allow for flexibility and adaptability. These practices may also involve effecting or altering policy in ways that will build the necessary organizational capacities over time to align with the plans. Kowch (2009) stated that leading technological change through planned phases would help develop a school vision, gain political support, cultivate trust-building networks, and sustain continuing policy building.

Traditional School Leadership Standards

Education standards provide a means for establishing minimum learning outcomes, measuring learning achievement, maintaining accountability, and providing a basis for improvement. The standards can be policy-driven based upon state or federal mandates or be in response to acts such as NCLB, reform movements such as 21st Century Learning, or national initiatives such as the Common Core State Standards. The resulting standards might be holistic or could be aligned with individual aspects of a school, such as school senior leadership.

From a variety of available traditional school leadership standards, the following eight appeared in the literature as the more frequently addressed standards and are fundamentally representative of others. Of these, the most widely used and documented set of standards is the Interstate School Leaders Licensure Consortium (ISLLC) standards that were originally advocated for and published by the Council of Chief State School Officers in 1996. The Wallace Foundation provided support for the 2008 edition. The 2008 ISLLC Standards have been adopted by the National Policy Board for Educational

Administration (NPBEA). Since 1996, the ISLLC standards have been used by most states as a basis in creating their own standards.

The National Association of Elementary School Principals (NAESP) has created a set of standards for elementary school administrators, and they are similar in content to the ISLLC standards. The McREL standards are based upon a meta-analysis of practices of effective schools, teachers and principals and are intended to provide guidance for what school leaders can do to increase student achievement. The SREB standards were created to enlighten school leaders on what they should know relative to curriculum and instruction. The National Policy Board for Educational Administration (NPBEA) provided the support for the development of the Educational Leadership Constituent Council's (ELCC) standards which were created as guides for educational leadership teaching programs and which were adopted by the National Council for Accreditation of Teacher Education (NCATE).

Internationally, the Australian Institute for Teaching and School Leadership (AITSL) developed an Australian set of standards which served a similar purpose to the ELCC standards. Likewise, in England the National College for School Leadership (NCSL) developed leadership learning standards. The International Society for Technology in Education (ISTE) has created the ISTE Standards for Administrators (ISTE Administrators-A) to define what educational administrators need to do to make effective use of technology in schools, including visionary leadership, digital age learning culture, excellence in professional practice, systemic improvement, an digital citizenship.

Many details within the eight sets of standards were found to be similar, particularly with several of them using the ISLLC standards as a guide. Some standards

have a different focus or approach and thus provide unique information, such as in the case of the ISTE Standards for Administrators. To create a comprehensive set of traditional school leadership standards that would scaffold this dissertation study, the individual leadership task and responsibility elements from the previously discussed standards were combined and then sorted using a constant comparison process.

The outcomes of this synthesis resulted in the elements being grouped within the themes of leadership, community, resources, data, communications, self, environment, learning, and people (Appendix A). Benefits of this exercise were that it resulted in a detailed comparison of the various standards, a validation of many of the individual standards' central components, a filling of gaps that had existed in some of the individual standards, and an illumination of the elements involved in modern school leadership.

Virtual Leadership

Virtual leadership skills are a useful if not necessary asset that most leaders may overlook or may not effectively execute. The increased globalization of people, services and economic activity that is being facilitated by the rapid development of Internet communication and collaboration technologies has led to an exponential increase in the need for functional virtual teams and organizations (Caulat, 2006; Zhang, Fjermestad, & Tremaine, 2005). Since this encroachment of virtualization into society and organizations is happening now as a real-time dynamic evolution, it is beneficial for leaders to understand and embrace it.

Perceptions of Leaders

Boje and Rhodes (2005) stated that due to mass media, leaders and leadership that are not directly seen can become virtualized and the virtual leader becomes a construct in

the minds of those who follow or are impacted by the leader. To employees, clients, teachers, students, and other virtual community members who do not encounter a leader face-to-face, the leader takes on a distinct character based upon the information they receive. The leader's persona is created from the individual perceptions and interpretations of virtually exhibited leader variables such as mannerisms, gestures, tones, words, actions, reactions, and styles. For this reason, it is important for leaders to mitigate misperceptions and incorrect beliefs by being careful, clear, intentional and communicative.

Challenges

Being perceived in a desired way can be made more intimidating by the fact that the virtual environment can be subject to the following unique barriers and challenges that have been identified by leaders of virtual teams (DeRosa 2009):

1. Having infrequent face-to-face contact as a team
2. Lacking necessary resources
3. Building a collaborative atmosphere
4. Lacking time to focus on leading the team
5. Evolving and shifting team and organizational priorities
6. Having more work than the team can handle
7. Managing poor performers
8. Experiencing situations in which team members can dedicate only a portion of their time to the team (p. 10)

These challenges are not insurmountable and can be addressed by selecting and developing leaders who have the necessary capacities and capabilities to perform

effectively in their specific environment and conditions.

Virtual Teams

Just as with different face-to-face work structures and environments, there are specific best practices and techniques that can be more or less effective in a virtual setting. Duarte and Tennant-Snyder (1999) recognize seven basic types of unique virtual teams with members who work across distance, time, and organizational boundaries. These team types are:

1. Networked teams – diffuse, fluid, and sometimes dissociated members collaborate to achieve a common goal
2. Parallel teams – a short-term working team with a distinct membership which makes recommendations concerning a special function or task
3. Project or product development teams – a decision-making team which exists for a defined period of time to produce a specific outcome
4. Work or production teams – these are usually recognized as organizational units which have a specific regular and ongoing work function
5. Service teams – these consist of multiple teams which function to provide around-the-clock operations
6. Management teams – members are located globally but work collaboratively to lead an organization
7. Action teams – members of these teams provide immediate responses when needed, often in emergency situations or short-term times of need (pp. 2-5)

It is important, regardless of the type of team, that virtual team members are aware of, are prepared for, and understand the challenges that each situation and work

dynamic presents. It is the leader's responsibility to identify the type of teams they have, need, or want and to proceed accordingly.

Characteristics and Responsibilities

This literature review led to the realization that there are currently no formal research-based virtual leadership standards, thus pointing out the need for research to be done in this area. During the literature review, fifteen sets of virtual leadership characteristics and requirements were discovered. These sets were derived from anecdotal evidence and/or expert opinion and were published in association with self-help literature, consulting practices or training events. Even though these are not based upon formal scientific studies, they do provide perspective in terms of virtual leadership considerations and thus offer useful information for this exploratory study. The outcomes of a synthesis of these fifteen sources produced seven themes associated with the characteristics and responsibilities of a virtual leader (Appendix B). These resulting themes are staff, relationships and teams, leadership behaviors, personal traits and self-focus, information management, technology, and communication.

Leadership Style in a Virtual Setting

To meet the needs of followers (teachers, staff, and students) as well as those of other individuals in an organization (SLVS), the senior leader must successfully transition their leadership abilities and knowledge from a traditional setting to the virtual setting. This entails having a grasp of basic virtual leadership skills, being able to identify virtual leadership needs and demands, adapting previous traditional setting skills to the virtual setting, and adopting new skills and strategies. As a virtual leader it is important to create a successful team that works well in a virtual setting, to engage and inspire team

members, to build trust and collaboration, to develop member self-confidence and empowerment, and to effectively communicate mission, vision, and details (Goodbody, 2005; Kimball, 1997; Malhotra, Majchrzak, & Rosen, 2007).

Effective Virtual Leadership Styles

Staff performing tasks within the virtual setting appear to be more positively responsive to certain leadership styles. In the review of studies that have examined at-a-distance leadership, it was discovered that most of the studies have been carried out to understand team dynamics and to identify the most effective leadership strategies for a virtual team. Additionally, it was found that transformational leadership was the most prevalent leadership style to be examined and associated with successful virtual leadership. In related studies, it was also found that the transformational leadership style readily emerged as being the most effective for leading virtual organizations (Garland, 2011; Howell, Neufeld, & Avolio, 2005; Malhotra, Majchrzak, & Rosen, 2007; Purvanova & Bono, 2009).

Other leadership styles that received mention are transactional leadership and authentic leadership. Although some literature states that these leadership styles can be beneficial in a virtual setting when combined with the transformational leadership style (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2009; Zhang, Fjermestad, & Tremaine, 2005), they were not individually as effective as the transformational leadership style in addressing at-a-distance requirements and challenges (Howell, Neufeld & Avolio, 2005; Judge & Piccolo, 2004; Purvanova & Bono, 2009).

Transformational Leadership Style

The term “transformational leadership” was first used by Downton (1973) in his

presentation of leader-follower relations; was popularized by Burns (1978) in his book, *Leadership*; and was then extended by Bass (1985) in his work, *Leadership and Performance beyond Expectation*. Bass (1990) gives four characteristics that are associated with transformational leadership: charisma, inspiration, intellectual stimulation, and individualized consideration. Associated with these are the leadership tasks of providing vision and sense of mission, gaining respect and trust, communicating high expectations, promoting intelligence and problem solving, giving personal attention, coaching, and advising.

In a more recent iteration of the term, Northouse (2010) gives the following description for transformational leadership:

> Transformational leadership is the process whereby a person engages others and creates a connection that raises the level of motivation and morality in both the leader and the follower. It is concerned with the emotions, values, ethics, standards, and long term goals. It includes assessing followers' motives, satisfying their needs, and treating them as human beings. Transformational leadership involves the exceptional form of influence that moves followers to accomplish more than is expected of them. (pp. 171-172)

This description aligns with many of the expectations and requirements that are associated with virtual leadership and in particular those of SLVS leadership.

Transformational Leadership in the Virtual Organization

One possible explanation for the effectiveness of the transformational style is the notion that it can help compensate for many of the factors that we rely upon in face-to-face communications such as eye contact, posture and other non-verbal cues that are not

observable in most virtual interactions. Transformational leadership qualities can present ways for the recipient of virtual communication to establish rapport and feel reassured about their views of the physically absent leader. As Boje and Rhodes (2005) state, the perception of a leader can behold the embodiment of the leader's virtues and abilities.

For geographically separated individuals who rely heavily on electronic communication, it is important to understand the development of leadership influence and perceptions within that context. Transformational leadership has been shown in the setting of a virtual organization or institution to facilitate the development of higher quality relationships, thus increasing peoples' senses of feeling important and appreciated, improving their ability to bond with others, and increasing their active participation (Balthazard, Waldman, & Warren, 2009; Dvir, Eden, Avolio, & Shamir, 2002; Purvanova & Bono, 2009). This ability to create a sense of presence and belonging is particularly important in the virtual setting. Given the demonstrated effectiveness of the transformational leadership style, it can be beneficial in the virtual school setting (Bogler, Caspi, & Roccas, 2013; Carreno, 2009; Garland, 2011; Mayrowetz, 2008).

Virtual School Leadership

Very few studies have examined a virtual school senior leader's role and those that do offer generalities. Mayrowetz (2008) contends that virtual school senior leadership should be based on those roles that form connections between school improvement and leadership development. Carreno (2009) is moderately more specific and presents four primary qualities of an effective virtual education leader: an extensive knowledge of related topics and resources, familiarity with instructional models and the instructional design of courses, experience with managing and leading in a virtual setting,

and being capable of broad and global vision. Garland (2011) reflects similar thoughts by stating that virtual school leaders are instructional leaders, data-based decision makers, visionary and student-centric. In a case study, Quilici and Joki (2011) found that virtual school leaders need to be more innovative, need to know more about online learning, and should guide virtual school teachers in adapting to a changing educational landscape.

Two pre-existing sources of models that a SLVS senior leader can draw upon for leadership strategies and styles are traditional school leadership and distance education leadership. Beaudoin (2003) states that the line between these two historically separate models is blurred. He indicates that virtual school leaders need to be able to work in both contexts and be able to merge the two into an integrated and dynamic model.

Due to the infancy of the SLVS leadership role and the sparse amount of related research, it is important for SLVS senior leaders to be innovative, adaptable and resourceful as they address challenges, embrace diversity and meet the needs of the educational community. Salsberry (2007) states that reflection and discussion are required to continue to identify the needs of virtual school leaders and to inform the alignment of higher education institution leadership preparation programs to those needs. To repeat a common quote, without an extensive and mature base of research or preparation, SLVS senior leaders are often "building a plane while it's in flight".

Characteristics and Requirements

Due to the lack of empirical research, a final synthesis was performed that brought together elements of traditional school leadership standards and virtual leadership characteristics and requirements. As led by the guiding questions, the purpose of this was to identify topical directions for dissertation study and to guide the research

process. The result was that the following nine categories can be used to define factors in the SLVS senior leader's role:

1. Personal and Professional Growth Opportunities
2. Curriculum and Instruction
3. Internal - Communication and Information
4. External – Accountability, Reporting, Culture, Community
5. Personal – Qualities, Attributes, Beliefs
6. Technology / Resources
7. Management
8. Work Environment
9. Leadership – Approach and Style

These categories provided a framework for the development of the guiding questions for the qualitative research and the formulation of the interview questions that were used for data gathering.

Virtual School Senior Leadership Development

Developing an individual with the capacity to inspire others to accomplish the common tasks that face an educational institution is a complex undertaking. In this literature review, it was found that professional development consultants and current business executives drive most leadership development practice and programs, and that most of these programs passively teach about leading principles and concepts rather than actively preparing someone with the skills to lead. Thus at the end of a leadership preparation event, a leader is often equipped with cognitive content that results in leadership literacy, but is ill prepared to apply those to effective leadership practice.

Goodbody (2005) found the typical success rate of virtual teams attaining their intended outcomes to be less than 30%. Since most current virtual leaders have had little or no advance preparation, it is not surprising to find that what leads to high performing virtual teams is the proper development of virtual leaders (Caulat, 2006; DeRosa, 2009; Duarte & Snyder, 2011; Gera, 2013).

Leadership Preparation Programs

During this review of the literature, many reports, studies and opinions were discovered that support the notion that the approaches to traditional school senior leader preparation and development have not been able to keep up with the pace of changes, demands and challenges in traditional schools (Crow, 2006; Hess & Kelly, 2007; Levine, 2005). Eacott (2008) contends that traditional school leadership strategies in general are still at a discovery level and are not yet supported by sufficient research and empirical evidence. With the more substantial lack of research and associated literature for SLVS senior leader preparation, there is an implied greater need for studies in this specific area (Beck & Lafrance, 2012).

The most relevant information that exists for the creation of effective SLVS senior leader preparation programs is that found for traditional school leadership preparation. From the literature sources discovered for traditional preparation programs, various program components were noted, compared, and compiled. The results, presented in Appendix C, indicate that these programs should: (a) be based on standards, (b) be acceptable to both state and national organizations, (c) include partnerships with higher education and school districts, (d) recruit participants based upon readiness, (e) be adequately resourced, (f) provide mentoring and ongoing communities of practice, and

(g) result in changes in attitudes and beliefs.

Online Teaching Standards

Online teaching standards is another category of standards that present factors directly affecting senior leadership roles and responsibilities. As with the traditional school leadership standards and virtual leadership characteristics and requirements, the various versions of online teaching standards were developed from experience, expert opinion, and observation, thus providing valuable information for this study. With a major role of school senior leaders being to guide and facilitate instruction (Leithwood, Louis, Anderson, & Wahlstrom, 2004), having a grasp of online teaching is important in supporting and promoting student learning. This necessitates that the leader have an understanding of online pedagogical methods and practices as well as the tools that are being used to support virtual education.

The Southern Regional Education Board (SREB) has been a leader in the development of online teaching standards since the 2006 publication of *Standards for Quality Online Teaching* and *Online Teaching Evaluation for State Virtual Schools*. In the publication, *National Standards for Quality Online Teaching, Version* 2, the International Association for K-12 Online Learning (iNACOL) (2011) states that the SREB standards are the most comprehensive set that they discovered in their 2011 review of online standards and that sixteen states were using them as guidelines for their virtual schools. The iNACOL organization and some state offices have published their own sets of standards, crediting the SREB as a basis of their content. The International Society for Technology in Education published a set of similar standards in 2008. As a result of the review of literature for online teaching standards, the common elements that were

discovered that can be facilitated by a SLVS senior leader include ensuring teacher professional development in terms of content and online teaching and learning methodologies, technology skills training, online class management, and student preparation and support. These elements of senior leader responsibility are similar to those standards that have been found in traditional school leadership standards and traditional school leadership for instructional technologies.

Summary

Based upon the literature findings, SLVS senior leaders must currently enter the position of virtual school leadership without having a complete background in the unique characteristics and challenges that the role presents or preparation in effective virtual school leadership strategies. Contributing to this is the very limited body of research that currently exists about virtual school leadership and the lack of research-informed development opportunities for virtual school leaders. As a result, SLVS senior leaders may often employ traditional leadership skills that may have been successful in face-to-face situations, but that can fall short at-a-distance.

An important result of this literature review was the identification of topics that represent nine categories of factors that determine the role of an effective SLVS senior leader: personal and professional growth opportunities, curriculum and instruction, school-internal duties, school-external duties, personal characteristics, resources and technology, management, work environment, and leadership approach and style. This and other knowledge gained from the review informed and facilitated the purpose of this study; which was to explore current SLVS senior leader experiences, practices, and recommendations, ultimately to the benefit of leader preparation, leader development,

and future research. The following methods chapter describes the research framework, including research questions, participants and setting, procedure, and design and data analysis.

CHAPTER 3: METHOD

This chapter includes a description of the research methodology that was used in this study. Due to the limited available research on the topic of this dissertation, it was decided that this dissertation would incorporate exploratory qualitative study during which data would be gathered through first person interviews (Anastas, 2004; Ezzy, 2002; Maxwell, 1998). The nine previously stated categories of factors that constitute the SLVS senior leader's role provided the basis for the data acquisition process.

This exploratory study required a flexible yet systematic process for gathering and analyzing data with the purpose of advancing new theory, and as such, a grounded theory methodology was used (Charmaz, 2006; Glaser & Strauss, 1967). With the research goal being to derive a contextualized and enhanced understanding of SLVS senior leadership through the interpretation of open-ended interview responses from individuals with various backgrounds, motivations and experiences, a constructivist paradigm was embraced. This paradigm provided a conceptual framework that relies upon a naturalistic and open-minded approach to knowing, understanding and explaining phenomenon through the construction of meaning and social reality.

The remaining sections of this chapter contain a presentation of the guiding questions, framework, design, limitations, researcher's role, and summary.

Guiding Questions

The researcher sought to discover data that would inform the intentional

development and preparation of individuals who intend to lead or who are currently leading a state-led virtual school, thus this study was guided by the following questions:

1. What are current SLVS senior leaders' thoughts related to the qualities, attributes and beliefs of successful SLVS senior leaders?
2. What are current SLVS senior leaders' thoughts related to successful senior leader approaches to SLVS leadership?

Methodological Framework

In this dissertation, the researcher explored a relatively new field of educational study that did not exist prior to 1997. As revealed in the review of literature, research has been performed for many decades on traditional school leadership, yet there are only a handful of studies that have mentioned virtual school leadership and none that have specifically addressed the qualities, attributes, beliefs, and approaches related to SLVS senior leadership. With this knowledge, it was determined that this was to be an exploratory study that would discover and examine qualitative data concerning SLVS senior leadership and the factors that influence it. Additionally, this required a scientific and open methodology to gather and analyze data that was dependent upon the specific circumstances and social realities of the participants, thus the constructivist grounded theory methodology was selected (Charmaz, 2009; Corbin & Strauss, 2008).

Constructivist Grounded Theory Methodology

In Glaser and Strauss's seminal publication, *The Discovery of Grounded Theory: Strategies for Qualitative Research*, they formally introduce the concept of grounded theory research methodology and describe it as a process of discovering theory from qualitative data through comparative analysis (Glaser & Strauss, 1967). The inductive

approach that they presented allows patterns, relationships, and theory to result from the analysis of research data, thus this methodology has the primary purpose of generating theory as opposed to verifying existing theory (Glaser & Strauss, 1967; Strauss & Corbin, 1994). This classic grounded theory process presents a means of creating an original theoretical truth that can be made generalizable as constant comparisons continue to be made against it (Glaser & Strauss, 1967).

Since this dissertation study would require gathering, analyzing, and building upon data from individuals who worked in unique contextual settings that determined their individual interpretations and responses, the grounded theory approach needed to reflect a subjective epistemology and relativist ontology. The constructivist grounded theory methodology met these requirements by empowering the researcher to actively and openly capture participant perspectives, interpret data, consider discoveries, and shift directions (Charmaz, 2009).

Constructivist Paradigm

This paradigm falls under the realm of the interpretivist philosophy that has the central tenet that people are continually interpreting their reality and world. According to Williamson (2006), the interpretivist researcher embraces a naturalistic inquiry approach that typically uses inductive reasoning and pursues qualitative data.

Constructivism is concerned with the study of the active process of how people create their reality based upon their personal experiences, beliefs and constructs. Ontologically, constructivist researchers acknowledge that reality is subjective and relative to an individual's existence, potentially giving rise to multiple and equally valid realities. These realities can be personal or social constructions. In terms of

epistemology, constructivism is an interactive and transactional process that involves researcher and participant discourse to uncover knowledge and create meaning. Methodologically it is a hermeneutical process based upon data typically gathered from interviews, observations and documents that will lead to the development of theory.

Constructivist Grounded Theory Assumptions

Using the constructivist grounded theory methodology requires the awareness and acceptance of several assumptions. These assumptions are either out of the researcher's control or must be controlled by the researcher. Additionally the researcher must be alert to their own personal tendencies, preconceived ideas, and the influence of existing theory, all which can have negative implications on the outcomes of the research (Fernandez & Lehmann, 2005).

According to Hathaway (1995) the outcomes of the observation of a phenomenon and the analysis of the resulting data provides the researcher with in-depth knowledge that is usually not generalizable and is dependent upon an understanding of the assumption, the role of the researcher, and the acquired data. Specifically relating to constructing grounded theory, Charmaz (2009) states there is no single true reality, but rather that it is assumed that people create their world reality through the process of giving meaning to that reality and then acting accordingly within that reality. This research approach is often pragmatic and creative, leading to the generation of new theory.

Another research assumption involves the interaction of constant comparison and theoretical sampling, which leads to a concurrent collection and analysis of data. Results from constant comparison would be the identification of relationships between the data,

the emergence of categories, and the building up of themes. Theoretical sampling would ensure the addition of new data that refines existing data and fills data gaps, ultimately leading to theoretical saturation and the emergence of theory.

The assumptions about the use of constructivist grounded theory in this study concerning SLVS senior leaders were:

- The research questions were considered important and worthwhile to study.
- There were no existing theories or preconceived ideas that will interfere with this study.
- The constant comparison analysis and theoretical sampling would lead to findings about SLVS senior leadership.
- The resulting findings would be unique to SLVS senior leaders and their reality.

Design

Following constructivist grounded theory methodology guidelines, the process of this study included data collection, data coding, data category development, memo writing, emergence of themes, and statement of findings. One of the necessities and advantages of using a constructivist grounded theory strategy was that it is a non-linear dynamic progression that requires reflection, concurrent analysis and data collection, and flexibility. With that knowledge, it was accepted that the components of the process are not presented as a sequence of events, but rather as a set of intermingling and interconnected sub-processes.

Site and Sample Selections

The participants in this study were current senior leaders of SLVSs. According to

Watson, Murin, Vashaw, Gemin, and Rapp (2010), a SLVS is an institution governed by a state education agency; providing supplemental online programs; receiving funding from state appropriation, course fees, or a combined formula; and having a statewide geographic reach. The researcher set the following selection criteria:

- The senior leader must have at least two years of experience as the leader of a single SLVS; thus ensuring that the selected individuals have had sufficient exposure to the processes, requirements, demands, and issues that are typical in leading a virtual school.
- The senior leader must have at least two years of experience as a senior leader in a traditional school.
- The senior leader must have a Master's level degree or higher in an education-related field of study.
- The virtual school that they lead must have had a course enrollment of at least 5000 in the 2010-2011 academic year in the 9-12 grade level range.
- The school's operation and function must be carried out in a virtual setting (i.e., non-physical setting).

For the purposes of an exploratory study of this nature, the inclusion of a minimum of five participants was deemed sufficient to provide the necessary data. This sample size was also considered adequate and attainable given the limited number of individuals in these SLVS leadership positions that would meet the criteria.

Recruitment

Institutional Review Board approval was secured prior to the study and the Board's requirements were followed while communicating and working with the

participants, analyzing data, and presenting findings. A list of potential participants was assembled based upon virtual school data provided in the 2011 iNACOL publication, *Keeping Pace with K-12 Online Learning: An Annual Review of Policy and Practice.* Websites for these schools and other Internet-based sources were searched for leader email contact information. Once all the email addresses were secured, an email invitation (Appendix D) was sent to the prospective participants. For those potential participants who did not respond, up to two reminders were sent.

When an email was received from a candidate expressing interest in being part of the study, a follow-up email (Appendix E) was sent with the informed consent document (Appendix F) attached. Upon receipt of an email confirmation stating acceptance of the informed consent document, the participants were sent information on how the interview would be conducted and a time was scheduled.

In response to the first email, five participants volunteered to be part of the study. A sixth participant joined the study in a response to the first email reminder. After the first email reminder, one respondent declined to participate. No other responses were received from the other email recipients. The six participants in the study affirmed to meeting the study participant criteria that were presented.

The names of participants and the schools they were associated with is confidential and reasonable measures were promised to maintain their anonymity. The participants' names were substituted with unisex pseudonyms, thus their actual names and gender reference did not appear in any part of this study. The six study participants were retrieved from a small possible pool of 14. Given the small population the researcher believes there is a high likelihood that the participants would being

distinguishable if personal or professional information is given, thus this information is not provided. Additionally, since each school represented in this study is unique and identifiable by demographic information, function, and operations, this knowledge is restricted as well.

Data Collection

To maintain research rigor, data acquisition was aligned with constructivist grounded theory practice. Adhering to accepted practice and process ensured that the appropriate methods and tools were used, that the collection strategies provided the needed data detail, that the means of analysis were appropriately supported, and that the evidence was credible to the readers (Ezzy, 2002; Ryan, 2010).

To gather data, each of the participants participated in a 55-60 minute semi-structured online interview using the Adobe Connect online meeting system. As stated by Myers and Newman (2007) and Diefenbach (2009), this method allows the interviewees to freely express their thoughts and opinions as the interview proceeds. Prior to the interview questions, a brief conversation was held with the participant to discuss logistics and establish rapport. The interview questions anchored the dialogue, with the researcher drawing out detailed information by maintaining the role of an active listener who followed the interviewees' lead and who provided follow-up questions as needed. The interview questions that were used for data discovery are as follows:

1. What are your thoughts on the type of personal and professional growth opportunities that a state-led virtual school senior leader should have?
2. What comes to mind when I ask for your thoughts about a senior leader's involvement with a state-led virtual school's curriculum and instruction?

3. Please make any personal comments you would like concerning how a state-led virtual school senior leader handles internal communication and information.
4. Please make any personal comments you would like concerning how a state-led virtual school senior leader handles interaction with the external school community.
5. What are your thoughts on the qualities, attributes and beliefs of a state-led virtual school senior leader?
6. What comes to your mind when I mention state-led virtual school technology and resources?
7. From your experience as a state-led virtual school senior leader, what is involved in managing staff?
8. What are your perspectives on the work environment of a state-led virtual school?
9. What are your thoughts on the senior leadership approach for a state-led virtual school?

The informed consent documentation that had been sent to each participant electronically for preview was discussed with each participant prior to the interview process. Verbal acceptance of the informed consent was acquired prior to the interview. Confidentiality is maintained through the omission in all publication materials of leader names, school names, and indirect references that may allude to these.

The purpose of the study was described to the participants and it was explained that their role was one in which they should be candid, honest, and open with their

responses. It was stated that their involvement was voluntary and that they had the option to refuse answering any question or questions and that they could terminate the interview at any time.

Recording and Managing Data

The interviews were held virtually using an online communication technology known as Adobe Connect. This system provided two-way voice transmission, audio recording capabilities, file conversion and storage, and audio playback. An Apple iPhone and recording application were used to provide a backup recording of the conversation. Immediately following the interview process, field notes and reflections were recorded. A text transcription of the interviews was made by playing back the voice recordings and transcribing them into Microsoft Word documents. After transcription, the data were prepared for coding. The data were maintained on a secure home computer and on encrypted cloud-based servers.

The Dedoose software program was used to analyze and code the transcribed data. This program received good overall reviews and was recommended for use in qualitative research projects such as this one. Its editable and adaptable electronic database facilitated the flexibility required for the manipulation, incorporation and evolution of data as needed for grounded theory practice. Prior to coding, the researcher established a personal awareness of what could be coded such as behaviors, strategies, meanings, settings, and personal practices (Gibbs & Taylor, 2010).

Data Analysis

The data sources used for the study were the transcripts of the interview voice recordings and the researcher's notes which were made during and immediately after the

interviews. The transcripts were read several times prior to analysis to grasp the interviewee's messages, intentions, and meanings. At the same time an awareness and a mindset were established to address the possibility of bias or influence. According to Zickmund (2010), this involves taking a naïve approach to the text, realizing that coding needs to be an open process, ignoring *a priori* knowledge from existing research, and acknowledging that the researcher should not have a stake in the findings.

A constructivist's perspective was taken with respect to the data analysis. This strategy, as described by Charmaz (2009), took an open approach to developing theory in a manner in which it emerges from the data analysis. This involved coding, constant comparison, memo-writing, diagramming, and theoretical sampling and sorting, which led to an interpretive understanding of the data (Charmaz, 1995).

Coding. The onset of the data analysis began with coding, which started as a task of summarizing and accounting for each piece of data. The coding process then led to the determination of the nature of the data and what it indicated, shifting from a descriptive nature to a conceptual one (Charmaz, 1995; Strauss & Corbin, 1998). The overall analysis involved four stages of coding as described by Charmaz (2009): initial coding, focused coding, axial coding, and selective coding. Initial coding incorporated a thorough reading of the data, statement-by-statement, without preconception or presumption and with the purpose of concept discovery and identification, giving rise to named (coded) segments of data. During focused coding the researcher assigned analytic value and importance to the conceptual properties and codes ultimately gave rise to an alignment of codes, forming emergent central categories. At this point axial coding occurred during which category properties were solidified, relationships between the data in a category

were established and subcategories were formed, and conceptual associations between categories began to be realized. The final stage in the process was theoretical coding. During this step the information gained from the development and analysis of categories and subcategories is used to conceptualize and understand relationships between categories, setting the stage for the emergence of findings concerning the factors that impact the SLVS leader role.

Constant comparison, memo-writing, and diagramming. During the coding process, the strategies of constant comparison, memo-writing, and diagramming were implemented. As the data gathering and data analysis proceeded, these actions were performed concurrently.

With constant comparison being an active and integrative process, each new code was compared with previous codes. Using this methodology, each observation was represented by a code, after which patterns and commonalities were identified and themes were developed and documented (Gay, Mills, & Airasian, 2006; McGhee, Marland, & Atkinson, 2007; Mills, Bonner, & Francis, 2006; Witte & Witte, 1997).

Charmaz (1995) states that memo-writing is a process that provides an opportunity to explore the data rather than simply being a means to organize it. Keeping this in mind, memo-writing occurred in conjunction with constant comparison as a means of elaborating upon and documenting what the coding was revealing, and indicating what other data were needed to fill in gaps or provide clarification.

Keeping a visual record of data conditions, consequences and interactions for the purpose of relating data to a broader context was addressed using a conditional / consequential matrix and diagrams (Corbin & Strauss, 1996; Strauss & Corbin, 1998).

Mills, Bonner, and Francis (2008) contend that these visualization strategies help lead to the eventual construction of grounded theory by providing supplementary processing of data that leads to a deeper analysis, thus this was useful in the data analysis as related to this study.

Theoretical sampling and sorting. The data indications that were identified during the simultaneous steps of constant comparison, memo-writing and diagramming informed theoretical sampling (Charmaz, 1995; Mills, Bonner, & Francis, 2008). In alignment with Charmaz (2009), the purpose of the theoretical aspects of sampling occurred to fully develop and saturate category properties. This transition from the original sampling analysis allowed for a deeper understanding of the data and the development of the analytical framework that set the stage for study outcomes.

At this level of data analysis, sorting had conceptual implications and additional memo-writing and diagramming supported the emergence of findings. Charmaz (2009) comments that sorting is done to make comparisons between categories that lead to the creation of theoretical connections. Memo-writing and diagramming evolved to the same level of purpose, with conceptual relationships being made and documented. Once a point of saturation was reached, documentation of the findings began.

Trustworthiness

The constructivist grounded theory methodology is subject to researcher bias due to prior knowledge, self-interests, existing theory, beliefs and personal preferences. The trustworthiness of this study was maintained by adhering to Guba's (1981) criteria to take measures that ensure credibility, transferability, dependability and confirmability. These terms can be associated with the quantitative counterparts of internal validity, external

validity, reliability, and objectivity.

Credibility of interpretation was largely upheld by using two qualitative validity approaches as presented by Cho and Trent (2006). The first approach employed in this study was an impressionistic transformational validity, which they described as a non-linear process consisting of self-reflection and self-checking. This methodology is well-aligned with Charmaz's (2009) constructivist grounded theory approach of reflection and non-linear analytical direction that was used in this study. The second approach used in this study was the more traditional transactional validity, which Cho and Trent explained as a linear process that involves ongoing methodical interaction between the researcher, the participants, and the data. For this research study, transactional validity involved using the steps of asking open-ended and non-leading interview questions, questioning iteratively during the interviews as needed, grounding the analysis by making sure it was supported by the data, carrying out peer debriefing with colleagues, and performing inter-rater reliability assessments that resulted in Cronbach's alphas of .70, .85, and .89.

Since the findings of this study are specific to a small group and context, the possible transferability of generalizations are limited (Guba, 1981; Shenton, 2004). It is recognized that since leadership contexts vary, transferability to other SLVS senior leaders will be dependent upon the alignment of context similarities (Morrow, 2005). Dependability was achieved by following accepted research design and clearly describing in detail and reflecting upon the processes used in the study. Lincoln and Guba (1985) state that there is a relationship between credibility and dependability, and that establishing credibility scaffolds dependability. Confirmability was ensured by maintaining the highest possible level of researcher objectivity by being aware of the

existence of personal predispositions and biases, and by using a "within-method" of triangulation that involved cross-checking between the participant data (Jick, 1979; Shenton, 2004).

Limitations

As a qualitative process, the grounded theory methodology has some recognized limitations. It is best used to study single subjects, as it can tend to having diminishing effectiveness when searching for patterns across groups of individuals (Cuban & Spiliopoulos, 2010). Additionally as Glaser (2002) contends, it must be realized that the outcome of grounded theory research is an abstraction that depends upon the context - time, place, and participant. This leads to the limitation of establishing trustworthiness due to restricted generalizability. Another limitation, due to the need for extreme detail and contextualization in the analysis, is that it can be a challenge to present the outcomes in a manner that is meaningful and useful to others.

The findings that resulted from this study were dependent upon the data that were collected and how they were analyzed. Additionally, Glaser (2002) states that using Charmaz's constructivist approach to grounded theory has a tendency to interject a greater level of predisposition in studies in which the researcher has a stake or feels passion. At the researcher level, two limitations that can create these predispositions are subjectivity and researcher bias, both of which can lead to challenges in establishing trustworthiness of the study. Subjectivity is viewed by the researcher as the influence of personal characteristics, knowledge, beliefs and attitudes, whereas bias results from external influences and acquired knowledge. Subjectivity was a greater challenge since the process should be free from the influence of existing theory, which left the analysis to

personal skills and experience. Having an awareness of personal inclinations and knowledge and establishing self-evaluation checkpoints were used to mitigate these tendencies.

Prior to the study, the researcher identified the following four primary limiting factors in gathering data. First, at the time of the study there were 14 state virtual schools that meet study criteria. Second, there would probably be SLVS senior leaders who would not meet the study criteria. Third, there was the likelihood that the number of participants would be lessened due to lack of availability or desire to participate. Fourth, since the interviews would be conducted though voice communication technologies, the level of rapport and richness of communication could be diminished. These limitations were recognized, yet the researcher felt confident that they would not negatively impact the study.

After the study was completed and even though the first three limitations diminished the number of participants, the minimum number that was determined as necessary to perform a viable study was exceeded by one. The researcher feels that the final number of six participants and the data that were retrieved was sufficient for the study. Additionally, the researcher contends that the fourth limitation did not negatively affect the study and findings, but also believes that in-person interviews could have been more illuminating in terms of having the benefit of non-verbal information.

Researcher's Role

The researcher's role was one of personal involvement during each step of the process including research design, interviewing, analyzing, and reporting. This role was a complex and challenging one with each phase being dependent upon making

interpretations and decisions based upon unbiased and non-subjective personal foundations. Essentially the researcher served as a dispassionate instrument for gathering data, a role which was a challenge due to the intimate nature of the data gathering process. To successfully attend to this role, the researcher maintained ongoing awareness of biases, assumptions, expectations, or the influence of experiences prior to or during the study. Any concerns, personal reactions, discrepancies, or reflections were noted and reviewed to help negate impact on the study.

During the interview process, the researcher took the stance of being an outsider who asked guiding questions, listened to and reflected upon the responses, and then asked probing questions as needed to ensure capturing the participant's perspective and message. Throughout the data analysis, the researcher maintained an awareness of educational, experiential, cultural, linguistic and other differences and perceptions. If there were gaps found in the data during analysis or if clarifying detail was needed, it was the researcher's role to address these through secondary contact with the participant rather than making assumptions or projections. During this study this was not needed. Since the conclusion of the research would be based upon the comments of a few respondents, it was the responsibility of the researcher to be sure statements were correctly transcribed by maintaining the tone and meaning with which they were made. Similar cautions were taken in reporting the findings and theoretical implications. The flexibilities and advantages of the grounded theory research methodology could have also been its greatest weakness if the appropriate role and strategies were not maintained.

Summary

For this exploratory study, the researcher used a constructivist grounded theory

methodology and implemented the associated protocols and procedures that ensured the rigor and trustworthiness of the research and findings. Using a semi-structured interview process, data were gathered from six SLVS senior leaders who volunteered and met the study criteria. The results of the data gathering and analysis was instrumental in the development of findings that can be used to inform future research, current SLVS senior leaders, SLVS senior leader preparation and development programs, and leader succession planning. The following Chapter 4 presents the data analysis findings.

CHAPTER 4: FINDINGS

The purpose of this exploratory research was the discovery and presentation of findings related to the role characteristics, influential factors, and requirements that can impact SLVS senior leadership qualities, attributes, beliefs, and approaches. The study data were acquired through semi-structured interviews with SLVS senior leaders. The interview questions and data gathering process were established in response to these guiding questions:

1. What are current SLVS senior leaders' thoughts related to the qualities, attributes and beliefs of successful SLVS senior leaders?
2. What are current SLVS senior leaders' thoughts related to senior leader approaches to SLVS leadership?

The interview questions were designed to draw out the senior leaders' thoughts relevant to those factors that influenced the leadership role and the leaders' qualities, attributes, beliefs, and approaches. This chapter first offers information about the participants, data gathering, data analysis, guiding questions, and identification of themes, and then presents the detailed findings that resulted from the analysis of the interview responses.

Participants

Due to the small participant population, the unique characteristics of each school and its operation, and the stipulation that confidentiality and anonymity would be maintained, only general information concerning the participants and their schools is

provided. The study involved both male and female participants, and unisex pseudonyms were provided for each of them. The six study participants were from various SLVSs from the eastern and mid-western portions of the United States. The participants had a minimum of five years of experience working with their respective school. Some individuals started working with their SLVS in their current position as a senior leader, while others had a prior position within the school. Two of the leaders spent most of their time working from their personal residence, while the other four worked at a common location with other central administration staff. In terms of education, the highest degree attained by two participants was a master's degree, with the other four having their doctorate. The areas of study for these degrees included business, educational leadership, educational technology, and curriculum and instruction. Leaders with multiple graduate degrees had specializations in combinations of these areas.

There was also variety in the characteristics of the schools that the participants represented. Some of the SLVSs schools only provided supplemental programs, whereas others provided both supplemental and full-time programs. For the schools with supplemental programs, the majority of students maintained full-time enrollment in their public home school district with most of the other students being in private schools or home schooled. Most virtual school teachers were in adjunct positions, with the others either being full-time or being provided through online course vendors. Most of these teachers worked at-a-distance and were connected with their schools and students via online communications and learning systems. Most central (administrative) staff worked at a common physical location, while some worked remotely and traveled to the physical location on a regular basis.

Data Gathering

To begin the data acquisition process, invitations were emailed to fourteen potential participants whose schools fit the study criteria. Follow-up reminders were sent to only those who did not respond to the prior notice. Six participants agreed to be part of the study and accepted the Consent for Participation in Research statements. The data for this study were collected during interviews that were held during July and August of 2013.

To provide consistency in getting initial reactions and impressions and to be able to dynamically engage with their thoughts, the interview questions were presented at the time of interview. The participants were familiar with the online Adobe Connect system that was used to hold and record the interviews and it presented no communication issues to them or the researcher. Notes were taken as needed during the interview process. The interviews were transcribed in the participants' voice with no grammatical changes being made. This was done to ensure the accuracy and authenticity of the data during analysis. Transcriptions were completed within a few days of the interview, with additional notes being made as appropriate.

Data Analysis

The transcripts were uploaded into the online Dedoose data analysis system. The notes that were made during and after the interviews were added to Dedoose and were placed with the relevant parts of the transcripts. The transcription data were then parsed into succinct excerpts. The total number of excerpts was 1051 and individual interviews resulted in 123 to 204 excerpts each with a mean of 175.2. These excerpts most often were individual sentences, but at times were portions of a sentence or were multiple

sentences. Rather than attempting to deconstruct certain excerpts and possibly lose their meaning or intention, multiple codes were assigned as needed, resulting in 1340 code applications.

The excerpt analysis resulted in the creation of a consistent set of codes. Due to the participants' interpretations of the interview questions, the directions their responses took, and their particular virtual school's operational parameters, staffing, functional structure, and funding, there were variations in the content of the responses. As a result, all codes were not used with all interviews. Following constructivist grounded theory methodology, the multi-pass analysis of the data and the formulation of codes led to the development of thematic associations.

Guiding Questions

The data interpretation and the thematic outcomes address the intent of the guiding questions and the associated interview questions to expose those factors that influence SLVS leadership. For this exploratory study, the guiding questions were open-ended and provided a focus on the topics of leadership qualities, attributes, and beliefs and leadership approach. This led to the development of the nine interview questions that guided the data gathering. The data analysis resulted in the discovery of SLVS leader-influencing factors and the emergence of sub-themes and themes.

Adhering to the semi-structured interview approach and the exploratory nature of the study, most interview questions were designed to elicit responses that produced data relevant to both guiding questions. These interview questions were (by interview question number):

2. What comes to mind when I ask for your thoughts about a senior leader's

involvement with a state-led virtual school's curriculum and instruction?

3. Please make any personal comments you would like concerning how a state-led virtual school senior leader handles internal communication and information.
4. Please make any personal comments you would like concerning how a state-led virtual school senior leader handles interaction with the external school community.
6. What comes to your mind when I mention state-led virtual school technology and resources?
7. From your experience as a state-led virtual school senior leader, what is involved in managing staff?
8. What are your perspectives on the work environment of a state-led virtual school?

The following two interview questions were developed for and provided study data that were primarily aligned with the first guiding question about leader qualities, attributes, and beliefs:

1. What are your thoughts on the type of personal and professional growth opportunities that a state-led virtual school senior leader should have?
5. What are your thoughts on the qualities, attributes and beliefs of a state-led virtual school senior leader?

The majority of data gathered from the next interview question were related to the second guiding question that concerned leader approach:

9. What are your thoughts on the senior leadership approach for a state-led

virtual school?

The goal of the two guiding questions was to ensure that the resulting interview questions provided a comprehensive perspective on the SLVS leader role. As a result, each of the themes that materialized from the analysis of data represented findings that contributed to the purpose of each of the guiding questions.

Identification of Themes

Emerging from the data analysis were 11 themes that comprised 59 sub-themes. During the process of analysis, the researcher maintained an awareness of the potential for bias and the influence of the literature review findings and the interview questions. It was noted that unintentional similarities exist between some themes and the interview questions that were used to gather the data.

Five of the emergent themes are similar to certain topics raised by specific interview questions. These themes are curriculum and instruction, internal communication, external communication, capital resources, and human capital. The curriculum and instruction theme incorporates participant statements made concerning their involvement with the curriculum, instructional design, course development, and online instruction in their given virtual school. Included in this theme are the related concerns of instructional design, course development, and online instruction. The theme of internal communication incorporates comments that referred to various means of contact with employees, whether full-time, part-time or contracted. Similarly, external communication evolved from responses made about exchanges with persons and entities outside the virtual school. The capital resources theme developed from replies that were linked to technological and digital infrastructure. The topic of human capital emerged

from remarks about matters concerning the management, guidance and development of the virtual schools personnel.

Two themes, although they have roots that can be associated with respective interview questions, include a discernible amount of information that resulted from other areas of discussion. The theme of education, experience, and professional growth materialized from the distillation of responses associated with the participants' ongoing professional development, but also includes the additions of prior experiences and education. The theme of work environment incorporates statements made by the participants about internal work processes and work structure, but additionally incorporate a collection of responses about external work processes.

The theme of leader profile is primarily represented by responses to two interview questions that referred to leader qualities, attributes, and beliefs and to leadership approach. The theme also contains serendipitous information that was given during discussions that were initiated by other questions.

Three other themes that emerged are not directly associated with the primary topic of any interview questions. These themes are the learner, governance, and operational logistics. The theme of the learner emerged from replies that were associated with student welfare and success, including communications, course access, and support. Governance, ascended from statements about participant experiences with state-level government individuals and entities that ultimately determine the virtual school's direction and future. This theme includes discussions of procedural expectations, directives, collaborations, and explanatory communications. The operational logistics theme came from the multitude of participant responses that captured those ongoing, routine or unexpected

operational factors that can affect the leader's role. These factors include technology use, daily internal and external work challenges, virtual communication nuances, evolving operational parameters, and relationship building.

Overview of Themes

After the processes of coding, reviewing of notes and graphic representations, constant comparison, and hypothetical sorting, 11 themes emerged. These themes are: (a) leader education, experience, and professional growth; (b) leader profile; (c) curriculum and instruction; (d) the learner; (e) human capital; (f) work environment; (g) internal communications; (h) external communications; (i) capital resources; (j) governance; and (k) operational logistics. These themes and their sub-themes are presented in the remainder of this chapter.

Leader Education, Experience, and Professional Growth

This theme surfaced from responses related to general knowledge, formal education, experience, and skills that a SLVS senior leader had either prior to or that were gained while being in that role. Six sub-themes that were associated with this theme are continuous informal improvement, peer communications and support, policy training and political savviness, prior education and experience, professional growth opportunities, and staying informed about the school. Table 2 presents these sub-themes with their frequency and the number of interviews associated with them. The current status of SLVS leader preparation is presented by Avery who said, "I still believe that on-the-job training is the best no matter what you do."

Table 2: Leader education, experience, and professional growth

Sub-theme	Frequency	Interviews
Continuous informal improvement	20	5
Peer communications and support	28	5
Policy training and political savviness	8	3
Prior education and experience	81	6
Professional growth opportunities	9	4
Staying informed about the school	5	2

Continuous informal improvement. Five of the participants expressed that belonging to professional organizations and attending professional meetings, conferences, etc. was essential to maintaining current knowledge and awareness about virtual school operations. There was an overall sense from these leaders that lifelong learning is important. This was clearly expressed by Avery who said, "If you are not open to learning new things, learning them rapidly, trying out new things, embracing what works and throwing out what doesn't, then this is not the place for you."

Peer communications and support. This sub-theme was derived from five participants' views about interacting with fellow school leaders for advice, information, and moral support. Comments made that were related to this were often accompanied by more emotion, emphasis, and even a sense of relief than most other comments made throughout the interviews. In reference to the benefits of peer interactions, Taylor stressed, "… having a group of like people in similar roles is of tremendous value.", while Alex added, "…we are a young field, but also a tight field."

Policy training and political savviness. The need for knowledge and awareness of local, state, and national policy; policy making; and dealing with politics related to the virtual school and its operation at the state level was expressed by half of the

interviewees. These topics were also indirectly alluded to during all data gathering sessions when issues such as funding, local school districts, course standards, and state leaders arose. Identifying with this, Jessie stated, "…so I think there is this certain level of policy making savvy that I've learned on the job and it would have been great if someone had sat me down beforehand and told me."

Prior formal education and experience. This sub-theme is common among all participants and has a higher frequency than the other sub-themes in this category combined. It includes statements based upon the previous education or background experiences that SLVS leaders had that were found to be applicable to the role. Formal education did not appear to be as important in most cases as were the skills and knowledge that were gained in previous positions. Lee advocated, "….someone with an MBA could probably do just as well as someone with a PhD in education. You need someone more with leadership skills than intricate knowledge. They need that, but leadership is most important."

There was a range in the formal education that the participants either had or felt were beneficial to the position. The degrees mentioned included the fields of educational leadership, educational technology, instructional technology, curriculum and instruction, business administration, educational psychology, and English.

The types of experiences that were mentioned as being useful to the SLVS leader position were broad in scope. All participants made comments that were related to the importance of having had a leadership role in an educational setting. Avery captured this by stating, "I would never hire anybody to lead a state virtual school who is not a strong instructional leader. That would be the absolute first thought." Taylor supports this with,

"I think that it's extremely important that they [SLVS senior leaders] have a background in administering a district or a school."

Leadership experience was followed by five participants directly commenting on the need for experience in educational technology or instructional technology. In comments related to this, the interviewees felt that technology was an integral part of the instructional process and that it was necessary to have an awareness of its importance and limitations. Jessie commented, "I would want them to understand about, at least at a high level, the technology that we use so they can have an intelligent conversation with someone about the technology we use."

Five participants stated the importance of having practical skills with curriculum or instruction. This includes having either traditional or online teaching experience, or having been in a role working with curriculum development or instructional guidance. Taylor offered, "I was thinking of administration in the [virtual] school setting and that having a background as a school teacher would be pretty important to put the whole package together." Jessie added, "…that they [SLVS leaders] have a good knowledge about what is unique about the online learning, both from the instructional perspective and from the content and curriculum perspective."

In addition to having experience with leadership, technology, and curriculum and instruction, there was mention of a variety of other areas of knowledge that are commonly associated with an educational leadership role. Taylor summed this up by stating, "…so a background that would include everything that comes with administration…evaluation of teachers, assessment of content, budgets, policy, procedural things, legislative activity and how to be part of that system and be an

advocate."

Professional growth opportunities. This involves statements referring to seeking out and having opportunities for formal professional development and growth. There were few references made to this and those that were made alluded to professional development that was related to certain general leadership responsibilities, but was not about virtual school leadership. Statements made were that professional development was about specific educational technology, online teaching, or communications, but was not a dedicated or comprehensive offering about virtual school leadership. Taylor remarked, "I think the pool of folks that are at that level of state-led programs is pretty small, so we have to be creative about how we get our professional growth opportunities."

Staying informed about the school. Only two participants reflected upon the leader staying informed about the school processes and operation. Even so, tacitly through other statements made by all participants, the importance of this sub-theme is apparent. In a statement about their school, Avery admitted "What I didn't know was basically how online learning differs from traditional face-to-face instruction in the classroom." From another perspective, Jessie stated, "I would want senior leadership to have a functional knowledge of the organization."

Leader Profile

Throughout the interviews, each participant referenced or discussed certain personal leadership traits and their leadership approach. The excerpts related to these characteristics were arranged in the sub-themes of authority, forward-thinking, personal motivations and interests, and role approach (Table 3).

Table 3: Leader profile

Sub-theme	Frequency	Interviews
Authority	14	3
Forward thinking	6	3
Personal motivations and interests	21	6
Role approach	28	6

Authority. Half of the participants made comments related to their authority in making decisions, addressing issues, and leading others. The absolute use of authority was only exercised when some other form of guidance or group decision making efforts failed. Within the virtual school, Avery expressed:

> If we get together and make a decision that is best for the program, then I will do it. I would rather that it be a joint decision so there is buy-in, but in the end I will make the decision if there is any disagreement.

Authority with external entities was more challenging as indicated by Lee's statement that , "I don't have a lot of authority since most local school districts are free to set their own policies related to online learning."

Forward thinking. Even though only three of the participants made statements directly related to preparing for the future and looking at new opportunities and innovations, all participants alluded to the need for this. In reflection, Avery said, "If you are not that kind of adventurous leader, if you are not willing to be a change agent, then this is not the place for you." Dana presented another perspective, "I also believe that one of the downfalls of schools is that if you always do what you've done, then you always get what you've gotten."

Personal motivations and interests. During all participant interviews, their personal determination, interests, and ambitions were apparent. Outside of a general

purpose to provide online learning, each presented a different perspective on this sub-theme. Lee expressed a special interest in personalized learning. Quality of instruction and course content was the stated concern of Jessie, whereas Taylor's stated desire was to serve the students in collaboration with their home school. Alex appreciated a "continued appetite and desire to improve and continue to grow and stay abreast of the leading edge in the field." "Looking for different ways to do things, more effective ways to do things" was stated as an interest of Avery. A philosophy of Dana is "to believe that virtual education can be as good if not better than face to face education."

Role Approach. All participants made explicit comments that indicated leadership tendencies and inclinations. Even though the balance differed from participant to participant, all participants shared commonalities in their leadership approach. Their influence reached out to a broad range of individuals including immediate staff, extended staff, students, home school staff, government representatives, and peers.

The leaders indicated the need to be flexible and understanding. Lee conveyed, "You have to be able to balance political lines, be a little understanding that there are two, three, or four sides to a story." Dana advised, "You have to be willing to listen, you have to value your stakeholders." There were also statements that indicated value in being open to people and ideas. Alex recommended:

> You need that critical discourse; you need to have people willing to share counter examples, counter ideas, challenge the status quo. I think that is healthy in a leader who can allow that to occur, who can digest that intelligently, to thank people for those offerings and to have a group then to decide what is the best course of action.

Curriculum and Instruction

This theme was the only one that had all participants express comments across all

the sub-themes. The leaders' responses germane to this theme varied depending upon whether or not they had staff who specialized in curriculum and instructional design and development. Table 4 presents the theme and the frequency of responses and interviews related to each sub-theme.

Table 4: Curriculum and instruction

Sub-theme	Frequency	Interviews
Course standards	28	6
Oversight	56	6
Quality control	18	6
Instructional design and content	22	6
Online instruction	20	6

Course standards. All leaders indicated the importance of connecting the curriculum and instruction to standards and ensuring that these were being followed. Lee asserted, "I guess from my side it's just making sure that the state standards are being covered." Avery followed with:

> I don't think an online learning program is any different [from a face-to-face learning program] because everything you do depends upon having outstanding courses that are aligned with state and national standards that are. For both content and online learning in general.

Some leaders stated that based upon their course development processes and staff, the adaptation of new standards presented issues at times, such as with the release of multiple Common Core standards. Jessie cautioned, "Really it's just the timing of when standards are being aligned and when you have to roll things out and when you have a year or less to do it then that can be a challenge." Alex offered another perspective on this challenge by stating, "…this notion of taking [existing] courses and understanding that these new curricula or content standards are important, then trying to reshape the

curriculum and lead that process…"

Oversight. For all leaders, the most frequent involvement with curriculum and instruction was for the leader to direct virtual school staff and contractors during the curriculum development and application phases. This is best exemplified by Lee who stated about their involvement, "…not a real deep hands on approach, but rather guiding and being sure that the instructors know what they are doing." In some of the virtual schools that had less staff, the leaders were more hands-on as indicated by Taylor who conveyed, "So I feel a senior leader is very involved in curriculum and instruction just short of teaching the students."

Instructional design and content. During the interviews the process of curriculum development was often associated with the design and development of courses or the acquisition of aligned content from other sources. All schools in this study either partially or fully developed courses in-house. Those that had been purchasing content from vendors were either in the process of transitioning to the internal development of their courses or expressed the desire to do so. This shift is witnessed in Avery's statement that, "When the program was actually launched...we of course had to purchase courses from a variety of vendors." Now this is done by school staff. Two leaders expressed collaborative development of course with other SLVSs.

Online instruction. Instructor approaches, interaction with course content, and the personalization of instruction were various concerns of the leaders. Many leaders felt that a strength of their school was the ability to address this assortment of factors. Dana believes, "The whole beauty of virtual education in my opinion is the flexibility it provides to both the teacher and the student in terms of the learning." In exercising this

flexibility, Lee suggested, "…you have to think outside the box or think about different scenarios that online learning might occur in."

Quality control. All participants supported internal processes that ensured course outcomes were being met and that course improvement processes took place. As indicated by the leaders at many points during the interviews, it is essential to the survival of the virtual school that all content and instruction is consistent, high quality, and standards-aligned. As Dana stated, "We have to be realistic about what is working and what is not working."

The Learner

Even though this theme was not directly alluded to in the interview questions, all participants made multiple statements about students and offered comments about factors that related to learner outcomes. There was an unquestionable sense that all leaders felt strongly about the fact that their role and efforts were ultimately for the students. Five sub-themes emerged from the participants comments related to students: communications, course awareness and access, engagement, student input, and support and benefits. Table 5 shows the sub-theme frequency and number of source interviews for this theme.

Table 5: The learner

Sub-theme	Frequency	Interviews
Communications	9	3
Course access	22	6
Engagement	13	4
Student input	4	3
Support and benefits	38	5

Communication. Half of the participants gave statements concerning

communications with students who were enrolled in a course. Even though this was the responsibility of the course instructors, the leaders felt it was necessary to ensure that students were receiving the necessary contact from the instructors. When asked about this, Alex offered, "our procedural expectations such as emails must be answered in 24 hours and grades or any feedback will and given within 72 hours." Student contact in some cases, such as those involving enrollment, advising and technical support, required other personnel from the virtual school and home school to be involved in student communication. Taylor said "We count on that person [school district contact person], the teacher, and us [non-instructional virtual school staff] to communicate vital information to the student beyond just course communication between teacher and student."

Course access. All participants expressed developing and implementing strategies to increase student awareness of the virtual school, its courses, enrollment processes and registration periods. This included establishing broad awareness and available access for students in public, charter, and private schools, and for those who are being home schooled. The diversity of students and their primary sources of education also presented the need for the SLVSs to be sensitive a range of students and needs. Dana revealed, "We have, 75% of our kids are public school, 10% are private school, and the rest are home school and we've always had that breakdown. So we've been mindful of that audience since we started to develop [courses]."

The general consensus among the participants was that most students who could be taking advantage of virtual school offerings were not. Lee reflected upon this situation by asserting that they need to "figure out how to get online learning into more students'

hands." An approach taken by Alex to help mitigate this is seen in the statement, "So typically we will have something for the core courses that are typically required for graduation and then we have quite a bit above and beyond that." Alex also cautioned, "So providing opportunities to supplement and enrich the public school experience that they [students] have in their local districts, I think is more important than figuring out how you get from 20,000 to 200,000 enrollments." This statement was similar to one made by another leader whose state allowed course credit from private vendors.

Engagement. Once students were enrolled in a course, the importance of getting students to engage with the instructors and course content was discussed by four leaders. Having students in an online course that inherently lacked an in-person presence presented challenges in ensuring that the teachers and content resonated with the students. Resolutions for this usually involved making course content interactive and relevant to the students. Taylor said, "We talk about strategies all the times about how to engage kids that are not in that face-to-face environment."

Student input. Half of the leaders brought up having an interest in receiving student opinions, perspectives, comments, and ratings. An assortment of approaches were used, from Lee asserting, "Yes, so we do a student survey at the end of each traditional semester." to Dana stating, "We have students who are involved in the development of our courses, in the testing of our courses."

Support and benefits. The provision of tutorials, guides, counseling, and other forms of support involved with student success was brought up by five of the participants. The leaders recognized that these were important offerings that could lead to the improvement of student outcomes. Jessie expressed, "A virtual school leader has to

believe first and foremost that we are trying to do good things for kids."

Leaders also conveyed that virtual school courses provide benefits beyond those of a traditional school course. Jessie stated:

> I think it is so important for them [students] to develop those [online] skills and dispositions in middle or high school so that they are ready because certainly higher education and the workforce are requiring it of our population now.

Another benefit to be leveraged was given by Dana who declared:

> It [the virtual school] gives students the availability of opportunity that would not be available to them based upon their zip code, so it levels the playing field across students, giving all student the opportunity for a high quality educational experience.

Human Capital

Many responses given during the interviews were associated with human capital, leading to the formation of four sub-themes: non-instructional staff, instructional staff, staff professional development and guidance, and staff review (Table 6). Participants revealed that, when compared to a traditional school, virtual school staff-related responsibilities required both modified and innovative strategies. The most common factor in this theme, and one that was expressed across the sub-themes, was to ensure that staff were capable and effective when working in the virtual setting.

Table 6: Human capital

Sub-theme	Frequency	Interviews
Non-instructional staff	34	6
Instructional staff	34	4
Staff professional development & guidance	40	5
Staff review	11	4

Non-instructional staff. A common leader desire was to have additional staff positions so they could better address administrative and management functions to

enhance the virtual school's operation. Taylor stated, "We are still probably short half an administrator position and half a program support position." There were also statements made concerning the added benefits when a new position was filled. Taylor added, "I could not get to those [tasks] until we got the director."

Participants also mentioned the channels they went through to find these staff. These included newspapers, websites, social media, work-of-mouth, and national organizations. In reference to conversations with other SLVS leaders at a recent conference, Alex relayed, "A lot of people belong to social networking groups and are well-connected with a group of people who have an expertise they are looking for."

Instructional staff. Four participants brought up instructional staff, with the majority of comments being about how to get the right people for teaching positions. This included hiring adjunct instructors for all schools and full-time instructors for two of them. Since most applicants for instructional positions came from traditional teaching positions, the most frequent concern was ensuring that they understood what was involved within a virtual school and that they were ready to teach in an online environment. Dana summarized the instructional staff aspect in this way:

> So, we really look for people who are self-motivated and who are energized about this being their vocation. They are energized about teaching and learning, they are focused on self-improvement. That they demonstrate that they are focused on becoming better at whatever they do. You know I think that both kids and teachers think it must be easier, but most teachers will tell you it's the hardest job they've ever had, but they love it more than any other job they've had.

Avery cautioned, "Just because you have someone who is an excellent teacher in a brick and mortar classroom doesn't mean they are going to be a good online teacher."

Staff professional development and guidance. This sub-theme includes the onboarding, professional development, guidance, and mentoring of staff. Leaders pointed

out that they wanted to ensure that staff had a correct perspective on working in the school. In one example of this, Dana said:

> One of the things you do as a non-instructional employee, one of the first things you do is go spend the day sitting next to a teacher working in their home so that you can see what their day looks like and so you can see what you are supporting.

Several of the interviewees explained that they had instructional staff attend training prior to accepting the position. Taylor explained, "Actually what we do if we are pretty sure we want to take a [closer] look at the candidate and get to know them better, we invite them to our [instructor] training."

After staff were hired, the participants discussed monitoring their progress. This seemed particularly important because most staff were new to working in a virtual school. Lee stated, "So that adds extra on you…that you have to be watchful and ensure that your staff is capable of working at a distance."

Most leaders talked about professional development, particularly for instructors. Taylor's approach was given in this statement, "During the school year, we were having monthly meeting and professional development opportunities." Other development opportunities were less formal. Avery responded:

> That is what our teachers say all the time. When they were in a brick and mortar school. They say they've had more professional growth in this job than they ever did in brick and mortar just because they are able to continually contact each other and learn. I think teachers are sometimes the best teacher of teachers.

Staff review. Input from four participants referred to performing evaluations or being involved in the review of staff. Even though some leaders were more directly involved in the process than others, they all ensured that the school was competently staffed. Dana stated, "As a leader in a virtual school you have to be able to judge your employees on the outcomes they produce for your students." From Avery's perspective:

> All of our employees report directly to me. So that is the administrative team, the full-time and part-time teachers, so I'm responsible for managing all of them, evaluating all of them. It is very similar to what I would do if I were a principal in a school.

Work Environment

For this theme, all participants provided responses that are included in each of the sub-themes. These sub-themes are external work processes, internal work processes, and internal work structure (Table 7).

Table 7: Work environment

Sub-theme	Frequency	Interviews
External work processes	26	6
Internal work processes	66	6
Internal work structure	47	6

External work processes. These factors include leaders working with vendors, course content hosts, school districts, committees, and other external groups and stakeholders. The leaders had different priorities and responsibilities depending upon their school's needs.

Most of the leaders dealt with external sources for course content. In many instances this involved working with course vendors in one fashion or another. To the benefit of the virtual school's budget and options, Lee stated, "There is a value to having the market of providers and driving competition." In some instances the virtual school leaders collaborated with other leaders in developing course content or were members of a consortia in which content was shared.

One leader had been engaged in consulting with school districts to help them integrate virtual school courses into their curriculum. In two other instances, leaders had

worked with school districts concerning the SLVS developing and teaching online courses specifically for them. In another case, Alex worked with a group of principals to help them "translate policy into what it means and how it will play out [with the virtual school].'

Internal work processes. This sub-theme encompassed a wide range of response topics. Most of these processes involved dealing with issues or changes, accomplishing goals and objectives, or addressing strategic planning. Other than being at-a-distance, it was found that many of these work processes mimicked those found in a traditional school. This thought was expressed by Avery as, "I'll be honest with you…I don't think managing staff is any different in the virtual world than it is in brick and mortar."

One work activity that was frequently mentioned was that of holding meetings. Dana revealed, "we come together as an executive team twice a week. Once for a phone call check in and once for a face-to-face." Some meeting demands were less rigorous as Lee indicated, "We'll get together to meet to discuss projects and timelines and go from there, but aside from this that's about the extent of it."

Many leaders stated ways that they managed and supported their immediate staff. Jessie's strategy was:

> I really try to work with them to make sure that we are on the same page with vision and mission and then I feel it is my job to get out of their way an let them manage their team and not try to micromanage their team.

Taylor's approach was given as, "when management needs to be done, it's more in the sense of a team." Considering the virtual setting, Alex added that, "to be comfortable managing work processes and staff who aren't physically in the same location as you is kind of a special skill set that someone in this position has to have."

Internal work structure. At various points during the interviews, the six participants made mention of organizational structure, including staff hierarchy, distribution of work and responsibilities, and employee work locations. Each had a different perspective. The reason for this is illuminated by Dana who stated, “You know, it [the organization] kind of depends upon what type of virtual school you’re designing.” Factors that were related to this were differences in staff size and distribution, the number and type of courses that were offered, and funding.

Common elements of structure existed. For all leaders, most central office staff were at a common physical location, but some were distributed geographically. Those who were at-a-distance traveled to the central physical location on a regular basis. In the statement, “We have a couple of people who are being more purposeful about coming into the office a little more frequently just so they can feel more connected with the others.”, Jessie expressed that having the physical presence was beneficial. Two of the participants reported that they worked from their personal home the majority of the time. Another common element was that the vast majority of all schools’ instructors were adjunct and worked at-a-distance. Alex states, “the individuals who teach for us during the semesters are never here.”

Internal Communication

In addition to being represented by two themes, internal and external communication, the topic of communication emerged as a specified sub-theme within five other themes. In each case, communication was presented with different purposes and considerations in mind.

In this theme, interview responses relevant to internal communication were

categorized as being general internal communication, central staff communication, or teacher communication (Table 8). Almost all responses involved at-a-distance and electronic forms of communication. The given means of communication varied between emails, phone calls, meetings, learning management systems, messaging, and face-to-face conversations.

Table 8: Internal communication

Sub-theme	Frequency	Interviews
General school communication	26	4
Central staff communication	26	5
Teacher communication	22	5

General internal communication. This incorporates comments about communication that was carried out across organizational boundaries to multiple groups or the entire staff. Most leaders alluded to the fact that there is a heightened sense of importance placed on communication within a virtual school due to the geographic distances between staff. Dana uttered, “Communication, communication, communication. I don’t think we can communicate enough.” Virtual school staff have embraced at-a-distance communication and the various means of electronic communication. Avery shared, “But it’s been real interesting having not worked in an online environment. I’ve been very very surprised with the connectivity. I think it’s greater than in brick and mortar schools.”

Central staff communication. As compared to other internal communication sub-themes, this sub-theme was represented by a greater amount of data. This included comments concerning communications with central office staff, whether centrally located or those who worked at-a-distance. Often referenced were discussions concerning the

leadership roles and responsibilities of other staff, school operations, and projects. Jessie recognized the issues that could be due to communication and advised:

> I think erring on the side of more communication is a good thing, especially because you don't have those hallway moments all the time...half of my staff is spread out all over the state and I don't see them face-to-face, you have to make an effort to do communication frequently and you have to do multiple kinds.

As in the general internal communication sub-theme, leaders demonstrated that they and their followers exhibited an awareness and compensation for the potential differences and challenges of at-a-distance operations. This had an apparent advantage. Jessie provided, "I think sometimes we know a little bit more about one another here than we sometimes do about people we work with face-to-face because you have to be a little more open."

Teacher communication. Other than possibly attending a meeting or two each year, communications with teachers involved some sort of electronic medium. The most commonly stated venues were email, instant messaging, and web-based content. All the virtual schools represented in this study had at least one instructional staff director who worked for the leader and who had the responsibility of communicating with teachers.

When compared to a traditional school, the leaders indicated there were more frequent and more random communications with teachers, both individually and as a group. Communication was also common between teachers. Avery reflected, "We are in touch with teachers, teachers are in touch with teachers." Avery then elaborated:

> All of our teachers say that as well [that there is better communication in the virtual school]. They felt that in a brick and mortar school that people can feel very isolated. They interact with people when they first get to school and they go to their classrooms and other than their students they sometimes don't talk to a colleague during the day. But that is not the case in online learning, and certainly it is not the case with us.

Some of the leaders described teacher communication strategies that were based on the importance of the messages and types of information. The leaders wanted to manage communication in a manner that reduced the burden on teachers to keep up with the volume of communications that were coming from the school and other sources. Messaging systems were used for brief input or responses from an individual or the first available person within a group of teachers. As Alex put it, for "short blasts" of information. A webpage or a learning management system typically served as a repository for teacher reference materials and current general information. Emails were often used as a means for personal and team communication or specific requests.

External Communication

This theme represents a greater number and variety of coded excerpts and sub-themes than the previous theme. Sub-themes contained within this category of factors are general external communication, guardian communication, post-secondary education communication, school district communication, vendor communication, representing the virtual school, feedback and input, and marketing (Table 9). Other than face-to-face interactions, the schools typically employed electronic communication mechanisms. The interview responses indicated that they most frequently relied upon email, phones, and web-based content, with a few specific instances of using instant messaging and video-based content delivery.

Table 9: External communication

Sub-theme	Frequency	Interviews
General external communication	13	2
Guardian communication	9	3
Post-secondary education communication	2	2
School district communication	36	6
Vendor communication	4	3
Representing the virtual school	26	5
Feedback and input	13	4
Marketing	15	4

General external communications. Two participants made broad remarks concerning external communication and how it was handled. Avery stressed, "I think communication is really one of the strongest components of this virtual [school] world we live in… and that effectively communicating with the external community is important."

Dana brought a focus to the overall procedures that were in place for handling communications. This individual indicated there was an alignment between organizational structure and areas of external communication responsibly. This is seen in the statement, "We certainly try to look at chains of command [areas of ownership] and respect chains of command anytime we are sending out any type of external communication."

Guardian communications. There were challenges with student's parents and other legal guardians communicating with the school. This was due to the parents having a variety of communication recipients from which to choose, including home school district guidance counselors, virtual school course instructors, and virtual school staff. This was compounded by guardians having access to several modes of communication.

Lee had found that often, “They [the parents] usually haven’t gone through the proper channels or should have gone to their local school.”

Post-secondary education communications. Two interviewees made statements concerning communications with colleges, universities, and technical schools. Contacts with these institutions seemed rare and involved establishing dual credit courses.

School district communications. This was the most frequently discussed external communication, with all participants presenting thoughts about it. Depending upon the purpose, these communications were either with the home school (teachers, counselors, principals, or other assigned contact persons) or district offices (district coordinators, superintendents, etc.). In some instances the leaders themselves performed the communication and in others it was done by one of their staff. Most often, a guidance counselor was mentioned as being the school district representative who was contacted.

These communications ranged from regular updates and announcements to being conversations about specific topics such as ensuring the local schools that the virtual school courses were aligned to standards. Some communications involved the leader contacting a principal or superintendent about a specific matter. As Avery summarized in terms of virtual school offerings, “We can’t do anything without them, they can’t do anything without us, so there’s a lot of communication.”

Vendor communications. This sub-theme includes the three participants who mentioned having regular communication with content providers or learning management system hosts. The topics mentioned included requests for purchase of services, established support channels, and ensuring the availability of course content.

Representing the virtual school. All participants were involved with representing

their school and five specifically discussed doing this through a range of venues, including online and face-to-face instances associated with conferences, committees, media broadcasts, collaborations, and meetings. During these events, Jessie advised, "You have to very much identify yourself to the audience so they know how to listen to you." Dana made the point that, "[SLVS senior leaders] need to be able to present themselves in front of groups and stakeholders…they have to convince people that virtual education is real education."

Feedback and input. All study participants mentioned that they had their school acquire assessment or evaluation data from external sources for the purposes of enhancing school operations and offerings. In this particular sub-theme, four participants described acquiring external comments, viewpoints, opinions, etc., through various means ranging from a random email sent by a parent concerning a given course to an annual school survey to receiving ideas from an advisory group. Four of the participants commented that multiple strategies were used to procure input and two indicated that they would like to receive more feedback. Jessie articulated, "I think you have to be a little more aggressive about how you go about getting feedback and ensure it's not just communication going one way."

Marketing. Four of school leaders indicated they or their staff were actively involved in publicizing school offerings, maintaining a public image, making press releases, or otherwise pushing out communications that branded and promoted the school. Getting the messages out extended from simple word of mouth to having representatives who traveled the state marketing the school. Dana stated, "As a senior leader, we are selling virtual education every day. We have to be tremendous influencers

that are credible and knowledgeable in the industry and field."

Capital Resources

This theme arose from participant comments concerning resources that were necessary to continue and expand the operations of their virtual schools. The leaders reported similar capital resources being used in their schools. All leaders were comfortable with the systems they were using at the time of the interviews, yet many were seeking upgrades, making changes, and keeping abreast of new technologies and systems. The resulting sub-themes are communication systems, learning systems, enterprise systems, and technology infrastructure (Table 10).

Table 10: Capital resources

Sub-theme	Frequency	Interviews
Communication systems	36	5
Learning systems	18	6
Enterprise systems	7	4
Technology infrastructure	27	3

Communication resources. Five participants made statements that referred to specific communication product types and products that they used for emailing, messaging, meeting, collaborating, and notifying. For external communication, phones and emails were the most frequently mentioned options. For internal communication there was an emphasis on online messaging and chat for informal exchanges, online meeting systems for group discussions and email systems for formal communications.

The leaders very often cited these technologies by product name rather than by function alone. For messaging, Skype was by far the most frequently mentioned tool, followed by Microsoft Live and Join.Me. An example of internal uses of messaging is

given by Avery:

> But it's also what all the teachers who work for us say they like most about the program. Is that there's such support. If a teacher doesn't know the answer to something, all she has to do is pose the question and she's probably going to get 20 answers. I mean instantly.

Blackboard Collaborate, Google Hangout, and Adobe Connect were given as systems for holding meetings that were for either fully online meetings or hybrid meetings with some participants at a physical locations and others at-a-distance. Twitter and Facebook were stated as social media outlets and Outlook as the email system of choice. For surveys, Google Forms and Survey Monkey were mentioned.

The value and expectations placed on technology are highlighted by Jessie who stated, "We are in constant communication. I try to stay up on those [communication] tools. Even sometimes when I'm in meetings I'll have those [communication tools] on the side and will be multi-tasking…staying connected."

Learning systems. Across the board, the participants made statements concerning their learning management systems. Two leaders commented that their schools had in-house hosting of these systems, while the other four schools used external hosting services. One school used a custom-developed learning management system and the other five used off-the-shelf systems, which were Blackboard and Moodle. Many participants were in the process of reviewing their existing system and seeking a possible replacement. A motivation to do this was given by Alex who stated, "We are a publicly funded with tax dollars organization, so we try to be as fiscally responsible as we can when we're looking at the benefits for paying for a learning management system."

Enterprise systems. Four participants responded concerning their core business systems, which included registration systems, student information systems, and financial

systems. Three of the schools were using systems that were custom developed for the school and the remaining school used off-the-shelf systems.

Technology infrastructure. Even though virtual schools are highly dependent upon their technology infrastructure and related technology resources, only three participants made reference to it. This sub-theme included such items as servers, connectivity, data centers, and technology staff. Alex states, "To a large extent we don't want the technology to become visible in the sense that it becomes a problem." This out-of-sight, out-of-mind thinking was also expressed by Dana in the statement, "So when you go to technology, it's really interesting and I have to actually stop and think. We talk so little about our technology, yet we have so many systems."

Governance

The virtual schools that these participants represented were authorized by a state level governing body and thus were abiding to a state authority. The participants' references to interacting with this authority led to the four sub-themes of collaboration, communication, directives and processes, and education (Table 11).

Table 11: Governance

Sub-theme	Frequency	Interviews
Collaboration	18	3
Communication	15	5
Directives and processes	23	6
Education	11	3

Collaboration. Working with the governing entity to develop, maintain, or enhance virtual school directions and functions was discussed by three participants. Taylor imparted, "I sit on many work groups and have just short of daily communications

with our Department [of Public Instruction] whether they are looking for resources or advice or because we are collaboratively working on multiple projects right now."

Communication. Communicating with a governing board, legislature, or other state leaders was a task relayed by five leaders during the interviews. In general, Taylor stated, "I would say the bulk of our communications outside our agency are more at the state level with our Department of Public Instruction." Alex stated having to annually "testify to the House and Senate appropriations committees and produce reports that are consumed by legislators."

Directives and processes. All participants reported addressing, implementing, and adjusting to governing mandates, policies, expectations, and directions. In some instances, what came from the governing entity was anticipated and at other times it was unknown until presented. Avery commented, "…but it seems they [legislature] are getting ready to change that process, so I don't know how that will affect us." When state level decisions are made, Alex said, "So if there is anything that is finalized as legislative policy or budget that matters to us, then those are sent out [as memos]." Many of these directives are connected to funding matters. For Alex's school, "There are so many different parameters. As I said, we are so tightly tied in with the politics and the way we are funded."

Education. One task that three interviewees expressed as being important was informing the governing body about the virtual school, how it operates, how it is different from traditional schools, and what its special needs are. Dana stated, "Legislators who are new in our state think we are just another provider. We have to educate them about what our school is and how it is different." Jessie offered a similar concern in the statement:

> There is always a real threat because in particular for us, since we were a real initiative of the previous governor, you want to make sure that new leaders understand that you are more than the baby or pet project of the previous leadership and therefore easily expendable.

Operational Logistics

From the perspective of the participants, these sub-themes shed light on a multitude of the organization's operational factors that are endemic to the function of a SLVS. As with many other sub-themes presented throughout this study, relationships do exist between these sub-themes and sub-themes associated with other themes. The ten sub-themes aggregated within this theme, along with their frequencies and interview presence, are represented in Table 12.

Table 12: Operational logistics

Sub-theme	Frequency	Interviews
Funding	60	6
Acceptance	12	3
External pressures	5	5
Growth and change	5	3
Home school districts	33	6
Relationship building	37	5
Technology use	36	6
Time management	27	4
Virtual communications	23	4
Working at-a-distance	32	5
Workload	11	4

Funding. Throughout the leaders' comments, they exuded a sense of being fundamentally satisfied with the funds they were receiving at the time of the interview, yet they expressed the desire to receive more to be able to enhance their schools' offerings and services. All participants indicated that they would like changes to be made in their funding models. In tune with the sentiments of many of the other leaders, Avery

expressed:

> …and that [what is currently received] is not a permanent funding source so certainly we would like to have more money and money that we know is secure, because there are a lot of things that we don't venture into because we don't know if the money will be available next year."

As a result of these unknowns, the leaders are continually involved with seeking a steady and reliable source of annual funds that are based upon enrollment projections.

Many of the leaders were also involved in seeking other monetary advantages. Negotiating with vendors and host companies was one strategy. Some leaders were turning to generating self-supporting funds. Avery stated, "We are looking for funding sources. We are looking at selling our courses, there's a market for that." Other sources were alluded to by Alex who said, "I think one of the things about these state virtual leaders that I haven't really talked about is additional funding opportunities and funding streams. Whether that is the National Science Foundation or the Gates Foundation or the Walton Foundation."

Acceptance. The concept of virtual schools and online courses is relatively new and not fully embraced by a majority of individuals. The three participants who interjected thoughts on this indicated that the rejection or slow acceptance of the virtual school was mostly due to insufficient information or explanations, resistance to change, undesirable experiences, or pre-existing negative perceptions. An issue that Taylor encountered was stated as:

> I still come across a superintendent, a school district, or a board member that has no clue who we are or how we can help support them. They have that myth in their mind that we're that virtual school who are going to take away our kids.

Dana presented a solution to this challenge. "My advice to people is that you have to find your champion and find someone who is passionate about what you believe in. Once you

find that champion, you can get them to help pave the way."

External pressures. Five participants made reference to what were various outside pressures. These can be described as being based upon external political and social forces. During a budget crisis, Dana had to contend with external thoughts and coercion on how the school's budget should be balanced as opposed to what they knew was best in the long run. This was presented in the statement, "You're really encouraged back-handedly or not, to eliminate what some may see as a non-necessity, and that typically comes in the form of professional development, face-to-face meetings, any kind of travel and all of those kinds of things."

Growth and change. Adjusting to evolving virtual school demands, embracing new ideologies, and compensating for enrollment changes were brought up by three participants. Lee gave an overall statement that provided a basis for this:

> They [virtual schools] are more in their toddler phase. They are going through the kinks. They are kind of in the stage of just now being able to gather some good data and evidence about what works and what doesn't.

Leaders reported changes occurring in school enrollment numbers from year to year. All leaders in this study had fixed budgets or budgets that were based upon previous enrollments, thus they were required to make projections for the upcoming year and adjust accordingly. Even so, this was still an estimate, which may or may not be accurate. Jessie admitted, "Sometimes we do fairly well, but there are factors that cause it to go up faster or not as much as we thought."

Home school districts. Challenges created by various operational differences between the virtual school and the traditional home schools were reported by all participants as having an effect on their job tasks. Dana indicated that at least in part this

was due to the differences in daily operations:

> So when you think about how [traditional] schools are designed, they are so cookie cutter in terms of how they move kids through curriculum, how they evaluate teachers, how everybody shows up and the same time, how everybody eats at the same time…

These differences have resulted in collaborative efforts between virtual schools, home schools and other educational entities in an attempt to align expectations and processes. Alex offered, "We've been always working on these models [with traditional schools] about what is the right amount of instruction, and providing options to school districts to be able to customize that for a particular learner." The diversity of these collaborations is seen in a statement given by Avery, "…for instance right now we have a collaboration with the governor's school of science and math, they are actually beginning a pre-engineering program and I've been working with them."

Another challenge that arises with school districts comes from the technology, computer programs, and web content that they allow and support. This is complicated by version differences and updates. Jessie said, "We aren't in control of the devices that the local schools are connecting to us from. So there are variety of operating systems, age of systems, bandwidth, and so on….sometimes there are challenges that happen from that mix."

Relationship building. The increased importance and challenge of developing good working relationships in the virtual setting was pointed out by five of the participants. Lee expressed, "I think the relationships are more difficult in the virtual setting. For some people that face-to-face contact is really important." A comment from Jessie about enriching relationships adds, "You need to see one another. Need to do fun things together. Go out to lunch, go out to dinner."

Developing and maintaining trust was indicated by three participants as a critical relationship component. Dana's perspective was, "So, being able to trust. As a leader in a virtual school you have to be able to judge your employees on the outcomes they produce for your students."

Technology use. Being a SLVS senior leader involves ensuring the selection, implementation, maintenance, support, or replacement of technologies, and keeping up with technological innovations and practices. All participants expressed one or more of these as an ongoing challenge. The dependency on technology gave rise to the expressed need for leaders to have at least a basic understanding of systems and associated terminology. This knowledge was seen in the responses given by all the leaders and was summed up by Dana:

> So I needed to be able to understand enough about how the technology was going to work to be able to make a judgment call as to whether or not should we build it or buy it and should we hire for it or should we outsource and how to do the cost analysis for both and what were the pros and cons of each.

Another frequently expressed topic involved end-user experiences with the technologies. One focus was on reliable availability of services and the inevitable possibility that a given technology may fail. About an unexpected disruption, Lee commented, "In general we don't have any major issues. A couple of years ago we had a really bad snowstorm and there were technical issues for several days." Alex expressed a different concern in a question that is asked when selecting technology applications, "How is that [technology] going to help personalize learning for students and move it in a helpful way?"

Time management. Addressing their personal and their staff's time management challenges were topics brought up by four participants' responses. This is symptomatic of

digital connectivity. As Jessie explained, “Because communication and information exchanges have gotten so easy, they can happen around the clock. And so sometimes our bigger challenge is trying to structure things so people know when to turn it off.” A solution to this expressed by three leaders was to allow their staff to vary their hours. In the case of teachers, Jessie was stated, “Some of our staff will purposefully shift their hours to be more of a ten [a.m.] to seven [p.m.] or eight [a.m.] to three [p.m.] and then six [p.m.] to eight [p.m.] so that they can be on when their students are on.” Once this was allowance was made, some of the leaders took the next step and asserted that working beyond those hours was not required. In a message to staff, Avery relayed, “There are no expectations on my part or anyone else’s for people to work outside their schedules work hours.”

Virtual communication. General comments were given by four participants in relation to the nuances created by primarily communicating through electronic means. This involved having an awareness of the challenges and then mitigating or compensating for them. An issue was presented by Avery in the statement, “You know it can be difficult when you are communicating with people whether it’s email or Skype or as you and I are now, it’s sometimes difficult to interject some of the personal aspects and tone.” A personal strategy is given by Lee who stated, “I’ve learned how to think about myself to be clear and if there is a cue, like silence, I think about whether or not I was understood.”

Leaders also expressed the responsibility of making sure that others were aware of the challenges and were prepared to work through them. One issue was maintaining a sense of equality for those people working at-a-distance. A way of addressing this was

given by Jessie who said, “The other challenge, and particularly for those folks who are not in the office, is making sure they stay connected.”

Working at-a-distance. This sub-theme emerged in relation to replies that encompassed developing and promoting effective strategies to enhance work outcomes between geographically separated staff. With new staff, one issue that came up was due to a lack of full knowledge of what working at-a-distance entails. As Jessie indicated, some people who want to work in the virtual school come in with an overly optimistic view of “oh this is great, I have all this flexibility” and then they find they work far more than expected. It was also indicated that supervising staff and maintaining operations at-a-distance had unique requirements. Alex stated that, “being comfortable managing work processes and staff who aren’t physically in the same location as you is kind of a special skill set that someone in this position has to have.” With a particular emphasis on instructors, Dana essentially made the same comment with, “So as an example, for us we don’t have any teachers reporting to a building, so being able to supervise people you do not see is an incredible skill and is something you have to learn how to do.”

Workload. Four participants referred to the need to be aware of virtual school work expectations and the amount of time it takes to perform tasks in that setting. For example, all interview participants made references in passing about how online instruction was much more time consuming and took more effort than face-to face. This had a tendency to intensify the workload if precautions were not taken. In turn, because of the flexible schedules of instructors, those who managed instructors had to delegate their time in an attempt to not exceed expectations. Dana expressed a leader’s concern with, ”you are constantly getting questions from people that say how do you know that

your staff is working?…I worry more that they are working all the time."

Summary

The purpose of this exploratory study was to determine those role factors that could influence the leadership qualities, attributes, beliefs, and approaches of state-led virtual school leaders. The primary focus of this chapter was to present the detailed findings that arose from an analysis of interview data collected from the six study participants. As a result of using data coding and analysis strategies that were aligned with Charmaz's (2009) constructivist grounded theory methodology, the organization of codes and creation of themes was possible.

During this process, a broad range of role-influencing factors were discovered for SLVS leadership. Unambiguous and frequent communication, both internal and external, through a variety of media was needed to scaffold successful leadership and school operations. Even though this was mostly done by digital means, the leaders appreciated the face-to-face opportunities. Another resource for virtual school leadership was being able to draw upon previous experience, even if that was within a traditional school. This was shored up in small part by their formal education, but was mainly fortified by on-the-job learning and peer support. Another important piece of this leadership foundation was the belief that online education was comparable to or better than in-person education.

At various points in the thematic development, the participants exhibited leadership qualities of being aware, available, understanding, and supportive when working with or for other individuals. This included being attentive to curriculum and instruction and providing respective information and assistance, but typically remaining hands-off. Additionally, even though there were governing directives and mandatory

operational requirements, the leaders were primarily driven by the common motivation to ensure student engagement and success.

Two categories of staff interaction arose during the analysis, non-instructional and instructional. The non-instructional staff was comprised of the central office staff, whether or not they were at a common geographic location. The instructional staff included full-time, part-time, and contract instructors and instructional assistants. Staff factors included hiring, retention, review, and professional development. The SLVS leaders were responsive to the requirements and needs of those state individuals who governed the school.

The findings indicated a variety of leadership role elements that were associated with either the work environment or capital resources. In relation to the work environment, the leaders' responses indicated the value of having a highly functional internal work structure and commensurate internal and external work processes that were aligned with the structure. Due to the virtual nature of the school, the leaders ensured that the work structure and processes were facilitated by a robust technological infrastructure and by systems that supported communication, learning, and enterprise operations.

A variety of other factors emerged that were more closely associated with daily or commonplace tasks. The more prominent of these were having variety of interactions with home school districts, ensuring the use and evolution of common and user-friendly technology, building relationships, securing funding, staff working at-a-distance, and dealing with external political and social pressures.

This study resulted in findings that were categorized in 11 themes and 59 sub-themes. Chapter 5 is the culmination of this process, first presenting the discoveries that

emerged from the analysis and then offering implications and recommendations.

CHAPTER 5: DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to investigate the state-led virtual school (SLVS) senior leader role in a manner that would lead to the advent of findings concerning the factors and position requirements that can influence and characterize a SLVS senior leader. The review of literature revealed this emerging field of study is supported by a scant basis of academic research on virtual school leadership. No exclusive literature examining the topic of SLVS senior leaders or SLVS senior leadership was found and very little was discovered concerning the more general topic of virtual school leadership. This resulted in the examination of additional literature from the related fields of virtual schools, traditional school leadership, traditional school leadership for instructional technology, traditional school leadership standards, virtual leadership, leadership style in a virtual setting, virtual school leadership, virtual school senior leadership development, and online teaching standards.

From the review of literature, the following two guiding questions were developed to give this research a direction of study:

1. What are current SLVS senior leaders' thoughts related to the qualities, attributes and beliefs of successful SLVS senior leaders?
2. What are current SLVS senior leaders' thoughts related to senior leader approaches to SLVS leadership?

Using these questions in combination with the literature review findings led to the

formulation of nine specific open-ended questions that were asked during semi-structured interviews.

This exploratory study employed a constructivist grounded theory methodology to guide the analysis of data that were retrieved from the six SLVS senior leader participants during their interviews. This resulted in the emergence of 11 themes with 59 sub-themes. Presented in this final chapter are the discussion of the guiding questions, discussion of these findings, conclusion, implications, and recommendations.

Discussion

The 11 themes that emerged from this study partially overlap the set of themes produced during the constant comparison analysis of traditional school leadership standards and virtual leadership indicators that were presented in the literature review (Appendices A and B). A related study by Quilici (2011) examined principals of an online school as instructional leaders and described how their online leadership differed from traditional leadership. It is noted that these principals worked within the same school and that they reported to the school's senior leader. Table 13 summarizes the thematic relationship between this dissertation's findings, the literature review synthesis, and Quilici's work.

Table 13: Comparison of virtual leadership themes

SLVS Senior Leaders in Current Study	Literature Review Analysis Outcomes	Principals as Instructional Leaders (Quilici, 2011)
Leader education, experience, and professional growth	Personal and professional growth opportunities	Professional development
Leader profile	Leadership	
Curriculum and instruction	Curriculum and instruction	Curriculum, data
The learner		Discipline, diversity, data
Human capital	Management	
Work environment	Work environment	
Internal communication	Internal communication and information	
External communication	External (culture and community)	
Capital resources	Technology / Resources	Technology
Governance	External (accountability and reporting)	
Operational Logistics		Relationships

The breadth and depth of findings from this current dissertation study of the SLVS senior leader role exceed the cumulative findings related to virtual school leadership discovered during the literature review. The following discussion delves deeper into the themes and findings that emerged during this study.

Leader Education, Experience, and Professional Growth

All participants in this study had a background working in a traditional school environment prior to taking a position with their respective virtual school. None of them

had formal education experiences that prepared them for the specific responsibilities of virtual school leadership or virtual school operations. Participants' responses and tones implied the importance of seeking whatever means of development they could. Findings indicated a lack of and desire for research-grounded professional development, training, and preparation programs that were specifically created for virtual school leaders. This is in alignment with Eich (2008), who states that leadership programs should be research-based and learner-centered.

Continuous informal improvement. For the study participants, seeking this type of development was a self-motivated response to fulfilling individual desires or demands. The participants indicated that this was done as-needed, if time was available, and if the necessary content existed, not unlike Reichard and Johnson's (2011) findings that the practice and support of self-development leads to continuous on-demand development that is sustainable, promotes positive attitudes, and is financially beneficial.

Sources of this type of self-improvement content come in different formats including academic articles, reports, blogs, professional publications, and conference presentations. The findings revealed that the majority of content consists of information that can be related to various aspects of the SLVS senior leader role, but was not specifically developed for the role itself. This is another indication that this is a young field and that role-specific research is only now beginning to occur and be published.

Peer communications and support. Interaction with other SLVS leaders offers the most common and relied upon means of both on-demand and long-term professional growth outside of the school. In addition to knowledge, participants' reliance on peer support to address challenges and improve their virtual schools provides needed senses of

camaraderie, comfort, and trust.

Policy training and political savviness. The two aspects of the leadership role that the participants regarded as their weakest when they first started with their respective schools were policy and politics related to the virtual school. Their greatest desire, above all other areas of knowledge, was to have been better prepared to navigate this terrain before entering the role. At the time of the interviews most participants indicated having developed their abilities in these areas while on the job. The need for skills in this area are indicated by Beck and LaFrance (2012) who specifically point out that the leadership preparation of virtual school leaders should incorporate policy implications.

Prior formal education and experience. The participants relied heavily upon their formal education and previous experiences in a traditional school as a basis for their virtual school leadership. Prior administrative abilities were presented as the most important skillset the leaders brought with them to the virtual school. Upon starting their role with the SLVS, the participants had been aware of or had soon realized that there were operational differences between traditional and virtual school environments, and that this required enhancement of their existing skillset. They also acknowledged new variables and complexities, such as the increased uses of technology and virtual communications, that had to be addressed and that required new skills to be gained and incorporated into their leadership competencies and strategies.

Even though their collective higher education degrees were a mix consisting of educational leadership, educational technology, instructional technology, curriculum and instruction, business administration, educational psychology, and English, they found their respective education provided advantages in their role. However, they often

reflected that other degrees in addition to what they had would be useful to SLVS senior leaders as well. Considering all responses, their education was not as important to their role in the SLVS as were their prior educational leadership experiences.

Professional growth opportunities. Formal professional development events that have been designed specifically for SLVS leadership are rare. Perhaps the best example of this, and one of the very few, is the two-day Virtual Leadership Training that is offered by Florida Virtual School. It was created for administrators who are either developing or managing a blended learning program or a virtual school. Other random development opportunities in the form of webinars exist for online team management, virtual leadership, and educational technology leadership. These are usually offered by or through professional organizations such as the International Association for K-12 Online Learning, the Sloan Consortium, and the Southern Regional Education Board. These types of events can offer highlights about what is involved with SLVS leadership, the opportunities to hold useful discussions with peers and experts, and chances to network, but because of their short duration the sessions tends to provide generalized topic overviews.

Grounded by participant responses and the literature review, the findings of this study indicate that even though existing professional development opportunities can be related to the role of a SLVS leader, they have not been created with the unique circumstances and challenges of this group in mind. It was found that this is mainly due to a lack of needs assessment data and research that would enable the development of SLVS leader-specific opportunities. This is consistent with Allio's (2005) implications that leadership training should be based upon metrics and that there should be a statistical

association between leadership competencies and training objectives.

Staying informed about the school. As indicated by the participants throughout the various interviews, virtual schools are evolving and continually reacting to internal and external influences. The leaders pointed out the importance of maintaining an awareness and working knowledge of each school's departments, functions, and operations. This is either done directly by the leader or indirectly through someone who reports to the leader. Which of these that occurs in a given school is dependent upon factors such as personal preference, school size, and available positions that can perform these tasks.

Leader Profile

Throughout the interviews, participant responses provided insight into their personal leadership traits, approaches, and styles. When asked the two interview questions that directly sought this information, rather than talking about themselves, the leaders typically resorted to citing practical examples about their operations and interactions with their school and staff. The majority of the data that were captured from these two questions resulted in the emergence of other themes. Alternatively, the rise of this theme was primarily an outcome of data acquired from other interview question responses.

Authority. Three leaders brought up this topic when they expressed having a lack of authority or input regarding most of the state and local school district policies related to the virtual school and the use of its services. A few other comments were made concerning authority within the virtual schools. In these instances, the leaders preferred to work with and make decisions as a team, but that they would step in with authority when

needed. This is aligned with Carreno (2009) who states that lines of authority should exist, but that concept development and decision making should be done as a team.

Forward thinking. Both directly and indirectly, the leaders made statements about monitoring trends and innovations, preparing for the future, and looking for new opportunities. Also brought up was the concept of being a change agent. In this role, the leader would be open to creativity, new ideas, different directions, and calculated risks.

Personal motivations and interests. The most consistent and heartfelt motivation for these leaders was their dedication to the students. These leaders were authentically concerned about the students, their learning, and their well-being. Some of the leaders expressed the pleasure they had previously as a classroom teacher in a traditional school and saw their current positions as a continuation of that role. Others stated that they wished they had the opportunity to teach in an online setting. Other intrinsic incentives were the leadership role itself, working with curriculum and instruction, being on a leading edge of education, and facilitating education using technology.

Role Approach. These leaders maintained an arsenal of personal tactics, strategies, and methodologies that were used in addressing the large number of different leadership challenges and responsibilities. Their approaches were determined by the people, circumstances, limitations, and resources that were involved. In addressing the leadership demands, the most common characteristics were for the leaders to be dynamic, adaptable, open, and agile.

Curriculum and Instruction

Compared to their responses for other themes, the participants as a whole demonstrated a high level of passion and concern about curriculum and instruction. Two

primary reasons for this surfaced during the interviews. One basis was that the participants realized that well-developed curricula and expert instruction can result in positive student outcomes. The second reason was that course standards existed for which the SLVSs were held accountable.

Course Standards. To provide a consistent, viable, and marketable product within a state system and for the cases of resale to other online course consumers, all participants were adamant about adhering to state and national standards when developing courses. The process of standards alignment varied from school to school, with the differences being dependent upon the number of courses involved and the available staff. The leaders' primary concerns were that the standards were being incorporated in the instructional design of the course and addressed during instruction. The differences between the leaders' decisions varied at this point, again mainly due to existing resources. Ultimately, all cases included a curriculum review and enhancement procedure. The level of attention that the participants gave to meeting standards was necessary to establish and maintain the credibility of their respective schools. In two instances, leaders procured course content from vendors. An internal vetting process was used to verify standards alignment of this content.

Oversight and development. For all schools, the leaders' role in this theme was primarily that of managing curriculum and instruction through other administrative staff. The leader role in this sub-theme can be considered synonymous with the instructional leadership role of traditional school leaders where the leader would know enough about curriculum and instruction to recognize that courses are meeting standards and that students are developing the required knowledge and skills (Bottoms, 2007). Several of

the leaders' concurred about the importance of having a competent and trusted individual in the position of directing curriculum and instruction. Some of the participants were hands-on in certain instances when there were either politically sensitive issues with a given course or there was an unusual increase in the overall curriculum and course development workload. This higher workload usually occurred when there were substantial changes in a given set of standards or when several areas of the curriculum were impacted simultaneously by new standards.

Instructional design and content. All of the participants assembled some form of in-house instructional design team and tasked them with developing standards-aligned course content. Earlier in their history, virtual school courses were usually developed by individual instructors, but now this task most often relies upon teams comprised of instructors, content specialists, and professional instructional designers (Watson & Gemin, 2009). It was found that the most common strategy for course development was for it to be done by teams of part-time instructors who were managed by a full-time staff member. In one case, full-time instructors served the purposes of providing instructional design team leadership and teaching their own courses. Two schools employed full-time instructional designers who worked with instructors and subject-matter experts to construct courses. Two of the leaders alluded to working with other SLVS leaders in establishing collaborative teams to develop courses. In each virtual school, there was a single individual who directed the various projects and reported to the SLVS leader. In a few instances of design, the leaders contracted with external vendors to provide staff to complete a given course design project.

Online instruction. Many leaders felt that a strength of a virtual school's online

instruction was the ability of the organization to address many of the issues and barriers that often existed in traditional schools. This includes a selection of courses not offered in the home school, students being able to take courses that they otherwise couldn't due to time conflicts, and the ability of the school to develop and extend to the students a more personalized learning experience. Several of the participants expressed the latter as providing the greatest distinction between online and traditional instruction. Although personalized learning can be time intensive for the instructor, the leaders' can adjust operational processes and staff utilization within a virtual school to provide instructional and learning flexibilities and efficiencies. The virtual school's ability to enable and maintain higher levels of personalization corresponds with the transition of the teacher from being a provider of content to being a facilitator of learning (O'Neil 2006).

Quality control. Ensuring the provision of quality control guidelines and monitoring at each stage of the instructional process was a paramount concern of the participants. Regardless of the task, the leaders made sure there were evaluations of curriculum and instruction, analyses of data, reflections upon what worked and what didn't, and enhancements made. In some cases, leaders made the decision to discard a course that was no longer aligned with needs or that required a total redesign.

The Learner

For this topic, the closest learner-related leader attribute that emerged from the literature review was that of instructional leadership in the traditional school. In this study it was found that the SLVS leaders were in a similar role in that they whole-heartedly facilitated and supported instruction and learning. This paralleled findings made by Leithwood and Jantzi (2008) who discovered that the effects that traditional school

leaders had on students were indirect and through the leaders' their work with the overall school and conditions. The findings of this dissertation study indicated that virtual school leaders were very interested in and placed a strong emphasis on the students and those activities that benefited them, possibly more than the typical traditional school leader. It was found that this was likely due to several factors, with the more apparent ones being that virtual schools are undergoing constant change, growth and enhancement that affect the students and that the students' role and outcomes are pivotal in the schools' success.

Other facets that shaped the emergence of the learner theme were related to the communication outreach that must occur due the broad potential student base, the fact that in almost all cases enrollment in the virtual school is voluntary, and the reality that virtual schools themselves are not as well-established or accepted as is a traditional school. As Barbour and Reeves (2009) pointed out in a review of literature, most virtual school students are currently a self-selective group who tend to be motivated independent learners.

Communications. This sub-theme exposed some of the student diversity and challenges that virtual schools face. Reaching out to students involved several components. Initially, the leader had to ensure that contact efforts were being performed to connect with potential students. For home school districts this was done through a school district contact person, usually a counselor. The leaders also led the marketing of their schools to students who were attending charter and private schools, were being home schooled, or who were otherwise not attending a traditional school. After these processes of communication successfully resulted in students enrolling in a virtual school course, the leaders had ensured that students' interaction with the virtual school

continued through various school staff via an assortment of channels such as emails, student information systems, and learning management systems.

Course access. Closely related to the sub-theme of communication is the topic of student awareness of and access to the courses offered by the school. The leader directs the virtual school's monitoring of student needs and desires, and ensures that the school creates and offers commensurate courses. Via the various communication channels, the availability of these courses of study are broadcast to potential students. To ultimately guarantee access to these courses, the school leaders must make sure that all enterprise systems are in place, ranging from online registration systems to course management systems.

Access to courses also entails that these online systems are available, reliable, and user-friendly. SLVS leaders must equip their schools to deal with a variety of variables that ultimately determine or effect student access. This includes maintaining system compatibility with other local and state systems, accommodating a variety of end-user operating systems and browsers, controlling updates, and planning for upgrades and innovations. A change management process needs to be in place and arrangements must be made for systems to be maintained, backed-up and secured.

Engagement. Students in online courses expect that the courses contain interactive components, that the content is relevant and meaningful, and that there is frequent teacher monitoring and communication (Oliver, Brady, & Osborne, 2009). This study found that in addition to making sure that students were enrolled and could access a course, leaders had given directives to ensure that students were engaged with the instructors and course content. Several of the participants expressed having set expectations for teachers to be

available to the students and for there to be purposeful and meaningful teacher communications with students. Often this was a component of an overall effort to personalize instruction by making it more pertinent and useful to the individual student. This entailed compensating for the lack of face-to-face interaction by equipping both teachers and students with innovative and engaging strategies and skills. Likewise, the instructional design practices used in developing courses and content were reviewed and evaluated to ensure student interest and involvement. With proper courses and instruction in place, many leaders felt that that this at-a-distance environment was actually better for learning than a traditional school classroom.

Student input. Having students provide constructive feedback on courses and instructors was both welcomed by and useful to the participants. It was one way the leaders could monitor the pulse of their school, enhance its effectiveness, and improve the quality of course offerings. The use of end-of-course surveys was most common, but others described more frequent input opportunities and the ability of students to be involved in course development.

Support and benefits. Virtual schools can provide many advantages to students, with one of the most important being to provide students with learning that they may not otherwise receive. SLVS leaders are aware of this and they made sure that their schools offer courses that fill gaps in traditional school course availability. A few participants also mentioned working with post-secondary institutions to offer dual credit courses to students. An added benefit to students is that virtual school courses enable students to interact with the courses at a time that is convenient and most productive for the student, and most SLVS leaders reported asking instructors to be available at those times.

Some participants alluded to another benefit of the school being that of equal access to high quality courses. The leaders ensured that students, regardless of their home school location, had the ability to take well-designed and well-vetted courses. Additionally these students were not exposed to the disruptions that occur in a traditional classroom, nor did they have to experience the same levels of peer pressure.

This study indicated that with virtual schools being a relatively new and evolving option, the creation, availability, and update of tutorials, guides, instructional support and technical support were essential to the success of students. The leaders recognized that these were indispensable for the continuation of their virtual schools and increasing the acceptance of them. This is reinforced by Barbour, McLaren, and Zhang's (2008) findings on student perceptions of web-based learning that states the most frequent challenge the students had was the lack of live support for technical and instructional issues.

Human Capital

The leaders presented different perspectives and inclinations toward their school's human capital. The leaders were most dependent upon and appreciative of their immediate central office staff. They also realized that their school's success depended upon a strong and well-prepared instructional staff. Overall, the leaders wanted to make sure that all staff functioned effectively within the virtual setting, and thus implemented professional development, guidance, and review.

Non-instructional staff. These staff were a mix of individuals who worked in the central office and others who worked at-a-distance. Regardless of geographic location, the work processes and systems that were in place facilitated smooth virtual school

operations. The leaders were grateful for the non-instructional staff positions they had and the most frequently mentioned of these staff were those involved with managing aspects of curriculum and instruction. The leaders appeared to be doing well with the staff they had, but a few stated the need for additional administrator positions. Most leaders indicated that there was little turnover.

Instructional staff. Since most of the instructors who were employed by the virtual schools came from a traditional school, the leaders' initial concerns were to set new expectations and provide professional development regarding online teaching and learning. One task was to ensure that the instructors were prepared for the rigor and time consuming nature of the job. As part of the interview process, several leaders implemented various forms of experiential opportunities, which included online teacher training or the shadowing of an online instructor. If both the school and interviewee then felt comfortable, the interview process continued. The leaders reported that many of those teachers who were still employed after the first year would express that in spite of the hard work it was the most rewarding teaching experience they'd had.

Largely, the instructors employed by the virtual schools were part-time, with the majority of these individuals working in a full-time position in a traditional school. Other part-time instructors were either retired teachers or were contracted through vendors. The leaders were comfortable with this adjunct instructor arrangement as it allowed them to bring in subject matter specialists for the variety of courses they had. In the cases of full-time instructors, the leaders usually expected them to perform additional tasks such as leading instructional design and professional development.

Staff professional development and guidance. As new staff were brought into the

school, all leaders were adamant that they received training, professional development, guidance, and mentoring. The leaders realized that most individuals were coming from a traditional setting and that certain perceptions, beliefs, expectations, attitudes, and skills needed to either be altered or instilled. This was usually a process that lasted throughout the first year. After that point, leaders reported that most staff sought assistance on an as-needed, real-time basis.

Staff review. The leaders who discussed the staff review process indicated the first year was the most intensive, consisting of formative reviews, informal observation, remediation when necessary, and then a final review. After the first year, the process was usually that of one interim review and then a final review. Some of the leaders were more hands-on with the review process than others. For staff who were being directed by others, the leaders' role was one of oversight and final approval. In instances where there was a smaller compliment of administrators, the leaders were more directly involved in the review process. Non-instructional staff were typically reviewed based upon virtual school operations and performance, whereas instructional staff members were based upon instructional performance and learning outcomes.

Work Environment

Responses concerning the work environment were generally similar from one leader to the next. Differences in the findings were usually due to the number and type of staff and their geographic proximity to one another.

External work processes. There were multiple discussions of the leaders interacting with individuals outside their virtual school for the purpose of assuring the school's operation and success. The most frequent reference was dealing with the school

districts that the virtual school served. The leaders often found themselves in role of working with school principals or district administrators to set the foundation for smooth interactions between the schools. Occasionally a virtual school leader was involved with negotiating special arrangements being made with a specific school district in terms of course content or instruction.

Beyond this, there was a mix of external involvement. Many of the leaders worked with online service vendors and course content providers to ensure cost-effective, dependable, and user-friendly services and systems for the school. The leaders also mentioned their participation in a variety of committees and professional groups where they worked on behalf of their virtual school on common topics and solutions to issues and challenges.

Internal work processes. The requirements for and purposes of these processes are similar to those within a traditional school, but how they are carried out can vary widely due to the virtual setting. Even though many processes have been touched upon throughout the other themes, the leaders did directly discuss others that are included in this section.

One ongoing responsibility for the leaders was to position the organization to be capable of dealing with problems, changes, and new trends. This involved establishing flexible strategic plans and adaptable school goals and objectives. The leaders commonly accomplished this through teamwork and other collaborative efforts within the school.

To facilitate internal school operations, the leaders used an assortment of online, face-to-face, and hybrid gatherings to bring the stakeholders or project teams together. Some of these were strictly planning meetings, certain ones served as progress

checkpoints, and others were interactive work sessions. Unless an executive decision was needed, the leaders tended to let project managers, team leaders, and the teams organize themselves and lead the progress.

Internal work structure. Each school had their unique organizational pattern and hierarchy, distribution of work responsibilities, and employee work locations. This was often determined by funding, state-level directives, and the leader's discretion. The first two created limitations, but the latter gave the leader latitude in making organizational decisions and assignments.

The individual traits, characteristics, and choices of the leaders are what gave the schools their personality and culture. The sense of trust and confidence that the leaders had to place upon their staff, mainly as a result of having so many working at-a-distance, enabled the organizational structures to remain functional and intact.

Internal Communication

The participants' continual return to the communication topic throughout the interviews highlighted communication as one of the most essential and influential components of their leadership. The majority of their references to this topic involved electronic forms of communication, which in and of themselves presented a challenge in terms of ensuring that they were done correctly, clearly, and effectively. If these conditions were met, leaders indicated that contemporary methods of electronic communications were seen to be advantageous over previous conventional ones. In the early years of academic work considering virtual schools, Ausbrooks (2000) projected that the forms of communication that would be used in a virtual school would tend to de-personalize the environment and would alter the advantages and reliance placed upon

nonverbal communication, but they would ultimately result in richer interactions and relationships.

General internal communications. Based upon participant comments, the means of and approaches to communication in a virtual school are different than in a traditional school. In a traditional school, general internal communications are often done according to a daily schedule, are commonly unidirectional, and are frequently asynchronously viewed, heard, and responded to at set times. The communication that occurs in a virtual school is more immediate, dynamic, frequent, and closer to real-time. The leaders were able to leverage at-a-distance electronic communication in a manner that promoted the overall importance of communication, the need for clarity of communication, the unique uses of communication, and the value that communication has to the school team and community. The media used for internal communication were varied and depended upon the geographic relationship of those who were in contact and the purpose of the communication. Belair (2012) reveals that for virtual schooling to be effective, an assortment of communication methods had to be used.

Central staff communications. The leaders reported communicating with central staff in a variety of ways that were purpose specific. The leaders distributed electronic memos and emails with general information to the entire staff. There were also standing times set for face-to-face meetings with all central staff, with these typically happening on a monthly or quarterly basis. Many of the leaders supplemented these meetings with the use of online meeting systems to connect with those staff who were unable to attend in-person.

The participants also used various means to communicate with those staff that

they were more dependent upon and had to speak with more frequently. Each relationship developed a favored form of communication. Being dependent upon proximity, time, and purpose, the common avenues of interaction would involve walking to an office to talk, calling someone by phone, sending an email, using an online meeting system, or using instant messaging. The sense from the leaders was that the availability of these options and the use of electronic communication allowed more responsive and frequent communication and a greater openness than they experienced in a traditional setting.

Teacher communications. Instructors make up a large percentage of a virtual school's employees. The majority of them worked at-a-distance, with many having full-time jobs in traditional schools. Even though the participants expressed the value of face-to-face meetings, they knew that these were difficult and expensive. Two leaders discussed having had these meetings once or twice a year when they had smaller numbers of teachers, but that practice has been discontinued.

The leaders knew that ongoing two-way communication with the instructional staff was of utmost importance to the success of the virtual school. This provided a strong incentive to have an instructional director position. At the time of the interview, most of the leaders had instructional directors in place and the directors performed much of the communication. One leader still handled teacher communications, but was in the process of requesting an instructional director position. If the leaders wanted to convey a message to the teachers, they would usually do this through the director. Even though having a director to communicate with the instructors assured that the instructors received operational communications, a survey of virtual high school teachers by Quilici and Joki (2011) found that teachers expressed a concern about not having enough personal

communication with the school leader.

In this dissertation study it was found that when the leaders did communicate with the teaching staff, they relied upon email, instant messaging, and web-based content. The communication was usually either general and to all instructors or was to individual as the result of a particular issue or need. Some leaders noted that electronic communication increased the amount of communication between teachers, thus creating a greater sense of support and team effort.

External Communication

Effective unambiguous external communication is essential to the operation of the virtual school. Even though internal staff have training and mentoring that ensures appropriate and meaningful communications, the individuals who are outside of the school do not. This means that additional attention must be given by leaders to ensure proper perception of both outgoing and incoming messages. Additionally, the means of external communication are more conventional and usually involve email exchanges or phone conversations. The leaders were also involved in a variety of face-to-face interactions including one-on-one conversations, private group meetings, and public events.

General external communications. Two of the leaders talked about outside communication as a whole and expressed its necessity. These leaders had communication plans and staff responsibilities in place for the schools' external communications. This included daily communications as well as scheduled communications with various groups throughout the year and preparations for unscheduled communications in cases such as virtual school related updates, service disruptions, and emergencies.

Guardian communications. These interactions were ones with students' parents or other legal guardians. Given the diversity of students who attend virtual schools, leaders ensuring communication and collaboration with parents can be helpful in addressing the needs of the learners (Belair, 2012; Garland, 2011; Mayrowetz, 2008). Communications with this group were often intended to provide one-way dissemination of information. Some leaders mentioned getting responses from these broadcasts that were either questions or expressions of appreciation. Two-way individual communication usually resulted from guardians having some concern about a student's performance, a course, or an instructor.

Some issues with communications resulted from the guardians having too many options for communication. The first task was for them to determine with whom they were to communicate, whether it be someone at the home school, the virtual school instructor, or some other virtual school staff member. The next challenge was for the guardian to determine how to communicate with these individuals. This was usually either via email or phone, which often required the guardian to locate an email address or phone number. The school leader's task was to have these processes streamlined as much as possible.

Post-secondary education communications. As the virtual schools expand their offerings and advantages, some leaders have started to communicate and form partnerships with colleges, universities, and technical schools. Two leaders had already contacted a post-secondary institution and had courses delivered with the purpose of offering dual credit. Another leader had expressed considering this as a possibility for their respective virtual school.

School district communications. This was the most common form of external communication that was discussed by the participants. As the leaders moved forward with the growth and acceptance of their schools, the home school districts seemed to be the best venue to establish a virtual school's brand and to gain virtual school champions. Depending upon the purpose or message, these virtual school leaders either communicated directly with the home districts or had a staff member make contact. The leaders typically were personally involved in communications with higher level school district representatives such as school principals or district office administrators.

Vendor communications. The leaders of some schools, typically the ones with smaller enrollments, dealt more frequently with vendors. In the larger schools the leader had less frequent dealings with vendors, either because the leader had staff to perform the needed school services or to communicate with the vendors. The leader's role in vendor communications was to ensure that the virtual school provided the most reliable services they could afford.

Representing the virtual school. All SLVS leaders were involved in an assortment of meetings, conferences, committees, and other gatherings external to their schools. Depending upon the function, these could include their peers, vendors, media, government officials, school district administrators, special interest groups, and persons with an interest or stake in virtual schools. During some of these events when there were people in attendance who were unfamiliar with virtual schools or the specific virtual school, the leaders would introduce themselves and provide the necessary introductory information. At other events, the leaders contributed to peer conversations, leveraged the expertise that was present, and advocated for their schools.

Feedback and input. In addition to the student feedback that was previously discussed, the leaders sought other forms of assessment, evaluation, and comments for the purposes of enhancing their schools' operations and offerings. These data were acquired from different sources, such as parents, home school districts, and advisory groups. The sense from the leaders was that response rates were low and that they sought ways to improve them.

Marketing. To a certain extent, virtual schools are a business that must promote themselves to remain sustainable. In their responses, each of the leaders presented an ongoing concern for the acceptance and growth of their schools. Their efforts to secure these involved branding their school, advertising school offerings, maintaining a positive public image, making press releases, and pushing out communications. Brand recognition takes time to develop but it serves as an important tool in the marketing of a school (Berridge, Henry, Jackson, & Turney, 2009; Beaudoin, 2003). The amount of marketing was in large part determined by state-imposed operational guidelines and the missions of the virtual school. Those schools whose charter limited their scope or that received sufficient funding were less involved in certain aspects of marketing than those that had a broader scope and a greater latitude in determining their own operations, or were seeking additional sources of funding.

Capital Resources

One constant, whether for a virtual school or traditional school, are the concerns associated with acquiring and maintaining capital resources. The leaders indicated that for virtual schools the budgeting and planning for capital resources and growth is more challenging than that for a traditional school. This was largely due to variable changes in

enrollment and having operating funds that were either static or unpredictable. Some schools have been able to receive per-student funds, which lessens some of these concerns. Even facing uncertainties, the SLVS leaders exuded a sense of confidence and pride in their current resource status.

Communication resources. To facilitate the assortment of external and internal communications, the leaders had an array of available options. For external communication, phones and email systems were most often used. Internally, the leaders reported using a greater diversity of resources types that were purpose specific. Online messaging and chat were the common choice for informal exchanges, online meetings for group discussions, online collaboration tools for team projects, and emails for formal communications. For surveys and feedback, online tools were used.

Additionally, the leaders often provided the specific names of the products or providers that they used. From this information, it was apparent that many of the tools and systems were licensed from vendors or were school owned and managed. These types were closed systems that were dedicated for use by the virtual school. Other product types were online consumer communication systems and social media that are publicly used.

Learning systems. At the core of the virtual school's mission are the resources that host the course content and enable the management of student learning and related data. The leaders expressed using a variety of systems for this. The larger virtual schools hosted their systems in-house and had staff to install and maintain them. The smaller schools elected to use systems that were hosted by vendors. The common reason for electing vendor hosting was the inability to amortize the costs that would be required for

internal infrastructure, maintenance, and staff. Two of the leaders who were using externally hosted systems were in the process of reconsidering their choice of vendors and learning management systems.

Enterprise systems. Registration systems, student information systems, and financial systems are other technologies that leaders employed in the operation of their virtual school. Half of the leaders reported using systems that had been custom developed for their school from the onset of operations. These leaders were nearing a point where they would retire their aging systems and replace them with commercial options. The other leaders who were already using off-the-shelf systems seemed to be overall satisfied with their choices and the having the systems supported and updated by the vendor.

Technology infrastructure. Based upon leader decisions, state mandates, and the resources that were available, the technology infrastructure varied from school to school. For instance in one school, the only significant technology infrastructure expenses that they had were the central office computers, peripheral equipment, a self-contained server for the state registration system and Internet connectivity. At the other end of the spectrum was a school that, in addition to standard office technologies, had a server room with emergency power, multiple servers, failover systems, firewalls, a data center, backup systems, and a network backbone to support the technologies. Regardless of the technology, infrastructure, and where it was located, the leaders' primary concern was for the systems to perform consistently and reliably.

Governance

During the interviews, the leaders spoke about those state individuals and entities to which they reported. Even though there were several references made concerning top

down mandates and expectations, the overall sense was that of sharing, cooperation, and understanding.

Collaboration. Opportunities existed for the leaders to work cooperatively with those people above them and the leaders took advantage of these when they could. During these sessions, there was a sense of partnership and teamwork as they worked together for a common good. The topics of these efforts included writing policy that affected the virtual school, strategic planning to continue school operations, funding deliberations, and working on committees.

Communication. Discussions and interactions between the SLVS leaders and a governing board, legislature, department, or other state leaders were common. In most instances, these communications were synchronous and in direct reference to the virtual school. At other times they involved topics of shared interest or for which the SLVS leader was considered an information resource or expert. Another form of upward communication was the leaders' involvement in the creation and submission of reports.

Directives and processes. As a natural course of operations, the leaders received instructions, expectations, and directions from the governing entity. Sometimes the leader was involved in the process of developing these or was otherwise aware of them in advance. At other times the directives were unexpected. In either case it was the leaders' responsibility to react to these and filter the information to the school and its operations.

Education. A vital aspect of the SLVS leader role was to inform the governing members about the virtual school. This was as basic as meeting with new legislators and enlightening them about the purpose and function of a virtual school, why the one in their state was in existence, and why it should remain in existence. In other instances, these

tasks involved informing state leaders about positive outcomes and short-term and long-term benefits stemming from their virtual school's efforts. Often the efforts to educate governing individuals was to secure ongoing support and funding.

Operational Logistics

This theme consists of sub-themes representing important factors that are central to SLVS operations and that present assorted issues and challenges that influence the SLVS leadership role. Since SLVSs are a dynamic ecosystem consisting of functional interrelationships and dependencies, as is true throughout the themes, many of these sub-themes have bearing on other thematic factors and sub-themes.

Funding. As mentioned previously in association with other themes, the SLVS leaders found that the funding models used for a virtual school, although appreciated, were often inadequate. As compared to the funding of a traditional school, a virtual school's funding was often not as stable, predictable or reliable.

If the funding was not a fixed amount, then the SLVSs received funding that was at least partially based on a projected per student formula. An issue with this is that virtual schools' growth is less predictable and steady than that of a traditional school. Virtual school enrollment uncertainties arise from hosting a diversity of students that can come from anywhere in a state, whereas traditional schools can more assuredly project enrollment changes in advance from the analysis of available community and socioeconomic indicators.

An additional challenge is that leaders reported the SLVSs represented in this study were undergoing some sort of funding shortfall or a change in funding. The leaders were working on various future strategies with hopes of receiving stable and secure

enrollment-adaptive funding that was tailored to the unique circumstances of a virtual school. This issue of the virtual school leaders' funding issue is presented by Anderson, Augenblick, DeCescre, and Conrad (2006) who state that it is an ongoing challenge to separate virtual school funding from the traditional models that already exist in a state.

As the leaders have become more confident in their schools and their course offerings, they are beginning to explore other avenues to supplement their monetary sources. One such approach that was being implemented by two leaders was to offer enrollments in their courses to students outside of their state. Another venture being undertaken by a few leaders and explored by others was the sale of course content. There were also leaders who were submitting grant proposals to secure additional monies.

Acceptance. What is a virtual school, what is its educational value, and why does our state have one? These questions are some of the most common and most critical for a SLVS leader to address with audiences that range from the general public to school district administrators. They do so by defining the school, pointing out benefits of the school, and otherwise changing beliefs and perspectives about virtual schools. This is still an issue, but has become less prominent with time as the concepts, advantages, and reputations of virtual schools and online learning are becoming more mainstream.

External pressures. Whether they were actively present or were already being addressed by ongoing efforts, these external burdens, stresses, and demands took up much of a leader's time and school resources. Examples of these pressure were maintaining a positive public perception, being politically correct, being diversity sensitive, avoiding misunderstandings, ensuring upbeat media reports and reviews, using funds appropriately, preventing service outages, and maintaining excellent relationships

with stakeholders. The benefit of the leader's reaction to these was the staff being more efficient and effective and the school being more successful.

Growth and change. With the inception of virtual schools in the late 1990s, and most SLVS implementations having been in existence for less than 10 years, SLVSs can be considered in a toddler phase. They are stretching their legs, seeing where they can go and what they can do. They are exploring and trying new things, often having to learn from failed or less than favorable outcomes. They are finding barriers and challenges that must be worked around and resolved. They are rapidly growing and changing as is the world around them. The leaders of these virtual schools have facilitated the evolution of their schools and their ability to adapt to new political, educational, technological, and social standards and expectations.

Many leaders accumulated data that were analyzed and used in making projections and decisions related to enrollment and funding. Based upon surveys, changes in course standards, student needs, and instructor input, these leaders have made hard decisions about course content and offerings. Changes in state directives and expectations have caused the leaders to stop, think, and often change direction in certain matters. The evolution of the virtual schools is one of the few constants.

Home school districts. Considerations and interactions with home school districts have been sources of continuing influence on the decisions and actions of the SLVS leaders. A virtual school's operations, timelines, constraints, and approaches are different than those of a traditional school, yet the virtual school leader is typically responsible for making the best possible alignment between the two. In the case of the study participants, this was done in consideration of students and providing options and services to their

home schools.

Technology differentials could also create issues. The leaders had to enforce technology and software versioning control and compatibility. Measures were put in place that ensured maintaining technology standards and requirements. Virtual school technology upgrades that might have negatively impacted student access either from home or their home school were minimized and done at times that would be the least intrusive. Bandwidth, security, malware and virus prevention, and privacy were also factors that were of home school districts' concern.

Relationship building. The at-a-distance relationship building abilities of the leaders was an essential skill and art. With much of the face-to-face visual cues and intonations being absent in electronically facilitated online communications, the natural human process of forming working relationships is more difficult. The leaders found that they had to be much more aware of what their messages said, how they said it, and how they thought it would be perceived. Valdez (2004) contends that leaders who have good success with this are also emotionally intelligent. Many of the leaders said that it was very important, even though more difficult, to establish trust. Given these challenges, the leaders took what opportunities they could to have at least one face-to-face encounter with people they worked with or encountered.

Technology use. Maintaining technological literacy was important to the leaders involved in this study. This did not require that they be technologists or understand technological nuances, but rather that they knew enough about technological trends, practices, and terminology that they could make educated decisions about vendor offerings, technology purchases, and determining the technological directions of their

schools. Having an awareness of technology has given SLVS leaders and their schools an edge in producing content that engages students and that can personalize learning.

Time management. One of the greatest advantages of online learning is the ubiquitous nature of the course content and the convenience and benefits that this affords the learner. This has also presented a challenge to the SLVS leaders and their staff. Most leaders wanted their instructors to be available at times that were convenient to their students. This primarily means evenings and weekends, which was when most of the instructors were available outside of their full-time jobs. However, this also meant that at these times many of these instructors had to balance this additional virtual school work with family and work for their full-time job.

There was a reported tendency of faculty to be over-connected, which is a common symptom of digital connectivity. To deter this, most leaders required instructors to set their work hours within certain time frames. Once the schedules were set, the leaders expected the instructors to be connected at those set times and able to respond to both student and school needs. Since much of the central office staff typically worked standard work hours and work weeks, some adjustments had to be made in some of their schedules to overlap with instructor schedules.

Virtual communication. As alluded to in other themes, communicating virtually required new skills, strategies, and awareness. The leaders made sure this was addressed through professional development and guidance, but also found that continuing practice and sensitivity during communication was still required. Personally, the leaders found themselves repeatedly thinking about what they were saying and how it might be perceived. Listening for tonal or silence cues that indicated confusion or understanding,

restating statements that might have been misunderstood, probing for understanding, or asking for clarification are strategies that the leaders used to ensure messages were being perceived as intended. Special care was taken by leaders when communicating with people outside the school or that were not as adept with the nuances of virtual communications.

Working at-a-distance. As with the previous sub-theme, aspects related to this topic have emerged in other thematic areas of this discussion. A primary task for leaders is to ensure that expectations are set for and understood by all staff who are working remotely through digital access. Many prospective and new employees have been attracted to the positive aspects and flexibilities that this provides, but then are faced with the reality of the time, effort, and communication challenges that are involved in performing the work. This is particularly true for instructors. This sub-theme ties in closely with the issues of being able to properly manage time and to communicate virtually.

Workload. Determining the staff workload, particularly for instructors and those who worked with them, and aligning that with scheduled work times was a responsibility for the leaders. There was a reliance and trust placed upon staff to report their workloads and to do the best that they personally could to manage it. The leader's awareness and well-developed experience with this was necessary in gauging assignments, reviewing workload and time reports, and balancing all factors with school needs and funds.

Guiding Questions

The intent of the guiding questions was the emergence of these themes and sub-themes, which presented the role factors that influenced SLVS senior leaders. Although

created as two separate guiding questions, the findings exposed the complex, interwoven, and inseparable nature of these factors and the subsequent leadership qualities, attributes, and beliefs and leadership approaches. The resulting coalescence of these features determined the senior leader's unique nature, characteristics, and actions.

Commonalities existed between the leader roles from one school to the next, such as the dependency on maintaining excellent communications, having a reliable infrastructure, and equipping staff to perform in the virtual setting. At a deeper level, each school leader had to contend with differences such as funding models, governance, work settings, resources, and the daily operations. The need to gain knowledge about virtual school operations and to seek advice and reassurance in contending with challenges led the SLVS leaders to have a strong peer network and to access outside professional development, support, and resources.

Guiding Question 1: Leader Qualities, Attributes and Beliefs

The intent of the first guiding question was accomplished by revealing those elements related to the senior leader role that influenced their SLVS leadership qualities, attributes and beliefs. SLVS leaders typically enter into their role possessing the experience and knowledge that enabled them to succeed as a traditional school leader. They knew from the onset with the virtual school that they must educate themselves about their virtual school's function, operations, and processes. The virtual school's dynamics, considerations, and issues that confronted the leaders presented unique challenges. Answers for some of these were intuitive, solutions to others were offered by experienced coworkers, other situations required gaining basic knowledge from commonly available sources, and yet others presented major issues that demanded

outside advice and consultation. In any case, the leaders made use of informal and formal information and professional development sources to enhance their knowledge and skills. As this transpired, modifications occurred in the leader's qualities, attributes, and beliefs.

In association with the various factors that shaped their leadership, the most common leader traits that were introduced by the leaders were those of being visionary, empowering, supportive, collaborative, communicative, trusting, and committed. Additional qualities that were indirectly observed included them being caring, broad-minded, encouraging, confident, creative, passionate, determined, and inspiring.

Guiding Question 2: Leader Approaches

The intent of the second guiding question was to ascertain those senior leader role factors that influenced their approach to SLVS leadership. It was found that as the leader's qualities, attributes, and beliefs evolved, so did their approaches to providing direction, motivating people, and executing plans. Over time they adjusted to and learned how to work more effectively and efficiently with students, staff, community and governance. This enhanced the internal and external SLVS operations and expedited the school's growth, outreach, and success.

Many of the leaders' actions and traits that were discovered in this study are closely related to those associated with the transformational leadership approach, which includes idealized influence, inspirational motivation, intellectual stimulation, and individual consideration (Bass, 1990). Gaining and maintaining their followers' trust and respect was discovered to be essential to SLVS success, enabling the leaders to be better influencers and guides. This in turn was seen to assist the facilitation of a sense of teamwork and camaraderie, which fortified their followers' commitment to the SLVS's

ideals and goals. As cited by many of the leaders and witnessed in their accomplishments, their followers were continually encouraged, nurtured, and prepared to think beyond traditional school beliefs and boundaries and to creatively leverage virtual advantages. The leaders also spent time and effort, either directly or indirectly, supporting individual followers in their personal and professional growth. These leadership practices, revealed throughout the findings of this dissertation, correlate with the outcomes of other studies that found that the transformational leadership approach is the most frequently applied and successful approach to virtual leadership (Garland, 2011; Howell, Neufeld, & Avolio, 2005; Malhotra, Majchrzak, & Rosen, 2007; Purvanova & Bono, 2009).

Conclusion

This qualitative study explored the operational and personal factors that relate to the role of a SLVS senior leader and that ultimately have an influence on their leadership qualities, attributes, beliefs, and approaches. The literature associated with the topic of virtual school leadership was very limited, with none being specifically about SLVS leaders. This required broadening the review to incorporate literature from related areas. Analysis of the literature findings ultimately led to the development of the dissertation's guiding questions and the data gathering interview questions.

Following the constructivist grounded theory methodology used by Charmaz (2009), the analysis of the interview data retrieved from the six participants revealed a rich set of factors that shaped the SLVS leader role. While there were some differences between the individuals' responses due to their particular situation and unique backgrounds, a common set of themes surfaced. Representing those elements that guided, influenced, motivated, and changed the participants, these themes are: (a) leader

education, experience, and professional growth; (b) leader profile; (c) curriculum and instruction; (d) the learner; (e) human capital; (f) work environment; (g) internal communications; (h) external communications; (i) capital resources; (j) governance; and (k) operational logistics.

Given the current scarcity of research-based formal virtual school leadership preparation or development, new SLVS senior leaders will initially depend heavily on their prior experiences. Then, in addition to gaining vital on-the-job virtual school leadership experience, relevant leadership knowledge can be acquired through peer interactions, professional development related to virtual or online leadership, virtual school leader workshops, and professional organizations.

The approach that a SLVS leader takes to their role is uniquely defined by the very nature of the virtual school. In general, beneficial leadership qualities are that they be available, amenable, responsive, decisive, and visionary. Since virtual operations require a culture of trust and the development of strong and enduring relationships, the transformational leadership style is associated with successful virtual leadership. This entails that the SLVS leader stimulates creativity and innovation, serves as a role model, and otherwise motivates, empowers, and encourages their staff.

It is essential for the leader to be a champion for a well-developed standards-based curriculum and a strong instructional program. As virtual schools gain social and political acceptance and expand their reach, it is important that strategic plans accommodate the evolution of curriculum and instruction. The leader must ensure that content creation and instructional design are aligned with research-based practices for online courses and that both curriculum and instruction are subject to a recurrent quality

review and update process.

Leaders who accept this role should have an authentic interest in the students and a desire to facilitate student success and well-being. Ensuring that students have course awareness and access will become a more intensive undertaking as the SLVSs broaden their reach to learners who are in public, private, or charter schools; who are full-time students in the virtual school, who are home-schooled; or who are subject to special circumstances. It is incumbent upon the leader to ensure that the students are being communicated with, are engaged with the school and courses, and are supported both instructionally and technically.

Working in a virtual setting is new to many staff and they must be well-managed, trained, and mentored. To facilitate the transition to the virtual school setting, appropriate expectations concerning the school and virtual operations are required at the onset of their employment. Depending upon their experience and needs, staff should be assigned a mentor, provided with guidance, and offered virtual school-specific professional development.

The SLVS leader is subject to two work scenarios, an inward facing one and an outward facing one, with each presenting distinctive nuances, issues, and challenges. With the inward facing work environment, the leader will be able to establish, maintain, control, and change internal work structures and processes. Through development and guidance, staff will be able to work efficiently and effectively within this work setting. For the outward facing work environment, the leader will not have these internal leadership advantages. They will need to be aware of and compensate for peoples' lack of familiarity with virtual school operations and possible inexperience with virtual

communications and interactions.

The process of internal communication is crucial to virtual school success, and is more problematic and frequent than in a traditional school. Staff need to know how and when to communicate and what means of communication will be used for various circumstances. There is a substantial dependency on virtual communication, yet miscommunications and misunderstandings occur more easily and are more difficult to recant or rectify. To mitigate issues, it is essential for the school leader to establish formal communication practices, policies, and tools for school business.

The SLVS leader must include effective external communication skills in their repertoire. This requires being prepared for a matrix of communications that serve a variety of proactive, reactive, and intended purposes and that occur through an assortment of channels. External communication includes connecting with vendors, educational partners, school district representatives, and guardians; representing the school in online and in-person meetings and events; making presentations at conferences; ensuring school marketing; reaching out to stakeholders; talking with media; and seeking input and feedback.

A virtual school's reputation is very much determined by the robustness and reliability of its technical infrastructure and systems. One necessity that is of great concern to SLVS leaders is the availability of services and the existence of contingency plans in the case of service disruption. The use of technology for the school's operation and services should be transparent, seamless, and user-friendly. Additionally, the leader maintains and awareness of information and educational technology trends and must plan for the aging out and replacement of systems and infrastructure.

In terms of governance, the most effective upward relationships are those that are based upon collaboration, trust, and two-way communication. The leader must react to changes in the political landscape, particularly with educating new legislators who make decisions relevant to the virtual school. As decisions and policies are made, it is important for the SLVS leader to be part of the process.

One of the most important skills that a SLVS leader must develop and maintain is that of being proficient with virtual communication. Closely associated with this are the leadership abilities to be able to build relationships and to work at-a-distance with and through other individuals. Leaders must be mindful that the perceptions resulting from virtual communications and interactions can be different than the intentions.

Even though the purpose of this study was to identify factors that influenced the SLVS leader's role and the result was the emergence of themes, these themes are not intended to represent distinct and separate silos of factors or responsibilities. In practice, they overlap, coalesce, and impact one another.

Implications

The realms of SLVS leadership and virtual school leadership as a whole will continue to expand and increase in complexity as the virtual school becomes more openly embraced by the educational community and society at large. With this evolution and acceptance, additional research and research-based documentation and support mechanisms for virtual school leaders will be essential to their success. The findings from this study provide much of the information necessary to begin fulfilling these needs.

The concept of virtual schools and virtual schooling is taking root in the United States. This is demonstrated by the increasing numbers of single district online programs,

blended schools, multi-district fully online schools, state virtual schools, course choice programs, consortium programs, and private or independent online schools (Watson, Murin, Vashaw, Gemin, & Rapp, 2013). Currently there is an insufficient pool of experienced or qualified virtual school leaders to lead the growing number of online programs and virtual schools.

When an individual assumes the responsibilities of a virtual school leader, they rarely if ever have a foundation in virtual school operations. They typically rely upon their traditional school backgrounds, experiences, and education and begin a lengthy process of self-motivated on-the-job transition and transformation in terms of their abilities, knowledge, and beliefs. These knowledge and skills shortcomings indicate a significant need for the existence of preparation programs and professional development.

Based upon participant work histories and interview statements, it can be implied that there are three types of SLVS leaders. The first type is most prevalent today and pertains to those leaders who were or are involved with the initial development of a virtual school. From the onset of this process, these virtual school leaders have taken a hands-on approach in the planning and development of the various aspects of the school. They seek and find support from peers who are or have been in a similar situation. This approach eventually gives the leader the insight, knowledge, and practice that they need to effectively lead the school and their followers. The second type is the individual coming from a traditional school who enters into a pre-existing virtual school and who lacks adequate preparation in virtual school operations. They enter the role with certain expectations and preconceived ideas, but must adapt, adopt, and learn as they work. These individuals receive assistance from existing experienced staff from within their

school and peers from other schools. The third type of leader enters the role from another position within the school, thus they have the benefit of familiarity and previous on-the-job training. Due to their practice within the virtual school, these leaders are likely the most knowledgeable about virtual school operations, but may be lacking in other areas of leadership skills and experience.

Even though the findings and themes that emerged from this study are not generalizable, they can provide an informed research foundation for the creation of professional development offerings, certification agendas, and university preparatory programs. This study's outcomes also offer a research basis for the validation and enhancement of current professional development opportunities. Additionally, the results can be of direct personal interest and benefit for existing and upcoming virtual school leaders.

Since the primary purpose of this research was to identify role characteristics, influential factors, and requirements that influence the SLVS leader, the results of this study provide a foundation for future qualitative and quantitative research. The research possibilities can extend to specific studies of the individual themes and sub-themes, with each outcome supplementing an expanding knowledge base for virtual school leadership. Ultimately, research will lead to the development of grounded theory and the much needed documentation of virtual school leadership standards and development of comprehensive supporting materials.

A basis for the formulation of virtual school leadership standards can be seen in the *Virtual School Leadership Standards and Indicators* found in Appendix G. To create these standards and indicators, the outcomes of this study have been combined with the

Traditional School Leadership Standards (Appendix A) and the *Virtual Leadership Competency Indicators* (Appendix B) that were developed as a result of the literature review. With the caveat that many if not all of the sources for the traditional school leadership standards and virtual leadership competency indicators are not based upon empirical study, the amalgamation of these three sources presents a foundation and guide for additional research and standards development.

Recommendations

Based upon the outcomes of this study, recommendations are made for continued research, development of leadership standards, creation of leadership preparation and development opportunities, and application to leadership practice. With the exception of leadership practice and the immediate creation of topic-specific professional development sessions, these are presented in the suggested order of implementation.

To continue the work started by this dissertation research, additional virtual school leadership study is recommended. The initial focus should be further study of SLVS leadership to discover remaining factors or factor details that influence the role. It is then suggested to broaden the scope of study to produce generalizable findings for the field of virtual school leadership. These findings would be inclusive of and applicable to senior leaders of SLVSs, charter virtual schools, online school consortia, commercial virtual schools, and other virtual learning endeavors.

It is then recommended that the study of the virtual school leadership role be followed by the development of a vetted and accepted compilation of virtual school leadership standards. The standards should be developed in association with a professional organization such as the International Association for K-12 Online Learning

(iNACOL) or the Sloan Consortium (SLOAN-C).

With standards in place, the next recommendation is the design and creation of comprehensive certification agendas, higher education programs, and professional development programs. These learning opportunities should be based upon research, practice, and standards and be created in a manner that ensures virtual school leaders develop knowledge and abilities through meaningful rhetoric, critical thinking exercises, and case study analyses. It is suggested that the development of these offerings include broad input and review from stakeholders, subject matter experts, existing leaders, and national professional organizations.

It is advocated that certification agendas and professional development programs be crafted to provide comprehensive leadership preparation that addresses all the themes presented in this study. These should be supplemented by ongoing communities of practice and support. In addition to the inclusion of central topics, professional development offerings should also include special topics as they arise, panel discussions, case presentations, and content for other levels of virtual school administration and leadership.

With the knowledge that currently there is a small number of individuals who would be interested in virtual school leadership, at least one graduate level course that introduces virtual instructional leadership should be offered in higher education programs at larger institutions. This overview course would benefit individuals who are in a variety of roles, from the leader of a traditional school that offers online courses to the leader of a virtual school.

Realizing that online and virtual education and schools are rapidly expanding and

reaching a critical mass, the next recommendation is for the creation of a national center for virtual school studies at a higher education institution. This center would take the lead in the study of virtual school theory and practice including, but not limited to, leadership. Based upon the work of this center and other researchers, a graduate program offering a specialization in virtual school leadership should be created.

Individuals who are currently interested in becoming a virtual school leader should seek membership in professional organizations, read existing academic literature on virtual schools and virtual leadership, and take advantage of networking opportunities with current virtual school leaders. Virtual school employees who are considering advancement into a leadership position within their virtual school should inquire about succession planning. For purposes of support, documentation, and ongoing development, it is suggested for existing leaders to create a formal consortium or collaborative organization that is open to leaders from various online and virtual school efforts.

Finally, it is recommended that topic specific professional development opportunities for virtual school leaders be created immediately. These should be based upon the findings of this study, covering the virtual school-focused topics of policy, organizational theory, leadership theory, instructional leadership, the school community, the workplace, and human virtual interaction.

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APPENDIX A: TRADITIONAL SCHOOL LEADERSHIP STANDARDS

Themes	Elements	References
Leadership	• Management • Distributed Leadership • Policy creation and implementation • Change management • Innovation • Planning • Human resources • Modeling • Vision • Consensus building • Advocacy	Australian Institute for Teaching and School Leadership, 2008; Bottoms, 2007; Interstate School Leader Licensure Consortium, 2008; International Society for Technology in Education, 2009; National Association of Elementary School Principals, 2008; National College for School Leadership, 2008; National Policy Board for Educational Administration, 2002; Waters & Cameron, 2007
Community	• Internal • External – laws, government, state policy • Stakeholders • Partnerships • Outreach • Public relations	Australian Institute for Teaching and School Leadership, 2008; Bottoms, 2007; Interstate School Leader Licensure Consortium, 2008; International Society for Technology in Education, 2009; National Association of Elementary School Principals, 2008; National College for School Leadership, 2008; National Policy Board for Educational Administration, 2002; Waters & Cameron, 2007
Resources	• Technology • Teaching • Learning • Intellectual	Australian Institute for Teaching and School Leadership, 2008; Interstate School Leader Licensure Consortium, 2008; International Society for Technology in Education, 2009; National Association of Elementary School Principals, 2008; National College for School Leadership, 2008; National Policy Board for Educational Administration, 2002; Waters & Cameron, 2007

APPENDIX A: (continued)

Themes	Elements	References
Data	• Evidence-influenced decisions • Collection and analysis of data • Assessments for learning, teaching, etc.	Australian Institute for Teaching and School Leadership, 2008; Bottoms, 2007; International Society for Technology in Education, 2009; National Association of Elementary School Principals, 2008; National College for School Leadership, 2008; National Policy Board for Educational Administration, 2002
Communications	• Internal • External	Australian Institute for Teaching and School Leadership, 2008; Bottoms, 2007; Interstate School Leader Licensure Consortium, 2008; International Society for Technology in Education, 2009; National Association of Elementary School Principals, 2008; National College for School Leadership, 2008; National Policy Board for Educational Administration, 2002; Waters & Cameron, 2007
Self	• Development • Awareness • Assessment • Confidence • High Standards	Australian Institute for Teaching and School Leadership, 2008; Interstate School Leader Licensure Consortium, 2008; National Association of Elementary School Principals, 2008; National College for School Leadership, 2008

APPENDIX A: (continued)

Themes	Elements	References
Environment	• Values • Safety • Context • Diversity • Culture	Australian Institute for Teaching and School Leadership, 2008; Interstate School Leader Licensure Consortium, 2008; International Society for Technology in Education, 2009; National Association of Elementary School Principals, 2008; National College for School Leadership, 2008; National Policy Board for Educational Administration, 2002; Waters & Cameron, 2007
Learning	• Curriculum • Instructional Practice and Teaching • Learning • Student focus • Time spent on teaching and learning • Organizational structure conducive to learning • Discipline	Australian Institute for Teaching and School Leadership, 2008; Bottoms, 2007; Interstate School Leader Licensure Consortium, 2008; International Society for Technology in Education, 2009; National Association of Elementary School Principals, 2008; National College for School Leadership, 2008; National Policy Board for Educational Administration, 2002; Waters & Cameron, 2007
People	• Team building • Relationships • Positive reinforcement and incentives • Professional development • Expectations • Evaluation • Feedback • Leadership building • Mentor • Providing teachers with support	Australian Institute for Teaching and School Leadership, 2008; Bottoms, 2007; Interstate School Leader Licensure Consortium, 2008; International Society for Technology in Education, 2009; National Association of Elementary School Principals, 2008; National College for School Leadership, 2008; National Policy Board for Educational Administration, 2002; Waters & Cameron, 2007

APPENDIX B: VIRTUAL LEADERSHIP COMPETENCY INDICATORS

Themes	Indicators	References
Staff	• Professional development • Career development • Morale • Trust • Fairness • Motivation • Involvement in decisions and processes • Empowerment • Recognition of individuality • Provision of feedback • Support • Meeting the needs of individuals	Caulat, 2006; DeRosa, 2009; Duarte & Snyder, 2006; Gould, 2006; Grier, Ault, Hanna, & Bailey, 2007; Johnson, 2008; Key & Dennis, 2006; Kimball, 1997; Miller, 2011; Pfeiffelman & Bennett, 2004; Serrat 2009; Settle-Murphy, 2011; Synetz, 2011; Transcende, 2011; Zain Books, 2011
Relationships / Team	• Social networking and interaction • Team building • Community • Collaboration • Relationship building • Accountability • Mutual identity • Working together/synergy • Celebration of successes – individual and team	Caulat, 2006; DeRosa, 2009; Duarte & Snyder, 2006; Gould, 2006; Grier, Ault, Hanna, & Bailey, 2007; Johnson, 2008; Key & Dennis, 2006; Kimball, 1997; Miller, 2011; Pfeiffelman & Bennett, 2004; Serrat 2009; Settle-Murphy, 2011; Synetz, 2011; Zain Books, 2011

APPENDIX B: (continued)

Themes	Indicators	References
Leadership	• Organization • Environment • Provision of direction • Management of goals, expectations, and responsibilities • Time mindfulness • Cultural awareness • Embracing diversity • Delegation of responsibilities • Creating and following processes and policies • Modeling behaviors • Managing tensions • Promoting and expecting etiquette • Establishing frameworks and working contexts	Caulat, 2006; DeRosa, 2009; Duarte & Snyder, 2006; Gould, 2006; Grier, Ault, Hanna, & Bailey, 2007; Johnson, 2008; Key & Dennis, 2006; Kimball, 1997; Miller, 2011; Serrat 2009; Settle-Murphy, 2011; Synetz, 2011; Transcende, 2011; Zain Books, 2011
Personal / Self	• Personal and professional development • Individual traits • Emotional intelligence • Self-awareness • Vision • Empathy • Recognition of stresses • Personal accountability • Self-discipline • Professional networking • Recognition of personal insecurities	Caulat, 2006; DeRosa, 2009; Duarte & Snyder, 2006; Grier, Ault, Hanna, & Bailey, 2007; Johnson, 2008; Key & Dennis, 2006; Kimball, 1997; Miller, 2011; Pfeiffelman & Bennett, 2004; Serrat 2009; Settle-Murphy, 2011; Synetz, 2011; Transcende, 2011; Zain Books, 2011

APPENDIX B: (continued)

Themes	Indicators	References
Information	• Understanding needs • Managing availability • Culture of sharing • Sense of co-creation	Caulat, 2006; DeRosa, 2009; Gould, 2006; Grier, Ault, Hanna, & Bailey, 2007; Key & Dennis, 2006; Pfeiffelman & Bennett, 2004; Serrat 2009; Settle-Murphy, 2011; Synetz, 2011; Zain Books, 2011
Technology	• Available resources • Appropriate resources • Training and support • Skills development	Caulat, 2006; DeRosa, 2009; Duarte & Snyder, 2006; Key & Dennis, 2006; Miller, 2011; Pfeiffelman & Bennett, 2004; Serrat 2009; Synetz, 2011; Transcende, 2011
Communication	• Showing patience, sensitivity and concern • Listening skills • Communicate outside the organization • Clear, consistent, regular, and considerate • Use of multiple formats • Use visuals • Open door policy • Comfort and fluency in non-verbal communication	Caulat, 2006; DeRosa, 2009; Gould, 2006; Grier, Ault, Hanna, & Bailey, 2007; Key & Dennis, 2006; Pfeiffelman & Bennett, 2004; Serrat 2009; Synetz, 2011; Transcende, 2011; & Zain Books, 2011

APPENDIX C: LEADERSHIP PREPARATION PROGRAM COMPONENTS

Program Components	References
Should be standards-based	Davis & Jazzar, 2005
Consist of challenging and critical learning components – case-studies, clinical experiences, etc.	Allio, 2005; Cardno & Fitzgerald, 2005; Darling-Hammond, LaPointe, Meyerson, & Orr, 2007; Davis & Jazzar, 2005
Programs should work with state and national organizations.	Abrego & Pankake, 2010
Good partnerships should exist between university programs and districts	Browne-Ferrigno & Muth, 2004; Darling-Hammond, LaPointe, Meyerson, & Orr, 2007
Participants should be recruited based upon readiness	Allio, 2005; Avolio and Hannah, 2008; Darling-Hammond, LaPointe, Meyerson, & Orr, 2007; Eissa, Fox, Webster, & Kim, 2012; Leithwood, Seashore Louis, Anderson, & Wahlstrom, 2004
Adequate resources should be made available	Darling-Hammond, LaPointe, Meyerson, & Orr; 2007
Mentoring experiences should exists	Allio, 2005; Browne-Ferrigno & Muth, 2004; Davis & Jazzar, 2005
Ongoing after-support such as communities of practice and networks	Browne-Ferrigno & Muth, 2004; Cardno & Fitzgerald, 2005; Davis & Jazzar, 2005; Leithwood, Seashore Louis, Anderson, & Wahlstrom, 2004
Require changes in attitudes and belief which occur over a longer period of time	Allio, 2005; Cardno & Fitzgerald 2005

APPENDIX D: EMAIL INVITATION

Dissertation Study – Virtual School Leadership

Dear _____:

My name is Mark Sivy, and I'm an advanced doctoral student in the Department of Educational Leadership at the University of North Carolina at Charlotte, where I am specializing in Instructional Systems Technology. Virtual school leadership is my main research topic of interest. Currently, research associated with virtual school leadership and in particular on the functions of state-led virtual school leaders is lacking. I am requesting your participation for my dissertation study on the roles of state-led virtual school senior leaders.

If you volunteer to be a participant in this study, you will be agreeing to a one-hour interview at a time of your convenience. Primary interview questions will gather information related to leader responsibilities, qualities, and attributes as well as functions associated with a virtual school. The online audio-only interview will be conducted and recorded using Adobe Connect (http://www.adobe.com/products/adobeconnect.edu.html). Brief follow-up communication either via Adobe Connect or email may be necessary, but I acknowledge and respect the importance of your time.

Your identity will be kept strictly confidential and there are no known risks associated with your participation. As for its benefits, my study will inform professional development, certification agendas, and university preparatory programs that are seeking to advance the knowledge and abilities of potential and existing virtual school leaders.

This study has been reviewed and approved by the University of North Carolina at Charlotte Institutional Review Board. If you are interested in participating, please email a statement of your interest to me at mjsivy@uncc.edu. Upon its receipt you will receive a copy of an informed consent document that should address any questions that you may have at this time.

Thank you in advance for considering my request.

Mark J. Sivy

APPENDIX E: FOLLOW-UP EMAIL

Good Morning _____,

Many thanks for your interest in being a participant.

Attached you will find my informed consent document. After reading it, please let me know if you have any questions or concerns.

If you are at a point where you can make a statement about your involvement, I will need you to copy and paste one of the following statements into your reply. There will also be a final verbal confirmation just prior to the interview.

I have read the informed consent document and I affirm participation in the study.

I have read the informed consent document and I decline participation in the study.

If and when you affirm participation in the study, we will need to arrange a one-hour audio meeting that will be held and recorded using Adobe Connect (more information will be provided about this). I am quite flexible in my availability, so please let me know of a time that is best for you. Perhaps we can consider scheduling the interview for some time during the next couple of weeks.

Thanks.

Mark

APPENDIX F: INFORMED CONSENT

Department of Educational Leadership
9201 University Blvd. Charlotte, NC 28223
www.uncc.edu

Consent for Participation in Research

Please read and consider this information carefully before deciding whether to participate in this interview-based dissertation study. The purpose of this research is to provide findings that will inform future research as well as professional development, certification agendas and university preparatory programs that are seeking to produce knowledgeable and effective state-led virtual school senior leaders.

Principal Investigator – Mark Sivy
Responsible Faculty – Dr. Chuang Wang

Dissertation study title - "State-Led Virtual School Senior Leaders: An Exploratory Study"

Subject Inclusion Criteria:
1. The senior leader must have at least two years of experience as a leader of a state-led virtual school.
2. The senior leader must have a Master's level degree or higher in an education-related field of study.
3. The virtual school this leader directs must have had a course enrollment of at least 3000 in grades 9-12 during the 2012-2013 academic year.
4. The school's operation and function must be carried out in a virtual setting (i.e., non-physical setting).

Subject Exclusion Criteria:
1. An inability or unwillingness to respond openly and truthfully to interview questions.
2. Not allowing the interview to be audio-recorded.
3. Not being able to commit a minimum of one continuous hour for an initial interview and to address clarifying communications.

APPENDIX F: (continued)

Consent Statements

1. You are a volunteer. The decision to participate in this study is completely up to you. If you decide to be in the study, you may withdraw at any time. You will not be treated any differently if you decide not to participate in the study or if you stop once you have started. You will not be paid for participation nor are there any costs for doing so. There will be 5-8 participants in this study.

2. If you volunteer as a subject, you will be asked to participate in one interview. If, however, you feel uncomfortable in any way during the interview session, you have the right to decline to answer any question or to end the interview.

3. The interview will last approximately 45-60 minutes. The interviews will take place using Adobe Connect, and an audio recording of the interview will be made. If you do not want to be recorded, you will not be able to participate in the study.

4. There may be follow-up questions to provide data clarification, which may require up to an additional 15-30 minutes.

5. Your responses to the interview questions will be kept confidential. At no time will your actual identity be revealed. You will be assigned a random numerical code and will only be known by this code to anyone who transcribes responses. All information will be kept in a private locked location and on a password protected computer. The recording and transcription will be destroyed when the dissertation has been accepted.

6. No one other than the researcher will have access to recordings, transcripts, or notes.

7. No risks are anticipated.

8. This research study has been reviewed and approved by the Institutional Review Board (IRB) at the University of North Carolina at Charlotte. UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. Contact the university's Research Compliance Office (704-687-3309) if you have questions about how you are treated as a study participant. If you have any questions about the project, please contact Dr. Chuang Wang (704-687-8708, cwang15@uncc.edu).

9. I have read the information in this consent form. I have had the chance to ask questions about this study, and those questions have been answered to my satisfaction. I am at least 18 years of age. I agree to participate in this research project. I understand that I am free to withdraw at any time without incurring any penalty. I have been given a copy of this consent form.

For further information, please contact the principal investigator:
Mark Sivy
mjsivy@uncc.edu

APPENDIX G: VIRTUAL SCHOOL LEADERSHIP STANDARDS

Standard 1 – Leader Professional Growth, Education, and Experience

- Continuous informal improvement
- Peer communications and networking
- Policy training and political savviness
- Prior education and experience
- Professional growth opportunities
- Staying informed about the school
- Trends awareness

Standard 2 – Leader Profile

- Self-awareness
- Self-assessment
- Self-discipline
- Personal standards, discipline, and accountability
- Authority
- Vision and forward thinking
- Change agent and innovator
- Personal motivations and interests
- Role approach
- Interaction qualities – patience, sensitivity, empathy, concern, openness, emotional intelligence, and availability
- Virtual communication skills – listening, speaking, writing, verbal and non-verbal cues, and non-visual interaction

Standard 3 – Curriculum and Instruction

- Course standards
- Oversight
- Quality control
- Instructional design and content
- Online instruction

Standard 4 – The Learner

- Communications
- Outreach and course access
- Engagement
- Learning
- Student input
- Support and benefits
- Safety and discipline
- Learning

APPENDIX G: (continued)

Standard 5 – Human Capital

- Staff management
- Staff personal needs - morale, motivation, individuality, empowerment, involvement, and support
- Non-instructional staff leadership
- Instructional staff leadership
- Staff professional development, guidance, and modeling
- Staff responsibilities, accountability, and review
- Staff recruitment, retention, and succession planning

Standard 6 – Work Environment

- Funding
- Task management
- Planning
- Culture – values, context, framework, goals, and practices
- Safety - trust, fairness, acceptance, secure
- Education focus
- External work processes
- Internal work processes and policies
- Internal work structure

Standard 7 – Internal Communication

- General internal communication
- Central staff communications
- Teacher communications

Standard 8 – External Communication and Community

- General external communications
- Guardian communications
- Post-secondary communications
- School district communications
- Vendor communications
- Representing the school
- Feedback and input
- Public relations and marketing
- Consensus building and partnerships

Standard 9 – Capital Resources

- Communication systems
- Learning systems
- Enterprise systems
- Technology infrastructure

APPENDIX G: (continued)

Standard 10 – Governance

- Collaboration
- Communication
- Directives, policy, laws, and processes
- Education and advocacy

Standard 11 – Operational Logistics

- Acceptance
- External pressures
- Growth and change
- Home school districts
- Relationship building
- Team building
- Technology use
- Time management
- Virtual communications
- Working at-a-distance
- Workload
- Virtual operations tensions

Standard 12 – Data and Information

- Information – needs, creation, sharing, and availability
- Data – needs, collection, analyses, reporting
- Evidence-based decisions, implications, and follow-through