WASHINGTON STATE SUPERINTENDENTS AND K-12 ONLINE LEARNING:
LEADERSHIP PERCEPTIONS, CHALLENGES, & OPPORTUNITIES

By

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I now know that it takes a fantastic team to conduct a study and write a dissertation. I would like to take this opportunity to acknowledge the hard work of the team members that significantly contributed to this study.

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Abstract

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May 2012

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The purpose of this mixed-methods study was to examine the perceptions, interpretations, and reactions of K-12 superintendents in Washington in response to the rapid growth of K-12 online learning. A survey instrument with 43 Likert-type items and five open-ended items was sent electronically to all superintendents in Washington during the 2010-11 school year. The representative sample consisted of 201 superintendents in Washington State, which represents 71% of those invited to participate.

A Pearson’s product-moment correlation coefficient was computed to assess the relationship between each of five subscales (Fiscal Advantage, Instructional Options, 21st Century Skills, Learner-Centered Environment and Alternate Learning Environment) and district factors (District Size, Superintendent’s Number of Years of Experience and Online Learning Status). Themes surfaced from the open-ended survey items using the constant comparative method of analysis. The results were organized into four areas to address the research questions concerning issues, purposes, recommendations and demographic impacts on perception.
The findings suggest that Superintendents agree that online learning is not for all students; instead they recommended blended learning as an option, combining traditional face-to-face with online instruction. The issues that emerged focused on financial impacts, quality concerns, and the lack of regulation. Superintendents identified the key purposes of K-12 online learning to be scheduling flexibility, expanding options and individualization. Superintendent perception was most strongly associated with degree of participation in online learning, that is, superintendents in districts that currently provide online learning were more likely to promote the benefits of online learning.
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Dedication

In 1960, a very, very young couple had a child. As he grew, he struggled in school. He was always placed in the low reading group, which resulted in his aversion to reading and writing. In fact, he hated school. As time went by he underperformed academically in comparison to his peers. By the time he graduated from high school he still struggled with reading. Without employable skills or discernible passion he decided to go to the local community college. Upon admission to college he was assessed to determine his preparedness for English 101, the first in a series of required English courses. The placement test indicated his deficiency to be two levels below the requirement and he was placed in remedial English 098 his first semester of college.

Overtime, this young man went on to get his Associates Degree, his Bachelors Degree, even a Masters Degree; and today you are about to read his dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education.

How does this happen? What made the difference? I propose it started with a solid faith, commitment to family, unconditional love and unwavering relationships. You see, this young man had two parents that loved him very much, they believed he could do anything he set his mind to and they always encouraged him to reach higher. Thank you Mom and Dad!

This young man became an adult and met a beautiful God-fearing woman that has loved him unconditionally for over 30 years. She sustained him and supported him through good times and bad. Thank you Tami! This man raised two lovely, talented and incredibly caring children. They loved him, respected him, and made him the proudest father ever! Thank you Christi and Craig!

And finally, this man has three lovely grandchildren and hopefully more to come. They have given him unbelievable hope for the future, immense joy and a new understanding of love! Thank you Emily, Eva and Levi! In fact, this dissertation is dedicated to the three of you…to your fabulous future! You can and will make a difference in this world. I love you very much.

~ Grand Pappy G
CHAPTER ONE

OVERVIEW

The purpose of this research study is to examine the perceptions, interpretations, and reactions of K-12 superintendents in Washington in response to the rapid growth of K-12 online learning. In addition, this study investigates the data and trends through theoretical themes about disruptive innovation and complexity phenomenon. These themes are used to understand how superintendents perceive challenges and opportunities created by the rapid expansion of K-12 online learning.

The Research Problem

Increasingly, K-12 public school systems are unable to compete with online learning options offered to their students by other districts who have partnered with online learning service providers or have created online options themselves. More and more students are electing to attend online courses instead of their local traditional brick and mortar schools. For some students, the conventional approach does not provide a compelling motive to remain in their current school setting when compared to online learning options presented by other districts.

As a result of increased loss of students to out-of-district, online learning opportunities, superintendents are faced with developing plans and strategies to retain resident students and the per-pupil funding that supports staff and programs they generate. Some superintendents suggest this should not merely be a discussion regarding survival and competition in a new market-based system but should be an opportunity to conduct schooling differently instead (Christensen, Horn & Johnson, 2009; Lips, 2010; Moe & Chubb, 2008; and Alliance, 2010); perhaps even the catalyst for transformational change (Bush & Wise, 2010). Current literature provides little direction for Washington State superintendents on this issue. Superintendents continually
express the need to address the underlying problems that lead students and parents to exit local schools for online programs.

**The Rapid Growth of Online Programs**

Marketing analysis from Ambient Insight (Adkins, 2011), an international market research firm that uses predictive analytics to identify revenue opportunities for global e-Learning suppliers, indicate the United States market for self-paced eLearning products and services reached $18.2 billion in 2010 and is projected to reach $24.2 billion by 2015. These projections point to the K-12 market specifically as the fastest growing segment, with the International Association for K-12 Online Learning (iNACOL) reporting 2009 financial estimates for the K-12 online learning service industry to be a $300 million market and growing at pace of 30% annually (iNACOL, 2010).

Nationally, three million students participated in K-12 online learning in 2009, up from only 45,000 students in 2000 (Horn & Staker, 2011). In their book, *Disrupting Class: How Disruptive Innovation will Change the Way the World Learns*, Christensen, Horn, and Johnson (2008) project that by the year 2013, 10% of all instruction in our nation’s high schools will take place online, furthermore, they forecast that within ten years more than half of all instruction will be delivered online. K-12 online learning providers are successfully competing for and gaining students at an exponential rate. This growth was unanticipated and superintendents are considering new leadership strategies to meet this emerging need.

Moreover, traditional leadership approaches to addressing new innovations to teaching and learning can create obstacles to innovation, creativity, and change (Uhl-Bien, Marion & McKelvey, 2007). This study helps to identify emergent themes and dominant trends across
Washington State, including challenges superintendents face and perceived opportunities created by the rapid expansion of K-12 online learning.

**Background: The National Context**

The 2010 National Technology Plan (U.S. Department of Education, 2010c) identifies the role of online learning as providing anytime, anywhere education for students while preparing them to join a global technological work force. At the federal level, the Blueprint for Reform (U.S. Department of Education, 2010a) suggests changes in the reauthorization of the Elementary and Secondary Education Act (ESEA) to include “quality online learning programs” (p. 38). In a recent report, Ferdig and Cavanaugh (2011) note that the latest U.S. Department of Education (2010b) study on online learning is helping to shape the pending iteration of ESEA. The mandates of No Child Left Behind (NCLB) have certainly drawn more attention to the virtual schools for offering students choice. Besides these examples, there is little federal legislation that affects online learning policy beyond the way NCLB impacts schools.

The majority of influential online learning programs operate outside the district control with state policy as the major regulator. Notable national state policy developments in 2010 include the addition of new state virtual schools that opened in Vermont and Montana, bringing the total to 31 states that operate virtual schools. Alaska began the process of opening a statewide online network with eight states now supporting state-led online initiatives. Michigan and Massachusetts both created their first full-time online schools; 27 states now offer multi-district full-time online schools (Watson, Murin, Vashaw, Gemin, & Rapp, 2010).

Connecticut supported legislation that favors online learning; the first allows online teachers to be certified in any state and the other requires districts with a dropout rate of 8% or higher to establish an online credit recovery program (Watson et al., 2010). A recent bill (Senate
Bill 1184) in Idaho reallocated money the state had been giving to local school districts for teacher salaries to now be used for technology and online learning.

Online learning has traditionally been viewed as a solution for rural school districts to offer more courses, but many large urban school districts created or significantly expanded their online offerings in 2010 (Ferdig & Cavanaugh, 2011); New York City and Los Angeles opened their first full-time online schools. Chicago school officials announced a pilot program to add 90 minutes to the school day at 15 elementary schools using online courses that are not teacher-led. Miami-Dade school officials were recently mentioned in the New York Times for finding an online solution that works its way around the state class-size limits in algebra classes (Gabriel, 2011).

The rapid proliferation of online learning is further accelerated in states where competition and charter schools are encouraged and allowed by public policy. This national online snapshot illustrates the varied responses states have used to approach the issue of providing options for students. In many cases, online learning was first initiated by legislative policy supported by for-profit online providers with little research to validate this shift from public to private funding, and online versus traditional schooling.

**Background: Washington Policies and Effects**

There were at least 41 K-12 online programs in Washington offered during the 2009-2010 school year (Nelson, 2011). Washington is one of only ten states that do not permit charter schools, so all of these programs are run by school districts with an estimated 13,000 students enrolled full-time and another 2,800 students enrolled in online supplement courses three-quarters of which were high school age (Watson et al., 2010). This total represents about 2% of Washington’s K-12 population.
In his report to the Washington State Legislature, Nelson (2011) reported that 6,452 students transferred from one district to another to attend an online school program in the 2009-2010 school year. Furthermore, of the 295 school districts in the state, 252 had at least one student transfer out of the district to attend an online school program in another district. A total of 13 districts lost more than 100 students to an online school program while the majority of districts, 177 of the 252, lost less than 25 students. Nevertheless, for many of the smaller districts, the financial impacts are still significant, as the state funding for the student now flows to the non-resident district. Nelson’s (2011) report shows that only 22 districts had students transfer into their online programs while the five largest online programs in Washington captured 93.5% of the transfer FTEs. The loss of students and the revenue they generate has hit Washington public school districts hard, with the loss of about $5,500 per student, per year.

Policy Effects

Washington policy expanded its definition of a full-time student in 2005 with Senate Bill 5828 and paved the way for the online learning explosion in Washington by giving online programs the same per pupil funding as traditional schools. This legislation created the nation’s least regulated K-12 online system of all fifty states at that time (Burwell, 2008).

These developments in Washington have led to concerns about quality, equity, and accountability. The resulting lack of oversight prompted a re-examination that led to Substitute Senate Bill (SSB) 5410, which was signed into law by Governor Gregoire in 2009. Substitute Senate Bill (SSB) 5410 established the newly created Digital Learning Department (DLD) under the supervision of the state’s Superintendent of Public Instruction (OSPI). In addition, $1.3 million were budgeted to fund this office and the mandates of Substitute Senate Bill (SSB) 5410
over two years. The intention of this legislation and the DLD was to provide much needed oversight (Nelson, 2009).

Washington’s online policies are based on Substitute Senate Bill (SSB) 5410. Substitute Senate Bill (SSB) 5410 created the Digital Learning Department (DLD), which replaced the Digital Learning Commons (DLC), a nonprofit supported by the legislature in 2003. Specifically, Substitute Senate Bill (SSB) 5410 directs OSPI to provide:

- information about and access to online learning course providers and online school programs;
- a multi-district online learning provider review process to ensure continued access to quality programs and providers;
- model agreements between school district and online learning providers to increase the scope and reach of online learning options in Washington;
- model policies and procedures around online opportunities to guide school boards;
- yearly reports on state online courses and programs in Washington; and
- assistance to school districts, students, and parents around online learning.

The DLD has roles in both reviewing and approving multi-district online learning providers, while also offering online courses from approved course providers to districts.

As a result of Substitute Senate Bill (SSB) 5410, School Boards were required to pass a policy and a set of procedures around online learning in 2010. In these documents, school districts must address student eligibility criteria, types of online courses available to students through the school district, methods districts will use to support students success, when school districts will pay course fees and other costs, and the granting of high school credit. In addition,
districts are required to provide information to students regarding online learning options (Nelson, 2009).

Quality assurance was addressed in Substitute Senate Bill (SSB) 5410 as well. The DLD solicits the advice of an advisory committee comprised of key constituents in online learning across the state. The DLD created a process and set the criteria for approving multi-district online learning providers (Morgan, 2009). From 2009 to 2012 the DLD has had four approval rounds and approved 30 providers (Nelson, 2012).

Superintendent Challenges

The loss of local students to out-of-district, online operations has superintendents adding online programs to their program offerings. The effort of superintendents is both to improve program options and quality and reduce the financial loss associated with declining student enrollment due to out-of-district online learning opportunities.

It appears that K-12 online learning options in Washington State with inception dates prior to 2005 were developed by school districts primarily motivated to provide options and alternatives for students, while the incentive of those created after 2005 appear to be driven by profit or survival motives. Out-of-state and out-of-district K-12 online learning providers have capitalized on a profitable opportunity in Washington.

Superintendents are also challenged to demonstrate the importance of what public schools can and should provide. Many are struggling with how to communicate to the public the value added by participation in the traditional system. The challenges are compounded by an uncertain economic future, looming teacher layoffs, and education cuts statewide in the billions of dollars (Alliance, 2010).
Theoretical Framework Themes: Innovation, Leadership and Change

Three themes dominate the theoretical framework for this study: Innovation, leadership, and change. First, innovation and the disruptive innovation theory (Bower & Christensen, 1995) help to examine and describe the exponential growth of K-12 online learning as an opportunity for innovation and leadership. Next, leadership and the complexity leadership theory (Marion & Uhl-Bien, 2001) provide a logical perspective to discuss superintendent leadership as it pertains to the novel, complex issues in the sudden emergence of online learning. Finally, the theory of change as viewed through the lens of visionary/emergence leadership (Snyder, Acker-Hocevar & Snyder, 2000) will provide more specificity to the notion of complexity leadership as it relates to this topic. This section briefly describes each of the three frameworks and how they relate to this research study.

Innovation: Disruptive innovation theory. Bower and Christensen (1995) characterize the rapid growth of K-12 online learning as an exemplar of disruptive innovation theory, a concept first presented in their article, Disrupting Technologies: Catching the Wave. Christensen (1997) brought further clarity to the theory and coined the term “disruptive innovation” in his book The Innovators Dilemma. Originally, he intended this work for business executives, but later added the implications for the social sector in both the health care industry and education in 2008.

Christensen (2008) describes a disruptive innovation as a different type of innovation and not the more typical breakthrough improvement, or what he calls a “sustaining” innovation. According to Christensen (2008), a disruptive innovation does not originally compete with the traditional market. He says the product is originally not as good as what has been offered historically and as such is targeted toward individuals without an option: non-consumers. When
applied to public schools, the disruptive innovation framework suggests that online providers first focused their market attention on perfecting online learning with non-consumers. Christensen (2008) gives the following examples of non-consumption in public schools: Students who desire Advanced Placement (AP) courses in districts with limited offerings, students in rural schools without a breadth of course offerings, students who needed to repeat a class for credit recovery, and home schooled students. In each case, students had no other choice; they could do nothing or try the online option. Online providers have honed their offerings now to the point that costs have declined and their services have improved.

**Leadership: Complexity leadership theory.** Complexity theory, as defined by Marion and Uhl-Bien (2001), “is a science of complexly interacting systems; it explores the nature of interaction and adaptation in such systems as emergence and innovation” (p. 389). Complexity dynamics and the emergent outcomes of adaptability, innovation, and learning are crucial for success in today’s highly complex world and a cornerstone to the examination of leadership in this study.

Applying the concepts of complexity theory to the study of leadership has resulted in what has been referred to as complexity leadership. Based on this framework, leadership is viewed as an interactive system of dynamic, unpredictable agents that interact with each other in complex feedback networks, which can then produce adaptive outcomes such as knowledge, dissemination, learning, innovation, and further adaptation to change (Uhl-Bien, Marion & McKelvey, 2007). Complexity thinking provides a unique perspective by which to view leadership. It focuses on the emergence of innovation in an organization and the leader’s role as it relates to that innovation. It sees leadership providing linkages to emergent structures within and among organizations. It fosters and speeds up the emergence of distributed intelligence. It
involves creating conditions that enable productive, but largely unspecified future states (Avolio, Walumbwa & Weber, 2009).

In *Leadership in Organizations*, Yukl (2010) also briefly mentions the notion of complexity leadership theory and suggests the challenging part of complexity theory for superintendents involves emergent processes and adaptive outcomes that are often unpredictable in advance. The interaction between online learning and school districts is indeed unpredictable; adaptation is needed from our K-12 school systems.

**Change: Visionary/Emergence leadership.** Synder, Acker-Hocevar, and Synder (2000) helped to advance the thinking on complexity theory in her book *Living on the Edge of Chaos: Leading Schools into the Global Age*. The authors present a theory of change around the notions of both chaos and complexity theory. They emphasize the importance of leaders paying attention to emerging trends and the idea of emergence. The basic claim of complexity theory is that complex systems cannot be controlled, but instead they adapt to their environment. Complexity theory says systems are never in equilibrium and are inherently unstable. The principle of emergence is indicative of complex, dynamic systems. Increased complexity is a fundamental property of complex, dynamic systems. A system’s survival has to do with information that is gathered about the environment and its response. The concept of emergence from within an organization is central to understanding the whole natural system.

Snyder et al. (2000) suggest the need for a style of leadership on the “other side” of visionary leadership, which they call emergence leadership. They argue that both “visionary and emergence perspectives are vital to the critical balance of a leader in pursuit of a dream” (p. 314). They illustrate visionary/emergence leadership as the “yin and yang for developing learning and adaptive organizations; the tension between what the organization might become and the
‘unfolding journey to that end’” (p. 314). This change leadership model provides an appropriate framework for this study of educational leaders facing the issues that online learning presents.

**Purpose**

The purpose of this study was to examine the perceptions, interpretations, and reactions of K-12 superintendents in Washington in response to the rapid growth of K-12 online learning. The study examines dominant trends in superintendent perceptions, interpretations, and reactions across the state through the theoretical themes of disruptive innovation and complexity phenomenon. These themes were used to understand how superintendents perceive challenges and opportunities created by the rapid expansion of K-12 online learning.

The study was guided by these research questions:

1. What are the issues that impede or support the implementation of online learning as perceived by Washington superintendents?
2. What do Washington superintendents identify as the purposes for online learning?
3. What recommendations do Washington superintendents suggest for successful implementation of online learning?
4. How does district size, years of experience, and online status affect superintendent perceptions of the online learning environment?

Although the problem of the rapid growth on online learning is well documented, there is scant research to inform superintendents on how they can or should respond to disruptive innovations, and in this case, the disruption caused by the growth of online learning. This significant gap in the literature has prompted this research study.
Design and Methodology

I conducted a statewide survey of superintendents regarding emergent themes and dominant trends found in the survey data. By gathering data from all superintendents, I depict the current perspectives on the issues described above and make recommendations from the theoretical framework themes: Innovation, Leadership, and Change. The survey was primarily adapted with permission from a survey used in previous research on the topic (Augustine-Shaw, 2001). I modeled the design from Derrington and Sharratt’s (2008) statewide survey of superintendents.

To enrich the data and provide triangulation where needed, qualitative data were collected through the use of five open-ended survey items. The methods used in related research and the research questions posed here prompted the need for this mixed-methods design approach (Creswell, 2008).

Significance of the Study

The rapid growth of online learning, challenges to traditional funding streams, and lack of research to guide policy and practice provides the rationale for this study. It represents an opportunity to discover how superintendents perceive this disruption to the traditional K-12 brick and mortar system as well as investigate the novel and daring ways some superintendents have embraced this challenge of online learning as an opportunity. A key question would be: How are superintendents statewide responding to this issue? The issue of online learning certainly presents an adaptive challenge for superintendents to wrestle with and will require an adaptive leadership approach to generate solutions. This disruption to the status quo is unique in that it is being forced from outside the organization and is not welcomed by many superintendents. The competition and for-profit motive has many superintendents reeling from the impact on district
budgets. Heifetz (1994) suggests a “view from the balcony,” stepping back and examining the issue from a detached perspective. Superintendents using this frame could seize the opportunity these emergent ideas bring, along with the prospect to disrupt the status quo at its core in terms of delivery systems.

A study of superintendents and their perceptions of K-12 online learning is important for several reasons. First, understanding how superintendents are reacting to online learning can help reveal the underlying logic of their decisions and can inform other superintendents so they can better evaluate their options. Second, policy makers need a better understanding of superintendent options and reactions to inform new policies and future actions. Finally, this study will add to the scholarly research and literature in the field by investigating the phenomenon of disruptive innovation. Does the growth of online learning provide the opportunity for innovation to occur? What would assist superintendents to react in ways that support true innovation?

**Organization of the Dissertation**

The organization of this dissertation includes five chapters. Chapter One gives a contextual overview with an introduction to the research problem and research questions. Chapter One also introduces the three themes and the theoretical framework recommended for this study.

**Chapter One: Overview** is organized into the following sections:

- The Research Problem
- The Rapid Growth of Online Learning Programs
  - Background: The National Context
  - Background: Washington Policies and Effects
• Policy Effects

• Superintendent Challenges

• Theoretical Framework Themes: Innovation, Leadership, & Change
  - Innovation: Disruptive Innovation Theory
  - Leadership: Complexity Leadership Theory
  - Change: Visionary/Emergence Leadership

• Purpose

• Design and Methodology

• Significance of the Study

• Organization of the Dissertation

Chapter Two: Literature Review is the literature review organized into the following sections:

• Online Learning and Education Reform

• Research about the Purposes of Online Learning

• Research about Growth of Online Learning

• Research about Effects of Online Learning Programs and Approaches

• Limitations of Research Literature about Online Learning Programs and Approaches

• Review of Literature on Superintendent Leadership Related to Online Learning

• Leadership Perspectives: Is Leadership for Online Learning Really that Different?

• Research on Interpreting Challenges from Online Learning

• Policy Issues and Recommendations

• Summary

Chapter Three: Methods describes the mixed methods approach used to design the
study and is organized into the following sections:

- **Research Design**
  - Design of similar research

- **Instrument Development**
  - Expert Opinion
  - Instrument Field Test
  - The Final Instrument
  - Subscales

- **Participants**

- **Analysis Methods**
  - Factors
  - Correlational Analysis
  - Open-Ended Responses

**Chapter Four: Results** reviews the findings and includes descriptions and analysis of the collected data:

- **Characteristics of the Respondents**

- **Correlation Analysis**
  - District Size
  - Years of Experience
  - Online Status

- **Other Relevant Data Supporting the Research Questions**
  - Issues that Impede or Support
  - Superintendent Roles and Recommendations
The Strongest Agreement and Disagreement

- Qualitative Analysis
  - Finance Theme
  - Quality Assurance Theme
  - Regulations Theme

Chapter Five: Discussion & Implications presents conclusions and suggests implications.

- Research Question #1: Issues that Impede or Support Online Implementation
  - Financial Barriers
  - Concerns About Quality
  - Regulations

- Research Question #2: The Purpose of Online Learning

- Research Question #3: Recommendations

- Research Question #4: Demographic Impact on Perception
  - District Size
  - Superintendent Years of Experience
  - Online Status

- Political Implications
  - National Politics
  - Washington Politics
  - Provider Politics
  - Common Core State Standards

- Conclusions
- Personal Revelation
  - Recommendations
  - Future Research

References, followed by Appendices, are found after Chapter Five.
CHAPTER TWO

REVIEW OF THE LITERATURE

Nationwide, K-12 online learning options are growing rapidly (Watson et al., 2010), and superintendents are responding without comprehensive guidance from the profession (Empowering, 2010). The Alliance for Excellent Education (2010) offers bold claims regarding the promise and future of online learning and its effect on the traditional K-12 brick and mortar system, including increasing student access to quality teaching and learning with flexibility for individual learning across school and district boundaries (Bush & Wise, 2010).

President Obama, in a speech given to a crowd in Cairo, Egypt in 2009, said this about the future of online learning: “We [the United States] will invest in online learning for teachers and children around the world; and create new online networks, so a young person in Kansas can communicate instantly with a young person in Cairo” (Obama, 2009).

Online Learning and Educational Reform

The rally for online learning is now being tied to current educational reform. Many (Lips, 2010; Moe & Chubb, 2009; Alliance, 2010) espouse the same mantra: with online learning, time is the variable and learning is the constant. Today’s online learning providers and supporters advocate for learning that is measured by proficiency not seat-time where the learning schedules vary based on student need and where the anonymity of online learners is touted as a way to remove demographic barriers. In reference to online learning, a recent report stated, “Among the benefits of a school system that extends beyond the neighborhood or school district is the potential for a school in which diverse groups of students are gathered to learn in ways that encourage tolerance” (Ferdig & Cavanaugh, 2011, p. 4).
Online learning has the potential to be academically and demographically blind; it can break down barriers to provide disadvantaged students with access to our best teachers.

Advances in technology have improved the quality of curriculum and recent literature (Bush & Wise, 2010; Alliance, 2010) is showing the need for leaders and policy makers to embrace online learning options. Early evidence shows that blended learning, where a student has access to both online learning content and access to a real teacher in school, outperformed both traditional methods and online-only methods (Horn & Staker, 2011; U.S. Department of Education, 2010b).

Today’s online virtual schools can be seen as the digital age version of state solutions to problems of educational equity. Although the beginnings for online learning service providers were in advanced placement and highly capable students, they have begun to shift toward providing opportunities for all, particularly the disadvantaged. Many online learning service providers are developing solutions to the “digital divide.” Some programs even loan students a computer and pay for high-speed Internet connectivity (Rose & Blomeyer, 2007).

**Research about the Purposes of Online Learning**

Picciano and Seaman (2008) surveyed school administrators nationally on the extent and nature of online learning in K-12 schools. They show that:

- More than 75% of K-12 schools and districts say they need online learning to offer courses not otherwise available.
- More than 75% of the K-12 schools and districts report needing online learning to meet the needs of a specific group of students.
- Nearly 70% of the K-12 schools and districts are looking to online learning to offer advanced placement and/or college level courses.
• 60% of the K-12 schools and districts reported that they need online learning for credit recovery.
• More than 50% need online learning programs to reduce student scheduling conflicts.
• 75% of the districts engaged in online learning expected their online enrollments to grow.

Research about Growth of Online Learning

The number of students engaged in online learning nationally surpassed one million in 2009, which was an increase of 47% from 2006 (Picciano & Seaman, 2009); and the latest estimates contend that over three million students participated in K-12 online learning last year (Horn & Staker, 2011). As indicated in Chapter 1, marketing analysis from Ambient Insight, an international market research firm that uses predictive analytics to identify revenue opportunities for global e-Learning suppliers, noted the United States market for self-paced eLearning products and services reached $18.2 billion in 2010 and is projected to reach $24.2 billion by 2015 (Adkins, 2011). These projections point to the K-12 market specifically as the fastest growing segment, with the International Association for K-12 Online Learning (iNACOL) reporting 2009 financial estimates for the K-12 online learning service industry to be a $300 million market and growing at a pace of 30% annually (iNACOL, 2010).

Nationally, three million students participated in K-12 online learning in 2009, which is up from only 45,000 students in 2000 (Horn & Staker, 2011). In their book, Disrupting Class: How Disruptive Innovation will Change the Way the World Learns, Christensen, Horn, and Johnson (2008) project that by the year 2013, 10% of all instruction in our nation’s high schools will take place online. Furthermore, they forecast that within 10 years, more than half of all instruction will be delivered online.
Research about Effects of Online Learning Programs and Approaches

The most in-depth, large-scale study on online learning is a meta-analysis and review of online learning studies completed by the United States Department of Education (2009). It was an evaluation of evidence-based practices in online learning that included 51 online studies. They found, on average, students in online conditions performed better than those receiving face-to-face instruction. The review looked at studies comparing both online and blended learning environments to face-to-face instruction. Studies that focused on blended environments and face-to-face instruction discovered that blended instruction has been more effective, providing more rationale for the effort required to design and implement blended approaches.

Their main findings were:

- Students who took all or part of their class online performed better on average than those taking the same course through traditional face-to-face instruction.
- Few rigorous research studies on the effectiveness of online for K-12 students have been published; 44 of the 51 were based on research with older learners.
- Learners in online conditions spent more time on task than face-to-face learners.
- Online learning can be enhanced by giving learners control of their interactions with media and prompting learner reflection.
- From 1989 to 2004, there were only 15 studies that met strict criteria for internal experimental validity comparing online courses with conventional courses.

Cavanaugh, Gillan, Hess and Blomeyer (2004) produced the first meta-analysis on online educational outcomes focused entirely on K-12 education. It is a meta-analysis that is mentioned frequently in the literature. They found that virtual instruction produced results measuring students achievement that were “as good as or better than” traditional face-to-face instruction.
Florida TaxWatch (2007) did a comprehensive assessment of the Florida Virtual School (FLVS) that examined the efficiency and efficacy of the FLVS. At the time, FLVS offered online courses and advanced placement courses for middle and high school students statewide. Their study examined student demographics, achievement, and cost effectiveness. They found that, in the 2004-2005 and 2005-2006 school years, the FLVS students consistently outperformed their counterparts in traditional Florida middle schools and high schools on such measures as grades, advanced placement scores, and FCAT scores. All FLVS teachers were certified and their pay was tied to student performance, making FLVS the only true performance-based educational system in the state at that time. The study found that FLVS is a bargain for Florida taxpayers largely because it had no expenses related to transportation or construction and maintenance of physical facilities. They also found that the FLVS served a higher proportion of minority and underserved students demographically statewide.

Lowe (2005) found that teacher instructional practices were transformed by learning how to teach online in developing new skills and pedagogical strategies using technology. The research indicated that online teaching improves practices in both virtual and face-to-face settings. Lowe examined how online teachers might serve as reform agents in the schools where they teach. Lowe found that interaction was at the heart of online learning; teachers in the study reported that their interactions with students, parents, and colleagues more often were focused on teaching and learning in online courses than in traditional settings.

Weiner (2003) produced the first significant research study on the socialization of students in full-time, online public schools. The results of this study provided substantial evidence supporting the conclusion that students enrolled in full-time, online public schools are at least as well socialized as equivalent students enrolled in traditional schools. The study found
that online students might even have an advantage in the social skills development when they are highly engaged in activities outside the school day involving both peer interaction and activities not involving peer interaction but interaction with others.

**Limitations of the Research Literature about Online Learning Programs and Approaches**

There is currently not a single, large scale, national study comparing students taking online courses with traditional students, using control groups in instructional design (Patrick & Powell, 2009). Most of the research that has been done on online learning has been focused on adult learners and not the K-12 population. The few K-12 online studies that do exist are criticized for having skewed results (Barbour, 2009).

Barbour (2009) reports, “another troubling aspect is the lack of literature related to the design and delivery of asynchronous content” (p. 15). Asynchronous content is delivered at your own pace anytime, anywhere; most of the research that exists in K-12 online learning focuses on synchronous content, where students are locked into a required pace and timing restraints. Barbour (2009) contends that students enrolled in online programs have a lower participation rate in assessments used to determine effectiveness; this claim matched the recent trend reported in Washington by Nelson (2011). Barbour (2009) points to the high drop out rate of online students. Specifically the FLVS study mentioned above showed 20-50% of the virtual students dropped out of the FLVS over a two-year period; McLeod et al. (2005) reported the student performance results of the FLVS study were skewed as a result.

Another limitation in the FLVS study was in 2007 FLVS highest enrollments were in Algebra I and Algebra II courses. Students typically took these courses in their first year of high school; as a result, online students taking these courses were for the most part taking the course for the second or third time (Barbour, 2009).
Watson, Gemin, and Ryan (2008) point to another possible example of negatively skewed results. The largest growth in K-12 online enrollment was in full-time online schools. Full-time online schools are those where the student takes no classes at their home school; many online schools have a higher population of at-risk kids raising questions about the demographic characteristics, such as the proportion of at-risk students in these schools (Barbour, 2009).

Moreover, weaknesses of the research identified by Barbour (2009) show, “that the vast majority” (p. 17) of virtual students were planning to attend a four-year college and many were honor students. Barbour (2009) underscores similar results found in a Michigan study (Watkins, 2005) where 45% of the virtual students were either in advanced placement courses or were identified as academically advanced students. Likewise, promising findings from the meta-analysis by the U. S. Department of Education (2009) of blended programs have limited generalization because of the proportion of adult learners in these programs.

Review of Literature on Superintendent Leadership Related to Online Learning

Augustine-Shaw (2001) conducted a study of leadership perspectives regarding online learning featuring 263 superintendents in Kansas. The major findings indicated that superintendents felt (a) new teaching and learning requirements impeded implementation of online learning, (b) online learning provides an additional source of revenue for districts, (c) professional development is needed to strengthen understanding and skills of staff, and (d) online learning provides options for students through alternate models. The study further concluded that (a) the ability to adapt to change was a critical skill for successful online implementation (b) financial implications are central to the implementation of online learning, and (c) quality online learning should align with local standards.
In a similar study including 91 superintendents in Appalachian, Ohio, Robison (2007) examined superintendents’ perceptions of online learning. The findings included the perception that online learning should only be used as an alternative and not a replacement for the traditional classroom. In fact, superintendents expressed “strong reservations” toward using online courses for anything but an alternative to the traditional classroom. Among their particular concerns of online learning were the lack of student motivation and lack of social interaction with online courses.

Augustine-Shaw (2001) and Robison (2007) were the only two researchers I found who specifically examined superintendent perceptions of online learning. In both, from rural Ohio to the entire state of Kansas, the researchers found patterns of resistance to change regarding online learning. Barriers and challenges included financial concerns, reservations to expansion beyond alternative settings, and apprehension about quality content. With this in mind, Brown (2009) examined the perceptions of online learning administrators nationwide to determine their perceptions of the purpose and potential for online learning. The findings suggest that these administrators, unlike the superintendents in earlier studies, saw great promise. They include the benefit of individualization for all students as the key purpose of online learning, quite a contrast to earlier perceptions of superintendents. They also felt the purpose of online learning is to reform the traditional educational systems. The desire to innovate practice and transform education was among the most common perception of these school leaders.

In a related study of principals, Heidlage (2003) conducted a study of Catholic High School principals’ perceptions nation-wide concerning the purpose of online learning. This study supports research that many feel the online student should be an independent, responsible learner with technological skills. In this case, these administrators saw online learning as a more
rigorous option. However, they too had reservations about its use for all students, and many felt a need to limit the types and numbers of students that participated as well as the courses that were offered.

Applying the theoretical perspective or themes used here, Superintendents need to adopt an adaptive leadership perspective, where emergent ideas often disrupt the status quo. In his book *Leadership without Easy Answers*, Heifetz (1994) suggests that adaptive work requires a change in values, beliefs, and/or behaviors. Adaptive change requires sustained periods of disequilibrium. Heifetz says school leaders fail to adapt for three reasons: (a) They misperceive the threat, (b) the challenge may exceed the culture’s adaptive capacity, and (c) they resist the pain of adapting. Avilio et al. (2009) also encourage leaders to hone their adaptive skills, encouraging engagement to overcome a challenge. Adaptive leadership is a critical belief for the success of a leader faced with addressing the innovation of online learning.

In *Good to Great*, Collins (2001) has a chapter devoted to this notion of how great leaders behave in (or with) regard to technology. His research shows that great leaders think differently about technology, and in good to great organizations he found technological sophistication. Level five leaders saw technology as an accelerator, not the cause of momentum, nor the creator of it. Great leaders never began their transitions to greatness with pioneering technology, yet they all became pioneers in the application of technology once they grasped how it fit.

Dede (1993) suggests that leaders sharpen the attribute of envisioning opportunities, claiming that they have “the ability to communicate desirable, achievable futures quite different from where the present is drifting” (p. 1). He also advocates the need to displace cherished misconceptions—mistaken beliefs most people hold about teaching and learning that form a
barrier that blocks improvement. Superintendents must embrace the belief that the online learning movement is not about technology, but instead a way to improve equitable access to quality teachers and content.

Mirra (2004) gave insight into the quandary of the role of the school superintendent as a technology leader by saying, “Superintendents are thrust into the complex world of technology leadership often unarmed with little technology related training or expertise” (p. 1). Elmore (2004) also suggests that standards-based school reform demands a new kind of leader. Avolio et al, (2009) remind us that leadership models designed for the past century may not capture the leadership dynamic of organizations today. The disruptive innovation of online learning and its growing presence in our traditional schools has created a need to examine leadership models for success today.

To make informed decisions amidst these multifaceted issues, superintendents must think outside their existing paradigm; change of the second magnitude is required within their school organizations. This second order change concept was originated by Weakland et al. (1974) and was connected more closely to school leadership by Marzano, Waters, and McNulty (2005). Their approach requires leaders to break from tradition, status quo, and business as usual. Leadership during these times necessitates the development of new knowledge and skills. The online learning option has caused a significant disturbance to the traditional school system. Superintendents who facilitate second order change, change that impacts learning and school structures, are the challengers of the status quo. Davies (2010) simply states, “Central to the literature on technology leadership is the idea of change” (p. 58). Change is at the heart of this discussion and change leadership is at the core of this issue to be studied. The notion of disruptive innovation extends current conceptions of leadership in response to this sudden,
unexpected, and ill-understood intrusion of technology; theoretically this reform will benefit students.

**Leadership Perspectives: Is Leadership for Online Learning Really that Different?**

The vision of the virtual school movement is to ensure more equitable access to effective high quality content and instructors. Abrego and Pankake (2010) in their article *PK-12 Virtual Schools: The Challenges and Roles of School Leaders* provide five simple perspectives for effective and equitable leadership of online learning:

1. Prepare students for success.
2. Prepare teachers for success.
3. Use interactive flexible course design.
4. Monitor and support teachers.
5. Monitor and support students.

I conclude that this perspective is no different than the needs for leaders of traditional schools. It matches the leadership perspective supported by City, Elmore, Fiarman, and Teitel (2009) with heavy focus on the instructional core as presented in Harvard’s Public Education Leadership Project (PELP) model. To ensure effective and equitable practices, the online school leader must also focus on the instructional core: students, teachers, and content.

**Research on Interpreting Challenges from Online Learning**

Watson (2011) identifies funding as the single most important policy barrier in online learning. Few studies have compared the costs of online learning schools to traditional schools; those that do suggest that the cost of educating in an online environment is about the same as educating the same student in a brick and mortar school. Online pundits believe that accounting
and reporting should be freed from seat-time and census dates. An innovative option is to fund students based on achievement outcomes.

The lack of sustainable funding is the most difficult for a school leader to face when dealing with online learning. Leaders must provide fiscally responsible solutions that benefit students; fiscal studies show that, minus the capital expenses, online learning costs are about the same as traditional schooling (Watson & Gemin, 2009). Many argue that in order to provide equitable solutions for those who elect the online learning option, the funding for online solutions should be comparable. Initial course development costs alone can reach $30,000 to develop one quality course.

Traditional funding based on student attendance also creates a challenge. In fact, funding for online schools ranked among the highest concerns of school administrator in a recent nationwide survey (Picciano & Seaman, 2009). Current funding systems nationally do not adequately address the notion of students who are not necessarily in a building and who are working at their own pace.

The list of other challenges includes certification for teachers, high speed internet access for all students, and access for handicapped students; with these challenges come tremendous opportunities! The virtual school movement has the potential to revolutionize the way we look at educational challenges (Lips, 2010).

**Policy Issues and Recommendations**

Policy development lags behind the rapid growth of online learning; this has created a reactive climate for school officials. Washington State alone experienced a 700% increase in online students from 2001 to 2008 (Mueller, 2008). Three school districts were required to pay back over $5 million collectively as a result of inaccurate reporting of online students in a 2006
audit. Since then, the oversight of Substitute Senate Bill 5410 (2009) has helped provide guidance to avoid similar problems. Most states predict student counts on the idea that students are in a classroom; this results in a lack of funding for online programs. There is an obvious need to change accounting practices. Many proponents suggest a shift toward the mastery of state standards over seat-time when awarding high school credit. For example, Alabama just passed a law that allows students to earn credit based on mastery of skills. This year, twelve states have new policy supporting the move to proficiency-based credit. Educators and policy makers are increasingly recognizing that seat-time is a poor substitute for student learning.

Leaders and policy makers should avoid policies that require on-site or face-to-face instruction. Mandating enrollment cap limits and setting funding levels for online students below funding for other students hurts the successful development of online learning.

The Alliance for Excellent Education (2010) predicts the promise of online learning to help meet education’s larger looming crises and challenges. His work supports the ability of online learning to help resolve the mismatch between future global workplace needs and current levels of educational attainment. He also views online learning as a way to mitigate the impact of the “funding cliff” in American education. Further, he thinks online learning can help deal with the predicted upcoming teacher shortage. Integrating a system of efficient technology applications into an effective school model can transform education and enable communities to deal with steady growing evidence of the cost effectiveness of online learning.

Watson and Gemin (2009) recommend the following areas for policy attention to promote effective practice in online learning. Policy makers should consider and clarify the differences between full-time and supplemental programs as well as differences between single-district and multi-district programs. Standards and monitoring expectations are needed for
online programs and/or program authorizers. They recommend balanced oversight by leaving room for flexibility and innovation. Policies that create reporting requirements for online schools are needed. Finally, Watson and Gemin (2009) recommend policy to provide sustainable funding that entails (a) funding for a state-led, supplemental program that will benefit from economies of scale in offering online courses to districts across the state; (b) funding for full-time schools at the same operational cost level, not including capital costs, as other schools in the state; and (c) allowing students to choose an online school that meets their needs, while allowing funding to follow the student.

Johnson, Glick, and Rose (2010) give the following advice for school leaders looking to promote equity in their online programs:

- Develop initial application and/or entry surveys to determine what support systems each student may need in order to be successful in online courses.
- Remove student assessments, both formal and informal, that are used to deny students access to virtual educational opportunities that reinforce preconceived notions about who can be successful in online courses.
- Remove requirements that students must have a home computer with Internet access in order to participate in virtual educational programs.
- Prepare guidance counselors, special education teams and others who influence student enrollments in virtual school programs and courses. Help them to address negative assumptions about online education that adversely impact student enrollment. Identify the support systems to ensure students’ success.
Summary

Since the introduction of the personal computer to education in the 1980’s, school reform efforts tied to the use of innovative technologies have been commonplace, with little evidence of successful integration (Cuban, 1986). Nevertheless, Lips (2010) claims that online learning is different and has the “potential to revolutionize American education” (p. 9). Similarly, The Alliance for Excellent Education (2010) promotes online learning as the “solution” to the major crises in U.S. education today. Christensen et al. (2008) predict that online learning, as a result of the disruptive innovation theory, will become so pervasive that half of all U.S. high school students will take online classes in 2019.

Beyond reform, other motives for pursuing online learning mentioned in the literature vary considerably. Lips (2010) suggests the use of online learning to save districts money while Adkins (2011) encourages the pursuit of K-12 online learning by entrepreneurs to make money. Surprisingly few make the claim that online learning should be embraced to promote student achievement. While proponents of online learning have concluded there are indeed some benefits to using online learning (Cavanaugh et al., 2004), common findings in most reports show online learning to make “no significant difference” (Reeves, 2005; Russell, 2002) in student achievement when measured comparatively against traditional methods. In fact, Barbour and Reeves (2009) argue that “the benefits of virtual schooling have been largely reported based upon the perceptions of those involved in the delivery of virtual schooling and not based upon robust research” (p. 407). Even so, a more recent study (U.S. Department of Education, 2010b) does show promise for online learning as an effective alternative to the current traditional school structure and program approach.
Regardless of the benefits or lack of, the growth of K-12 online learning and its impact on traditional education is well documented and inarguable (Watson et al., 2010). Consequently, this study is not merely focused on the effectiveness of online learning but more importantly, it investigates it as a leadership challenge. More distinctly, the purpose of this study is to examine the perceptions, interpretations, and reactions of K-12 superintendents in Washington in response to the rapid growth of K-12 online learning.

With that being said, research regarding superintendent opinions of online learning indicates perceptions on this topic vary significantly and may be impacted geographically (Augustine-Shaw, 2001; Robison, 2007). Pertinent research upon which this study uses as a scaffold includes two similar studies regarding superintendent perceptions and understandings of online learning. Specifically, Augustine-Shaw (2001) found that only 23% of the superintendents in Kansas viewed online learning as a way to provide financial resources to their district, while almost 50% of the superintendents surveyed in Ohio by Robison (2007) felt that online learning incurred an unreasonable financial burden on their district.

Further findings show that an overwhelming majority of the superintendents surveyed in both states do not think online learning can meet the needs of all students. Augustine-Shaw (2001) found 86% of the superintendents in Kansas felt that online learning requires independent and responsible learners. Whereas, superintendents in Ohio were even more strongly convinced with 98% in agreement that online learning is only for responsible learners (Robison, 2007).

Finally, superintendents in both studies were leery of online learning. Among superintendents studied by Robison (2007) there was “a strong sense…that students are best served in a traditional setting” (p. 99). Even more surprising, 34% of those superintendents surveyed by Augustine-Shaw (2001) felt they should not be held accountable for the lack of
progress of their online students. The ability to adapt to change, financial implications, alignment to the standards, and expanded opportunities for all students continue to be the common themes that emerge in the literature concerning superintendents and online learning. Studies of superintendents and online learning are few and far between, with the last one completed four years ago (Robison, 2007). The rapid expansion of online learning continues despite the lack of supportive research; this is a topic worthy of consideration for further study.

In closing, online learning in the U.S. K-12 environment has only been a reality since 1997; as a result, there is much we do not know about its use in public schools. As you would expect, the lack of research concerning online learning is well documented in the literature (Barbour, 2009; Rice, 2006). The available research is focused primarily on adult learners and not K-12 education (Barbour, 2009). Moreover, very little research exists regarding leadership of online learning (Dede, 1993; Mirra, 2004), and only a small number of those studies have investigated superintendent perceptions of online learning (Augustine-Shaw, 2001; Robison, 2007). This gap in the literature led directly to the research questions posed in this study.
CHAPTER THREE

METHODOLOGY

The study examined the perceptions, interpretations, and reactions of K-12 superintendents in Washington in response to the rapid growth of K-12 online learning. The study was guided by these research questions:

1. What are the issues that impede or support the implementation of online learning as perceived by Washington superintendents?
2. What do Washington superintendents identify as the purposes for online learning?
3. What recommendations do Washington superintendents suggest for successful implementation of online learning?
4. How does district size, years of experience, and online status affect superintendent perceptions of the online learning environment?

This chapter describes the research design, instrument development, subject makeup and provides data analysis to address the research questions.

Research Design

To answer questions regarding perception, attitude, and opinion, Creswell (2009) suggests a survey design to provide a “quantitative or numeric description of trends, attitudes or opinions of a population” (p. 145). Fink (2009) also recommends surveys to collect information to describe, compare, or explain individual “knowledge, feelings, values, preferences and behavior” (p. 1). Surveys provide data about general trends and specific issues (Fink, 2009; Creswell, 2008). This study adhered to Fink’s (2009) guidelines for survey design, item format, technical quality, and analyses.
**Designs in similar research.** Most recently, in a national study of virtual high schools and their head administrators, Brown (2009) used a sequential, mixed methods study; collecting data from surveys, interviews and web sites to explore the purpose and potential of virtual high schools as reported by virtual school administrators.

Similarly, a study of Kansas’ superintendents by Augustine-Shaw (2001) used a mixed methods approach to explore leadership perspectives and policy issues regarding virtual school learning environments in Kansas K-12 public schools. She used focus groups, interviews, and Likert–type survey questionnaires as her data collection methods. A purposeful sampling process was used to invite superintendents to participate who represented different geographic locations, served varying sizes of school districts, and with superintendents who had been exposed to the virtual school concept.

In another study, Heidlage (2003) adapted Augustine-Shaw’s survey to explore his interest in trends of secondary Catholic schools across the country and their use of online learning. His data were collected using a Likert–type survey with opportunities in the survey for open-ended responses.

In a regional study in Ohio, Robison (2007) explored perceptions and experiences of superintendents and principals in a region of Ohio using primarily a quantitative data collection method. His data were collected using a Likert–type survey with opportunities in the survey for open-ended responses. He too modified the survey tool created by Augustine-Shaw (2001).

Research indirectly related to online learning examined the perceptions of three New Hampshire superintendents as to the institutional conditions they believed impacted a teacher’s ability to integrate technology (Shulman, 2004). Methodology for this multiple-site case study included a combination of interviews, observations, and document data.
Table 1 shows a comparison of the five studies mentioned that contribute to the body of research on the conceptions, perceptions, and/or perspectives of K-12 school leaders and K-12 online learning. This examination of prior research helped inform the use of a mixed methods design, particularly in administering a survey for this study.

Table 1

<table>
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<tr>
<th>Title</th>
<th>Author</th>
<th>Year</th>
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<th>Design</th>
<th>Methods</th>
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<td>Heidlage</td>
<td>2003</td>
<td>88</td>
<td>Quantitative</td>
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<td>Superintendent Conceptions of Institutional Conditions that Impact Teacher Technology Integration</td>
<td>Shuldman</td>
<td>2004</td>
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<td>Qualitative: Multiple Case Study</td>
<td>Interviews, Observations, &amp; Document Analysis</td>
<td>New Hampshire</td>
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<td>Online Courses in Appalachian Ohio High Schools: Perceptions and Experiences of Superintendents and Principals</td>
<td>Robinson</td>
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<td>Document Analysis, Online Survey, &amp; Interviews</td>
<td>United States</td>
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Instrument Development

This mixed methods study used SurveyMonkey to deliver a survey with three demographic items, 39 closed-ended survey items and five open-ended survey items to 287 superintendents in Washington. To ensure validity and reliability, the modified instrument was adapted, with permissions (see Appendices A and B), from surveys developed by researchers of similar, previous studies of superintendents in Kansas (Augustine-Shaw, 2001) and Ohio (Robison, 2007).

Augustine-Shaw (2001) developed research items focused on the purposes, issues, and recommendations of superintendents in regard to online learning in the K-12 environment. Her study included a survey of superintendents in Kansas using 50 closed-ended items and two open-ended items. This methodology provided a proven instrumentation scheme that fit nicely with this study including similar research questions.

Augustine–Shaw (2001) developed her survey by constructing items based on a review of the literature, guidelines from the Kansas State Department of Education, and focus group responses from practicing superintendents. She created survey items that asked questions centered on superintendent perceptions of the purposes, issues, and recommendations in regard to K-12 online learning. To provide further reliability for her survey, Augustine-Shaw conducted a two-stage pilot of the gathered items by first mailing her survey items for feedback to 12 administrators in districts with varying sizes across the state of Kansas, followed by a second stage review by a panel of 11 national online learning experts. She made the necessary adjustments to the survey items after this process was complete.
Specifically, for internal consistency reliability, Augustine-Shaw (2001) used Hoyt’s analysis of variance procedure on survey responses. This measure revealed moderate internal consistency (.83) of survey item responses (p. 124). For questionnaire validity, Augustine-Shaw (2001) conducted a factor analysis, “to discover empirical relationships among the questionnaire items and to assess construct validity” (p. 124). Factor analysis was also used:

... to determine whether factors could be identified from responses to questionnaire items. Factor loadings were derived from a principle components analysis with Varimax rotation. The principal components when subjected to the Varimax rotation further minimized the tendency toward a general factor or identified cluster. (Augustine-Shaw, 2001, p. 125)

The Varimax rotation identified seven factors with eigenvalues greater than 1.0 for her data set of 263 superintendents’ responses.

Robison (2007) slightly modified the Augustine-Shaw (2001) five-point Likert-type scale instrument for his study of 91 superintendents in Appalachian, Ohio. Like Augustine–Shaw, his research questions were focused on the perceptions of superintendents on the purposes of online learning as well as the issues of online learning in the K-12 setting. His survey used a four-point Likert-type scale and included 39 closed-ended survey items and three open-ended survey items. Robison made his modifications based on the comments and recommendations from respondents in his pilot survey; the changes included some rewording of both items and instructions for increased readability. Robison also elected to relocate some items within the survey for better alignment.

In order to retain the validity and reliability of the instruments established by the two previous researchers, only minor changes were made to the instrument for this study. Likewise,
the instrument was developed to answer similar research questions; the research questions for
this study were only slightly modified from the study by Augustine-Shaw (2001).

**Expert opinion.** To ensure the terminology and definitions matched existing
nomenclature promoted by the Washington State Office of Superintendent of Public Instruction
(OSPI), an interview with Karl Nelson, the Director of the Digital Learning Department (DLD),
was conducted. Nelson is responsible for supporting districts as they implement the mandates
and policies related to online learning. He gives an annual report to the legislature on the state of
included 10 open-ended survey items focused on the DLD support of the superintendents’ roles
in regard to online learning. The two-hour interview was recorded for future access throughout
the project. Nelson requested that the definition at the introduction to the survey match the state
department’s definition. He stated the definition of online learning is “very tricky and often
leads to confusion during discussions.” This suggestion was accepted by adding a definitions
page with the exact wording from the DLD website in the pilot survey. This was done with his
permission and will help his efforts with superintendents’ understanding of the issue.

In addition to the interview, Nelson provided further assistance to improve the quality of
this survey by reviewing each survey item for accuracy and integrity. His interview and
feedback on the instrument helped fine-tune the survey items and craft the tenor of the query to
match previous communications to district superintendents from his office. Nelson suggested
specific rewording on two survey items about policy. In his view, we have existing policy, so
survey items should focus on implementing as well as adding policy; the final survey reflected
this perspective.
Finally, suggestions from my committee as well as the success of the Robison (2007) survey influenced the decision to use a forced choice, four-point instead of a five-point Likert-type scale for this survey. The four-point scale included “strongly disagree,” “disagree,” “agree,” and “strongly agree” as the options for each survey item. The middle category was removed because we know that when offered more respondents will choose it over any other option (Shaeffer & Presser, 2003). The four-point Likert-type scales force choices of either agree or disagree; the only issue is to which degree. A fifth choice of either “not sure” or “not familiar” was added for all survey items because of the newness of online learning and to prevent a skewing of the data by those who were truly unfamiliar with the topic.

**Instrument field test.** “All surveys must be pilot tested” (Fink, 2009, p. 6). To ensure the modifications to the surveys created by Augustine-Shaw (2001) and Robison (2007) were clear, a pilot survey group was selected of 19 superintendents with representation from multiple categories within each of three demographics: District size, years of experience and online learning experience. This group was generated with support and suggestions from Dr. Gene Sharratt and Dr. Gay Selby because of their affiliation with the Washington State University Superintendent Certification Program and their close connection to the superintendent population in our state. The pilot had an 84% participation rate with 16 of the 19 superintendents responding, including representation from each of the desired demographics. Each demographic cohort was represented as seen in Table 2.

Table 2

*Pilot Survey Number and Percentage of Respondents by Factor*

<table>
<thead>
<tr>
<th>School Factor</th>
<th>Number of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 100</td>
<td>1</td>
<td>6.2%</td>
</tr>
<tr>
<td>101-500</td>
<td>4</td>
<td>25%</td>
</tr>
</tbody>
</table>
Creswell (2009) suggests an online survey tool for creating surveys quickly with custom formats. Online surveys can be easily posted on the web or be sent through e-mail. A SurveyMonkey account was established and used for both the pilot and the final survey. This online survey tool allows for results to be generated as descriptive statistics or as graphed information (Fink, 2009). The final results were downloaded into a spreadsheet and then uploaded into Statistical Package for the Social Sciences (SPSS) for additional analysis to be described in more detail in the next section.

The pilot survey included three introductory pages, five open-ended survey items, 43 Likert-type items and three demographic items. The pilot began with a cover letter including specific directions for the pilot respondents and was followed by the first page of the survey detailing the purpose of the study. In the pilot, this page gave superintendents an opportunity to answer the question, “Is this page clear, easy to follow and understand?” with a yes or no response. In addition, in the pilot survey, this page included an open-ended box for respondents who may have answered “no” to provide suggestions for clarity. The same protocol was
followed for each of the introductory pages, including the “Research Study Consent” page and the “Definition of Online Learning for this Study” page from the Nelson recommendation. All respondents in the pilot marked yes and gave no suggestions for improvement of the three introductory pages; as a result these three pages were replicated in the final survey.

The three demographic survey items asked in the pilot survey included the clarity question, “Was this question clear?” For each of these survey items, superintendents answered yes or no, with all respondents indicating “yes,” and these survey items were retained verbatim in the final survey.

The remaining survey items were organized into five sections around the research questions focusing on purpose, issues, and recommendations. The bulk of the survey items on the pilot were the 43 Likert-type items. After each survey item, pilot respondents were asked, “Was this question clear?” with a yes or no box option. If a survey item had two or more respondents respond with “no,” the item was deleted from the final survey. When asked, “Was the question clear?” 100% responded “yes” on 72% (31 of 43) of the items. However, one superintendent (usually the same respondent) responded “no” on 19% (eight of 43) of the survey items.

Only three of 43, 7% of the survey items, had two subjects respond “no” the item was not clear; all of these items were in the final section and were deleted to improve the clarity of the instrument and to reduce the amount of time it takes to complete.

Interesting to note, the same respondent answered “no” the survey item was not clear on nine of the 11 different items with at least one “no” response. On those same nine items, this particular superintendent’s answer to the survey item on each of these nine was either “not sure” or “not familiar.”
The five open-ended survey items in the pilot were purposely placed at the end of each section. For each of the five sections along with the open-ended items, pilot respondents were asked, “Is there anything missing in this section that you think should be added?” The feedback in this section contributed the following comments, which led to modifications on the final survey.

“I do have a suggestion, earlier in the survey you mentioned the names of your committee members but didn’t identify them as WSU professors - I would consider including this information.” This information was added to the final survey.

Another pilot superintendent said, “The question about superintendent accountability, I thought was too broad, there are many factors that need to be reviewed as far as the success of online students.” This survey item had two superintendents respond that the item was unclear so it was deleted.

One survey item asked, “To what extent do you agree or disagree that the superintendent should: encourage staff to take risks in implementing online learning courses.” This item in the final section had two superintendents respond the item was unclear so it was deleted.

Another survey item asked, “To what extent do you agree or disagree that the superintendent should: consider issues and formulate answers to questions before beginning implementation of online learning.” This survey item in the final section had two superintendents respond the item was unclear so it was deleted.

One superintendent said, “There are clearly multiple purposes. I think the question would read better if it said ‘…do you agree or disagree that a purpose…”’ The word “the” purpose was changed to “a” purpose in all survey items in the first section to better reflect the intent of the items.
Finally, a survey item asked, “To what extent do you agree or disagree that online learning: broadens students’ learning opportunities, beyond that which your schools offer.” This item, although it was clear, was very similar to a survey item asked previously in the first section, so it was deleted.

According to Fink (2009), the length of a survey matters and can have a significant impact on the results if proper attention is not given to a reasonable length. To measure this on the pilot, each respondent was asked to document the time they spent on the survey with the goal being less than 15 minutes. The average time to complete the pilot survey was 15.4 minutes with the highest being 25 minutes and a low of 10 minutes. Two superintendents did not respond to the item of time. To ensure the final survey took less than 15 minutes, the deletion of the four survey items mentioned above helped meet the time goal.

**The final survey instrument.** The final instrument included three introductory pages, three demographic survey items, five open-ended items, and 39 items with four-point Likert-type response categories: “not sure” or “not familiar” (coded 0); “strongly disagree” (coded 1); “disagree” (coded 2); “agree” (coded 3); “strongly agree” (coded 4). This 47-item instrument was referred to as the Superintendent Online Learning Survey (SOLS) (See Appendix C).

**Subscale descriptions.** To explore perceptions focused on the second research question, “What do superintendents identify as the purposes for online learning?” the following five subscales were created. Each subscale is focused on an element of online learning that emerged from the factor analysis by Augustine-Shaw (2001).

Alternative Learning Environment (ALE) is a subscale that measures superintendent perceptions on the efficiency of online learning options to provide students with opportunities to take courses not offered in the regular setting. This subscale also explores online learning as an
enhancement to instructional services for specific student populations such as special needs or gifted students.

Fiscal Advantage (FA) is a subscale that measures superintendent perceptions on the inclination of online learning to provide economic solutions to teacher shortages, alternate options to the construction of a new school buildings, or financial resources to a school district.

Instructional Options (IO) is a subscale that measures superintendent perceptions on the usefulness of online learning solutions to help resolve course-scheduling conflicts. This includes providing flexible opportunities for students, families and school systems.

21st Century Skills (21) is a subscale that measures superintendent perceptions on the usefulness of the online interactive learning environment for students to be globally connected. In addition, this subscale explores the proclivity of online learning to better prepare students for their future.

Learner-Centered Instruction (LC) is a subscale that measures superintendent perceptions on the effectiveness of online learning to provide greater individualized instruction to students and therefore better customer service.

Within these five subscales, 17 items were identified for use in this survey. Alternative learning environment was represented by five items, 21st century skills with four items, learner-centered instruction with two items, and both instructional options and fiscal advantage with three items each.

The remaining items were divided between two additional categories. These were “superintendent’s role” with four items and “learner requirements” with six survey items. These items were used to answer the first and the third research questions: “What are the issues that impede or support the implementation of online learning?” and “What recommendations do
superintendents suggest for successful implementation?” The origin of these survey items came from both Robison (2007) and Augustine-Shaw (2001).

Participants

There were 296 school districts in Washington State during the 2010-11 school years. There were 13 districts that shared a superintendent with other districts and in one case a superintendent served three districts that same year. In all, there were six superintendents who worked for multiple districts. That condensed the total number of superintendents and possible respondents in this study to 289 superintendents.

This study utilized the services of SurveyMonkey to deliver an invitation to participate in the entirely online survey. SurveyMonkey’s anti-spam policy allows all recipients of any SurveyMonkey survey to opt-out; superintendents from 12 districts had previously elected to opt-out of SurveyMonkey surveys. Instead these 12 superintendents were sent a separate email with a web link to the survey and four of them did participate.

An online survey requires respondents to have online access including an email. Emails for superintendents in two districts were not published, reducing the pool of possible respondents to 287 superintendents. Both of these districts represent the smallest school districts in the state - Benge School District with eight students and Vader School District with only one student listed was closed in 2007 for financial insolvency.

An updated and accurate directory of Washington State superintendents is difficult to find. As a result, the email database for this study was developed using multiple sources. The first was the School District Directory found on the Office of Superintendent of Public Instruction (OSPI) website. In addition, the 2010-2011 Washington Education Directory was consulted for additional reliability and cross checking. The Washington Association of School Administrators
(WASA) was similarly contacted to compare lists. This association also provides the most comprehensive and current listing of superintendent openings including the outgoing and incoming superintendents; this information was critical since this study only included superintendents serving during the 2010-11 school year. Finally, where inconsistencies and inaccuracies of superintendent and emails were present, individual school district websites were consulted. The resulting emails were entered into the SurveyMonkey database for statewide distribution of the survey.

In the end, 287 superintendents were invited to participate in the survey, with 71% replying (N=201). This exceeded the desired response rate for this study; and meets the general rule for acceptable survey response rates (Fink, 2009).

Analysis Methods

The study was predominantly a descriptive study. Descriptive statistics of the survey results include percentage response rates, mean scores, and standard deviations. Descriptive statistics were used to analyze the data, which were categorized to identify emergent themes. Survey Monkey output was recoded, and reversed coded where needed, into a useable Statistical Package for the Social Sciences (SPSS) data file ready to conduct analysis appropriate to the research questions. Frequency charts and measures of central tendency are provided in table format for descriptive purposes. Pearson’s Correlation Coefficient was calculated for relationships between superintendent demographic items and perceptions where appropriate. Survey items were grouped together into five subscales: Alternate Learning Environment, Fiscal Advantage, Instruction Options, Learner-Centered Instruction and 21st Century Skills.

School factors. To provide data to address the fourth research question, superintendents were grouped and coded based on the number of students in the school district. District size was
coded as a continuous variable with 1 = less than 1,000 students, 2 = 1,001-2,500 students, 3 = 2,501-5,000 students, 4 = 5,001-10,000 students, 5 = over 10,000 students. This comprised the factor District Size (DS). Respondents were grouped and coded based on the superintendent’s number of years of experience. The number of years of experience was coded as a continuous variable with 1 = 0-3 years, 2 = 4-7 years, 3 = 8-11 years, 4 = 12 plus years. This comprised the factor Superintendent Experience (SE). The district’s online status was coded as a continuous variable with 1 = not offering, 2 = considering, 3 = currently offering. This comprised the factor Online Status (OS). The scale used provided parametric, interval data for a more detailed analysis.

The means for each of the five subscales were calculated by averaging the collective score from each of the survey items from every superintendent identified within each factor. This process gave each superintendent a mean score for each of the five subscales (Fiscal Advantage, Instructional Options, 21st Century Skills, Learner-Centered Environment and Alternate Learning Environment). Then, each superintendent’s subscale mean was sorted within each of the three factors (DS, SE, and OS). Next, a collective mean was calculated for the group of superintendents within each of the subscales within each of the three factors. The means of superintendents who selected “not familiar” or “not sure” for any of the survey items within a particular subscale were not included in the computation of the mean; for totals see Table 4 below.

Table 3

Subscale Survey Item Response Rate

<table>
<thead>
<tr>
<th>Survey Item # by Subscale</th>
<th># UA</th>
<th># NS/NF</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate Learning Environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>1</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>Q10</td>
<td>3</td>
<td>4</td>
<td>2.0%</td>
</tr>
<tr>
<td>Question</td>
<td>Subscale</td>
<td>Value 1</td>
<td>Value 2</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Q11</td>
<td>Fiscal Advantage</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Q12</td>
<td>Fiscal Advantage</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Q39</td>
<td>Fiscal Advantage</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Q6</td>
<td>Instructional Options</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Q9</td>
<td>Instructional Options</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Q40</td>
<td>Instructional Options</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Q5</td>
<td>Learner-Centered Instruction</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Q7</td>
<td>Learner-Centered Instruction</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Q13</td>
<td>Learner-Centered Instruction</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Q14</td>
<td>21st Century Skills</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Q36</td>
<td>21st Century Skills</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Q37</td>
<td>21st Century Skills</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Q38</td>
<td>21st Century Skills</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

*Note.* N = 201. UA = Unanswered; NS = Not Sure, NF = Not Familiar.

**Correlation analysis.** A Pearson’s product-moment correlation coefficient was computed to assess the relationship between each of the five subscales (Fiscal Advantage, Instructional Options, 21st Century Skills, Learner-Centered Environment and Alternate Learning Environment) and school factors (District Size, Superintendent’s Number of Years of Experience, and Online Learning Status).

**Open-ended responses.** The open-ended survey items afforded superintendents an opportunity to expand on their perceptions. All qualitative data obtained through the five open-ended survey items were compiled and coded to discover emergent themes. The constant comparative method of data analysis was used to compare segments of data with one another to determine similarities and differences (Merriam, 2009). Data were then organized into categories matching those established from the subscales where appropriate. The significant amount of qualitative data gathered helped to better understand perceptions.
CHAPTER FOUR

RESULTS

This chapter centers on the presentation and analysis of the data collected in this study. It is organized in three main sections. The first section describes the characteristics of the respondents. The second section presents the results of a Pearson’s Correlation analysis including comparing means from each five subscales. The third section explains the results of the qualitative data collected through five open-ended survey items.

The results are reported by school factor (District Size, Superintendent’s Years of Experience and Online Status). Three measures, Pearson’s Correlation Coefficients, means and standard deviations, are reported when discussing significant interactions and patterns between the school factors and the five subscales (Alternate Learning Environment, Fiscal Advantage, Instructional Options, 21st Century Skills and Learner Centered).

The study examined the perceptions, interpretations, and reactions of K-12 superintendents in Washington in response to the rapid growth of K-12 online learning. The presentation of the results in this chapter is intended to offer possible explanations to these research questions:

1. What are the issues that impede or support the implementation of online learning as perceived by Washington superintendents?
2. What do Washington superintendents identify as the purposes for online learning?
3. What recommendations do Washington superintendents suggest for successful implementation of online learning?
4. How does district size, years of experience, and online status affect superintendent perceptions of the online learning environment?
Characteristics of the Respondents

The representative sample consisted of 201 superintendents in Washington State, which represents 71% of those invited to participate. Three items of demographic information were requested from each respondent; years of experience, district size and online status. The demographic data for this sample is presented in Table 4.

Geographically this response represents at least one superintendent from every county in the state. This sample includes demographic representation of superintendents in each of six district size categories. The size categories on this survey item were selected to maintain equal representation by size statewide; however, for analysis all size categories less than 1,000 were combined to match the span between categories of the larger size districts. The reported numbers in all charts show both sets to ensure transparency of the process. The district size demographic indicates that 48.5% of all the respondents serve in smaller districts of less than 1,000 students while 13.4% were from districts with over 10,000 students. This accurately reflects the demographic of the state.

The sample includes a balance of both experienced and new superintendents across four categories. The four categories ranged from less than three years to over 12 years of experience as a superintendent. The sample accurately reflects representation of the state in terms of superintendents in each category, with 25.2% of the respondents having less than three years of experience and 23.8% with over 12 years of experience.

Information of Online Learning Status was collected to determine if the district served by a respondent was using online learning as defined by the state. The survey item asked respondents if they were currently offering or considering online learning; this survey item was modified from the survey item in the earlier research of Augustine-Shaw (2001). The
respondents indicated that 81.2% of the districts served by the superintendents in this survey were either considering or currently using online learning as described by OSPI; with 64.9% currently offering online learning.

Table 4

Number and Percentage of Respondents by Factor

<table>
<thead>
<tr>
<th>School Factor</th>
<th>Number of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 100</td>
<td>16</td>
<td>8.0%</td>
</tr>
<tr>
<td>101-500</td>
<td>46</td>
<td>22.9%</td>
</tr>
<tr>
<td>501-1,000</td>
<td>30</td>
<td>14.9%</td>
</tr>
<tr>
<td>&lt; 1,000</td>
<td>92</td>
<td>45.8%</td>
</tr>
<tr>
<td>1,001-2,500</td>
<td>35</td>
<td>17.4%</td>
</tr>
<tr>
<td>2,501-5,000</td>
<td>26</td>
<td>12.9%</td>
</tr>
<tr>
<td>5,001-10,000</td>
<td>21</td>
<td>10.5%</td>
</tr>
<tr>
<td>10,000+</td>
<td>27</td>
<td>13.4%</td>
</tr>
<tr>
<td>Superintendent’s Years of Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-3 years</td>
<td>51</td>
<td>25.2%</td>
</tr>
<tr>
<td>4-7 years</td>
<td>67</td>
<td>33.2%</td>
</tr>
<tr>
<td>8-11 years</td>
<td>36</td>
<td>17.8%</td>
</tr>
<tr>
<td>12+ years</td>
<td>48</td>
<td>23.8%</td>
</tr>
<tr>
<td>District Status of Online Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Offering</td>
<td>38</td>
<td>18.8%</td>
</tr>
<tr>
<td>Considering</td>
<td>33</td>
<td>16.3%</td>
</tr>
<tr>
<td>Currently Offering</td>
<td>131</td>
<td>64.9%</td>
</tr>
</tbody>
</table>

Note. The <1,000 category represents the total of the <100, 100-500, and the 501-1,000 categories.

Correlation Analysis

A Pearson’s product-moment correlation coefficient was computed to assess the relationship between each of the five subscales (Fiscal Advantage, Instructional Options, 21st Century Skills, Learner-Centered Environment and Alternate Learning Environment) and school factors (District Size, Superintendent’s Number of Years of Experience and Online Learning Status).
Table 5

*Pearson’s Correlation Coefficient by Factor and Subscale*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>District Size</th>
<th>Sup’t Years</th>
<th>Online Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Advantage</td>
<td>-.083</td>
<td>.042</td>
<td>-.051</td>
</tr>
<tr>
<td>Instructional Options</td>
<td>.092</td>
<td>-.066</td>
<td>.111</td>
</tr>
<tr>
<td>21st Century Skills</td>
<td>.017</td>
<td>.037</td>
<td>.171*</td>
</tr>
<tr>
<td>Learner-Centered</td>
<td>.137</td>
<td>.107</td>
<td>.107</td>
</tr>
<tr>
<td>Alternate Learning</td>
<td>.157*</td>
<td>-.025</td>
<td>.280**</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

**District Size**

Data in each of the five subscales were compared by District Size. There was a significant small positive correlation between School District Size and Alternate Learning Environment ($r=0.157$, $n=191$, $p=0.030$) (Table 5). Superintendents of schools with over 10,000 students had a higher mean level of agreement on the Alternate Learning Environment subscale ($M=3.18$, $SD=.56$) than Superintendents of schools with less than 1,000 students ($M=2.87$, $SD=.49$). As school district size increased, superintendents agreed more strongly that the virtual school offers an Alternate Learning Environment (Figure 1).
Figure 1. Superintendent perception by district size. Subscale means (ALE = Alternative Learning Environment; FA = Fiscal Advantage; IO = Instructional Options; 21 = 21st Century Skills; LC = Learner Centered) sorted by district size. Response scale ranged from 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree.

The outcome was similar for the Instructional Options, 21st Century Skills and Learner-Centered subscales; as school size increased, superintendent’s agreement increased that the virtual school provides students with Learner-Centered Instruction, more Instructional Options, and more opportunities to develop 21st Century Skills. The data suggested that District Size did not influence superintendents’ perceptions of Fiscal Advantage. Overall, superintendents disagreed that the virtual school offers Fiscal Advantages.
Years of Experience

Data in each of the five subscales were compared by the superintendent’s Number of Years of Experience. Correlations in each of the subscales to the superintendent’s Number of Years of Experience were negligible with the exception of the Learner-Centered Instruction subscale. There was a small positive correlation to the superintendent’s Number of Years of Experience and perceptions that the virtual school offers Learner-Centered Instruction ($r=0.107$, $n=191$, $p=0.141$).

Superintendents’ perceptions of the Alternate Learning Environment and Instructional Options were not affected by the Number of Years of Experience. The mean level of agreement for the Alternate Learning Environment and Instructional Options was unchanged respectively, from 0 to 12+ years of experience (Figure 2). Overall, superintendents were in agreement that the virtual school provides an Alternative Learning Environment, viable Instructional Options and 21st Century Skills. There was a slight decline ($M=2.78$ and 2.92 respectively) in the level of agreement in 21st Century Skills between superintendents with 0-3 years and 4-7 years of experience.

Finally, superintendents disagreed that virtual schools offered a Fiscal Advantage; however, superintendents with 12+ years of experience had a slightly higher mean ($M=2.03$, $SD = .45$) compared to superintendent’s with less than 11 years of experience ($M=1.88$, $SD = .57$).
Figure 2. Superintendent perception by experience. Subscale means (ALE = Alternative Learning Environment; FA = Fiscal Advantage; IO = Instructional Options; 21 = 21st Century Skills; LC = Learner Centered) sorted by superintendent years of experience. Response scale ranged from 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree.

Online Status

Data in each of the five subscales were compared by the district’s Online Status. There was a small positive correlation between the district’s Online Status and four of the subscales; two of which were significant. Correlations were significant for the Alternate Learning Environment (r=0.280, n=191, p=0.000) and the 21st Century Skills subscales (r=0.171, n=191, p=0.017.) The Superintendent of districts currently offering online classes agreed more strongly than those not offering online classes that the virtual school provides an avenue for students to experience an Alternate Learning Environment ($M=3.02$ and 2.61, respectively) and engage in 21st Century Skills ($M=2.96$ and 2.63, respectively).
Although not statistically significant, there was a small positive correlation between Online Status and the Instructional Options subscale ($r=0.111, n=194, p=0.123$) and Learner-Centered subscale ($r=0.107, n=191, p=0.142$.) Superintendents currently offering online classes agreed more strongly ($M=3.03$ and $2.88$, respectively) that the virtual school offers a way to provide Instructional Options to students as well as Learner-Centered Instruction ($M=2.29$ and $2.49$, respectively).

Finally, the data suggested that districts’ Online Status did not influence Superintendents’ perceptions of Fiscal Advantage; Superintendents disagreed that virtual schools offer a Fiscal Advantage (Figure 3).

**Figure 3.** Superintendent perception by online status. Subscale means (ALE = Alternative Learning Environment; FA = Fiscal Advantage; IO = Instructional Options; 21 = 21st Century Skills; LC = Learner Centered) sorted by online learning status. Response scale ranged from 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree.
Table 6

Survey Item Means Sorted by Factor and Subscale

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Factors</th>
<th>ALE</th>
<th>FA</th>
<th>IO</th>
<th>21</th>
<th>LC</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 100</td>
<td></td>
<td>2.66</td>
<td>2.02</td>
<td>2.89</td>
<td>2.71</td>
<td>2.44</td>
</tr>
<tr>
<td>101-500</td>
<td></td>
<td>2.95</td>
<td>2.02</td>
<td>3.13</td>
<td>3.04</td>
<td>2.35</td>
</tr>
<tr>
<td>501-1,000</td>
<td></td>
<td>2.86</td>
<td>1.86</td>
<td>2.81</td>
<td>2.72</td>
<td>2.32</td>
</tr>
<tr>
<td>&lt; 1,000</td>
<td></td>
<td>2.87</td>
<td>1.97</td>
<td>2.98</td>
<td>2.87</td>
<td>2.36</td>
</tr>
<tr>
<td>1,001-2,500</td>
<td></td>
<td>3.00</td>
<td>1.89</td>
<td>2.99</td>
<td>2.78</td>
<td>2.55</td>
</tr>
<tr>
<td>2,501-5,000</td>
<td></td>
<td>2.88</td>
<td>1.85</td>
<td>2.92</td>
<td>2.89</td>
<td>2.61</td>
</tr>
<tr>
<td>5,001-10,000</td>
<td></td>
<td>2.95</td>
<td>1.96</td>
<td>3.02</td>
<td>3.06</td>
<td>2.45</td>
</tr>
<tr>
<td>10,000+</td>
<td></td>
<td>3.18</td>
<td>1.83</td>
<td>3.19</td>
<td>2.92</td>
<td>2.56</td>
</tr>
<tr>
<td>Superintendent’s Years of Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-3 years</td>
<td></td>
<td>2.93</td>
<td>1.88</td>
<td>3.01</td>
<td>2.92</td>
<td>2.34</td>
</tr>
<tr>
<td>4-7 years</td>
<td></td>
<td>2.98</td>
<td>1.97</td>
<td>3.05</td>
<td>2.78</td>
<td>2.46</td>
</tr>
<tr>
<td>8-11 years</td>
<td></td>
<td>2.92</td>
<td>1.73</td>
<td>3.02</td>
<td>2.98</td>
<td>2.57</td>
</tr>
<tr>
<td>12+ years</td>
<td></td>
<td>2.92</td>
<td>2.03</td>
<td>2.93</td>
<td>2.91</td>
<td>2.51</td>
</tr>
<tr>
<td>District Status of Online Courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Offering</td>
<td></td>
<td>2.61</td>
<td>1.99</td>
<td>2.88</td>
<td>2.63</td>
<td>2.29</td>
</tr>
<tr>
<td>Considering</td>
<td></td>
<td>3.02</td>
<td>1.90</td>
<td>3.02</td>
<td>2.84</td>
<td>2.53</td>
</tr>
<tr>
<td>Currently Offering</td>
<td></td>
<td>3.02</td>
<td>1.91</td>
<td>3.03</td>
<td>2.96</td>
<td>2.49</td>
</tr>
<tr>
<td>All Superintendents</td>
<td></td>
<td>2.94</td>
<td>1.92</td>
<td>3.00</td>
<td>2.88</td>
<td>2.46</td>
</tr>
</tbody>
</table>

Note. ALE = Alternative Learning Environment; FA = Fiscal Advantage; IO = Instructional Options; 21 = 21st Century Skills; LC = Learner Centered. The <1,000 category represents the mean of the <100, 100-500, and the 501-1,000 categories.

Other Relevant Data Supporting the Research Questions

The purpose of online learning. Eleven survey items solicited superintendents’ perceptions regarding the purpose of online learning. Responses indicated that superintendents agreed that a purpose of online learning is to provide for flexible scheduling of learning (M=3.23, SD = .73), to offer students an opportunity to take courses not offered in the regular setting (M=3.11, SD = .72) and to meet the needs of homebound students (M=3.23, SD = .75). To a lesser degree they agreed that a purpose of online learning is to increase Advanced Placement
offerings (M=2.94, SD = .72), to better meet the needs of specific student populations such as special needs or gifted (M=2.88, SD =.82), and to avoid course scheduling conflicts (M=2.79, SD = .75). The means, standard deviations and response frequencies are reported in Table 7 and displayed in Figure 4.

Table 7

Survey Items Focused on the Purpose of Online Learning (N=201) 
(Research question #2)

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Mean</th>
<th>SD</th>
<th>#NF</th>
<th>#UA</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Offer Unavailable Courses</td>
<td>3.11</td>
<td>0.72</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5. Avoid Scheduling Conflict</td>
<td>2.79</td>
<td>0.75</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>6. Solution to Teacher Shortage</td>
<td>1.96</td>
<td>0.77</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>7. Advanced Placement Selection</td>
<td>2.94</td>
<td>0.72</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>8. Individualized Instruction</td>
<td>2.79</td>
<td>0.84</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>9. Provide Financial Resources</td>
<td>1.95</td>
<td>0.89</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>10. Homebound Students</td>
<td>3.13</td>
<td>0.75</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>11. Special Needs</td>
<td>2.88</td>
<td>0.82</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>12. Home School</td>
<td>2.68</td>
<td>0.92</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>13. Flexible Learning</td>
<td>3.23</td>
<td>0.73</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14. Develops Tech Skills</td>
<td>2.67</td>
<td>0.85</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

Notes. Response scale ranged from 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree, 0 = Not Familiar (NF); UA = Unanswered.
**Issues that impede or support implementation.** Twelve survey items solicited superintendents’ perceptions regarding the issues that impeded or supported the implementation of online learning. Responses indicated that superintendents agreed that mentors are needed for students participating in online programs to keep them on track and honest with their work ($M =$
Likewise, respondents strongly agreed that online learning requires independent and responsible learners (M=3.54, SD=.57). In comparison, superintendents strongly disagreed that online programs placed a financial burden on parents (M=1.95, SD=.57). The mean, standard deviation and response frequencies are reported in Table 8 and Table 9 and displayed in Figure 5.

Table 8

*Survey Items Focused on Issues that Impede or Support Implementation (N=201)*

(Research question #1)

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Mean</th>
<th>SD</th>
<th>#NS</th>
<th>#UA</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Increased Inequities</td>
<td>2.41</td>
<td>0.65</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>17. Financial Burden on Schools</td>
<td>2.35</td>
<td>0.73</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>18. Diminishes Parent Involmt</td>
<td>2.15</td>
<td>0.66</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>19. Financial Burden on Parents</td>
<td>1.95</td>
<td>0.57</td>
<td>26</td>
<td>5</td>
</tr>
<tr>
<td>20. Independent Learners</td>
<td>3.54</td>
<td>0.57</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>21. Teacher/Student Interactions</td>
<td>2.64</td>
<td>0.79</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>22. Tech Skills Needed</td>
<td>2.85</td>
<td>0.60</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>23. Best for 6th – 12th grade</td>
<td>2.94</td>
<td>0.70</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>24. Isolates Students</td>
<td>2.82</td>
<td>0.79</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>25. Easy to Pass</td>
<td>2.10</td>
<td>0.75</td>
<td>24</td>
<td>4</td>
</tr>
<tr>
<td>26. Detracts from Community</td>
<td>2.80</td>
<td>0.78</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>27. Void of Diversity Issues</td>
<td>2.48</td>
<td>0.81</td>
<td>37</td>
<td>6</td>
</tr>
</tbody>
</table>

*Notes.* Response scale ranged from 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree, 0 = Not Sure (NS); UA = Unanswered.
Table 9

*Survey Items Focused on Issues that Impede or Support Implementation (N=201)*

*(Research question #1)*

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Mean</th>
<th>SD</th>
<th>#NF</th>
<th>#UA</th>
</tr>
</thead>
<tbody>
<tr>
<td>29. Gain Support</td>
<td>3.17</td>
<td>0.63</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>30. Adequate Computers</td>
<td>3.21</td>
<td>0.68</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>31. Create Policy Limits</td>
<td>2.82</td>
<td>0.79</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>32. Manage Records</td>
<td>3.31</td>
<td>0.53</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>33. Trained Teachers</td>
<td>3.22</td>
<td>0.64</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>34. Mentors for Students</td>
<td>3.34</td>
<td>0.59</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

*Notes.* Response scale ranged from 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree, 0 = Not Familiar (NF); UA = Unanswered.
**Figure 5.** Online learning issues. Response scale ranged from 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree.

**Superintendent’s role and recommendations.** While the open-ended items provided the most insight into the recommendations for successful implementation of online learning, four survey items provided supporting data. Three of the five highest means on the survey came from the items that probed superintendents’ perceptions of the behaviors needed for successful
implementation of online programs. Playing an active role, modeling technology literacy and
supporting online learning opportunities had the highest levels of agreement among the
respondents with means of 3.28, 3.31 and 3.31 respectively (see Table 10). These data suggested
the respondents agreed that the superintendent has a significant role to play in the
implementation of an online learning program.

Table 10

*Survey Items Focused on Superintendent’s Role and Recommendations (N=201)*

(*Research question #3*)

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Mean</th>
<th>SD</th>
<th>#NF</th>
<th>#UA</th>
</tr>
</thead>
<tbody>
<tr>
<td>43. Active Role</td>
<td>3.28</td>
<td>0.54</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>44. Model Technology Literacy</td>
<td>3.31</td>
<td>0.55</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>45. Allocate Resources</td>
<td>3.04</td>
<td>0.63</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>46. Support Opportunities</td>
<td>3.31</td>
<td>0.51</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

Notes. Response scale ranged from 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 =
Strongly Agree, 0 = Not Familiar (NF); UA = Unanswered.

The strongest agreement and disagreement. Respondents gave clear indication that
online learning does not fulfill all the needs of a school community. Superintendents’
perceptions are that online learning is not an alternative to the construction of new school
buildings (M=1.91, SD = .77), is not a financial resource to a district (M=1.98, SD =.85) and is
not a solution to the teacher shortage (M=2.01, SD = .73). Respondents also felt that online
learning does not place a financial burden on parents (M=1.95, SD = .57).
Table 11

Survey Items with the Strongest Disagreement by Mean (N=201)

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Mean</th>
<th>SD</th>
<th>#NF</th>
<th>#UA</th>
</tr>
</thead>
<tbody>
<tr>
<td>40. Alternate to Construction</td>
<td>1.91</td>
<td>0.77</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>19. Financial Burden on Parents</td>
<td>1.95</td>
<td>0.57</td>
<td>26</td>
<td>5</td>
</tr>
<tr>
<td>9. Financial Resource</td>
<td>1.98</td>
<td>0.85</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>6. Solution to Teacher Shortage</td>
<td>2.01</td>
<td>0.73</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>25. Easy to Pass</td>
<td>2.10</td>
<td>0.75</td>
<td>24</td>
<td>4</td>
</tr>
</tbody>
</table>

Notes. Response scale ranged from 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree, 0 = Not Familiar (NF); UA = Unanswered.

Table 12 provides further insight regarding recommendations of the superintendents for successful implementation of online learning; specifically the mean scores of the five survey items with the highest level of agreement are displayed. Most notable, is the strong agreement found among respondents when asked if online learning requires independent and responsible learners (M=3.54, SD= .57). Superintendents agreed that successful online learning requires mentors for students (M=3.34, SD = .59), superintendent modeling of technology literacy (M=3.31, SD = .55), superintendent support (M=3.31, SD = .51) and accurate management of academic records before implementation (M=3.31, SD = .53).

Table 12

Survey Items with the Strongest Agreement by Mean (N=201)

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Mean</th>
<th>SD</th>
<th>#NF</th>
<th>#UA</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. Independent Learners</td>
<td>3.54</td>
<td>0.57</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
Qualitative Analysis: Purposes, Issues and Recommendations

Five open-ended survey items probed superintendents’ perceptions of the issues and purposes of online learning as well as solicited recommendations for successful implementation. Eighty-five unique respondents provided 191 individual comments which were compared, sorted, and categorized using the constant comparative analysis method. The themes of finance, quality assurance and regulations emerged as the predominate topics. These comments provided important triangulation of the data with the surveys and the literature and helped to more fully explain the complexity of superintendents’ perceptions surrounding online learning.

Finance theme. The open-ended survey items that focused on the topic of finance had the highest response rate (10%) compared to the remaining open-ended items. Respondents shared their frustration with elected officials in Washington State for lack of oversight on the implementation of virtual schools. Superintendents also expressed frustration with their peers concerning a focus on financial profit, rather than student learning using phrases such as “money grabbers,” “pirating students” and “stealing FTE” when describing the online learning programs offered by districts across the state. Superintendents reported having a “skeptical,” “jaded” and “deeply troubled” perspective on the “overwhelmingly financial motives” of online learning programs and individuals. Some superintendents declared “it’s all about the money,” saying that

34. Mentors for Students  3.34  0.59   3  6
44. Supt. Model Tech Literacy  3.31  0.55   2  5
46. Supt. Support  3.31  0.51   3  5
32. Manage Records  3.31  0.53  0   7

Notes. Response scale ranged from 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree, 0 = Not Familiar (NF); UA = Unanswered.
online learning is a “money-making proposition” and a “cash cow” for some; while others expressed their hesitancy to offer online learning because of the new alternative learning education (ALE) requirements and the “risky” nature of investing in online learning given current policies.

One superintendent stated we are “collapsing under the current traditional infrastructure” while others reported they were “just trying to survive,” and we are “forced to offer online options just to keep FTE.” More than one superintendent commented on their concern over the “abuse of the system from revenue generating interests,” prompting one superintendent to accuse others of trying to “rip-off the system.” However, a handful of superintendents had a differing perspective and seemed defensive in their comments, stating that online learning is a “tool used in creating a continuum of services to meet the mission of ensuring the learning of all our children; not a whipping post for legislators and shortsighted educators who may be afraid of change.”

Quality assurance theme. Many superintendents reported that “quality rather than cost should be the focus” of online learning initiatives. However, numerous superintendents were critical of the statewide programs being more focused on the numbers than learning, implying that “educating students is secondary to their mission.” One superintendent said, “Some districts are offering full online classes that in my opinion lack quality and academic integrity.” Another superintendent expressed, “serious concern about districts hosting students on a statewide basis that appear to be using this as a revenue enhancement, in spite of educational issues.” Some superintendents see a disconnect between “true learning needs and the actual implementation and the intent.”
Multiple superintendents expressed concerns with the deficits they see in students after they experience online learning offered by another district and return to their home district. Several respondents said, “We find that students that come back to us from an online program have significant deficits in their learning.” One superintendent expressed his opinion this way, “Online schools expect local schools to pick up the pieces when students come back well behind.” Another respondent when addressing the issues of online learning said, “The harm to local districts comes when the parents get sick of baby-sitting and send the student back to the home district to pick up the loss of academic gains.”

Concerns about quality were consistently expressed. One superintendent said, “I worry about online programs being legally sufficient” but not necessarily offering quality instruction. The concern was further mentioned by a respondent who commented, “There are many programs that compromise student learning. They seem to be just gathering FTE.” This theme of sacrificing quality for numbers clearly emerged from the comments.

Other respondents expressed concerns about the online teacher quality. Some respondents called for additional regulations for certification of online teachers. One superintendent described a personal experience where two teachers that had been let go from their district were “immediately hired by an online outfit.” This particular superintendent questioned the hiring process, evaluation process, and supervision of online teachers.

One respondent said, “It (online learning) got a bad start, some programs were of poor quality, some districts inappropriately accessed huge amounts of FTE money at the expense of other districts. The reality is it’s here to stay and will grow.” Finally, a superintendent summarized, “It feels more like the wild west where anything goes in terms of online learning and the only quality control is happening by districts that make that their business, while others
appear to be offering online programs leading to ‘McGraduates.’ I cannot sheriff this on a statewide basis and thus, just tend to the practice in my district.”

**Regulations theme.** There is little agreement on the need for increased regulations for online learning programs in Washington, although comments from respondents on the need for more regulations outnumbered those who called for less regulation. The 2011 legislation initiated by Engrossed Substitute House Bill (ESHB) 2065 inspired some superintendents to mention their hope for the future saying, “OSPI and the legislature are starting to apply stricter regulations and guidelines on all providers.” However, others viewed this legislation as a step backward, asserting that there are different solutions to make online learning viable but “the state taking away funding and opening their own online competition is definitely an issue.” The same sentiment was expressed by a few other respondents that “state agencies need to work together to remove roadblocks.” One respondent commented, “If the public sector does not realize the role and value of online learning it will be relegated to the private sector. We need to relearn to accommodate and utilize this opportunity for kids.”

Some superintendents called for a greater role for OSPI by providing a statewide model so districts are not competing for students and commented, “The state needs to help fund online learning, not the district. We are already underfunded!” One respondent said, “Online programs, if offered to the public, should be offered and controlled 100% by OSPI.” Another superintendent affirmed this notion by saying, “There needs to be a way for the state to provide online programs, as a part of basic education, that are affordable and do not take away from district FTE.” Finally, a superintendent asserted, “If the state wants to support online learning, they should provide the school, take a slice of the pie and the home district keeps the kid.”
The majority of respondents focused comments on their frustration with the lack of regulation from OSPI with one respondent harshly declaring, “OSPI has done nothing to take leadership to regulate this growing mess.” Others suggested the development of, “stronger policies that discourage fly-by-night providers that create churn in student enrollments for profit.”

Overall, superintendents felt that the Office of the Superintendent of Public Instruction (OSPI) needs to, “regulate the funding very carefully to limit abuse from revenue generating interests.” The overall message in the comments of respondents pointed to regulations being needed to “weed-out the money grabbers from the legitimate educators.”
CHAPTER FIVE

IMPLICATIONS AND DISCUSSION

The study examined the perceptions, interpretations, and reactions of K-12 superintendents in Washington in response to the rapid growth of K-12 online learning. This chapter discusses the implications of the study in relation to these research questions:

1. What are the issues that impede or support the implementation of online learning as perceived by Washington superintendents?
2. What do Washington superintendents identify as the purposes for online learning?
3. What recommendations do Washington superintendents suggest for successful implementation of online learning?
4. How does district size, years of experience, and online status affect superintendent perceptions of the online learning environment?

Research Question #1: Issues that Impede or Support Online Implementation

Financial barriers. The survey items clearly indicate that superintendents do not perceive online learning to be a financial resource (M=1.98, SD = .85) or to provide a fiscal advantage to their school district (M=1.92). However, superintendents did not express the perception that online learning created a financial burden on the school district (M=2.35, SD = .73). Nevertheless, in the fiscal comments superintendents note that other districts are taking advantage of the opportunities to add additional funds. One superintendent responded, “Online learning is a way to make money, though few will admit it.” Another respondent reported, “It is a financial burden when other school districts steal your FTE.” A superintendent whose district offers a statewide program noted their online program, “Could not survive without picking up at least 100 students from other districts just to make ends meet and even with the out-of-district
students they still lose money when compared to brick and mortar schools.” The comments reveal that superintendents on both sides of the issue agree that finance is not an issue that impedes implementation.

Although the survey instrument for this study was delivered prior to superintendents fully experiencing the 15% funding reductions imposed on online learning programs by Engrossed Substitute House Bill (ESHB) 2065 implemented in 2011, some respondents still reported their concern for the future of online learning, specifically with the new funding reductions. One superintendent addressed the recent reductions by commenting, “When funding for online students is not at one-hundred percent, it is hard to support this option.”

Based on the literature review, it was expected superintendents would report that online learning provided a fiscal advantage. It was a surprise to find that respondents agree fiscal resources are not an advantage. The literature is strong with the perspective that leads many to assume that online learning is a fiscally sound option (Lips, 2010; Moe & Wise, 2009; Alliance, 2010). However, superintendents in Washington do not view online learning as a fiscally sound option, especially in light of recently mandated funding reductions.

**Concerns about quality.** While superintendents reported that online learning provides flexibility for scheduling, meets learner-centered needs, and provides acceptable alternative learning environments for some students, they did not indicate that the instruction was of high quality. In fact, numerous comments expressed concern over the lack of quality, and academic integrity in regard to two areas. Some respondents expressed skepticism over the content quality while other superintendents were more concerned with online teacher quality.

The percentage of students in online school programs in Washington that met standard on the spring of 2011 state assessments was lower than the state average for students in traditional
school settings; in some cases the gap between the state average and the percent passing in online schools exceeded 22% (Nelson, 2012). If state assessments are suitable quality indicators, online learning programs are significantly lacking comparatively. Superintendents reiterated this concern through the comments in the open-ended survey items. Respondents frequently mentioned the deficits found in students who had left their schools for an out-of-district online program, only to return with inferior academic skills. This finding matches those found in an investigative study of over 10,500 students from Colorado, where half of the students left the online program within a year, and when they did return they were often further behind academically (Hubbard & Mitchell, 2011).

Online learning quality is a concern nationally, in that the research of full-time online learning in particular does not support the rapid national implementation movement (Barbour, 2009). Future decisions regarding online learning by superintendents and policy makers should be grounded in research that addresses student achievement and educational effectiveness.

**Regulations.** The Digital Learning Department (DLD) in the Office of the Superintendent of Public Instruction (OSPI) regulates K-12 online learning in Washington. As a result, OSPI was the target of criticism from some of the respondents in this study. Some superintendents reported they wanted to offer quality online learning to their students, but they felt the current regulations made it too “risky” for a sound investment. Other superintendents with an established connection to an online provider early on, or were offering a program that is successfully gathering FTE, advocated for fewer regulations. Still other survey respondents suggested a fully state-run online learning program that would allow them to retain part of the FTE.
When examining state policy as it pertains to online learning compared to other states, it is helpful to consider recommendations from a national perspective. With this in mind the 2012 annual report to the legislature (Nelson, 2012), references the policy recommendations of the Foundation for Excellence in Education, which manages the Digital Learning Now (DLN) initiative, led by Governors Jeb Bush and Bob Wise. Their organization created a digital learning report card that assesses each state’s alignment to 72 policy recommendations based on their 10 elements of quality digital learning. Using their rubric, Washington received the second highest point total when compared to all 50 states by meeting 47 of the 72 recommendations. Although superintendents in this study did not mention this exemplary rating, some of the superintendents’ regulation recommendations in this study, if adopted, would lower our grade on this report card.

The bottom line for most superintendents concerning regulations centers on their need to keep FTE and the money that is generated by each full-time student. Other superintendents expressed a need to gain out-of-district FTE and the money that is generated by each full-time student in order to keep their online programs open. Nelson (2012) reports that during the 2010-11 school year there were 74 online programs in Washington, 40 of which enrolled non-resident students. Washington saw 18,300 students participate in online programs during that same year. The three districts with the highest online enrollments represent 27% of that amount. Nine districts statewide received more than 100 students from out-of-district to attend their online programs. These nine districts accounted for more than 90% of the state total participating in online learning. Of the 295 districts in the state, 245 had students leave their district for other district online programs. There were 18 districts that lost more than 100 students to other district online programs, with one district even losing 313 total students.
Research Question #2: The Purpose of Online Learning

Collectively, superintendents in Washington do see a purpose for online learning, with one respondent describing the purpose as “a tool used in creating a continuum of services to meet the mission of ensuring the learning of all our children.” Superintendents recognize the value online learning brings by providing scheduling flexibility (M=3.23), expanding course options (M=3.11), and meeting individual needs of students (M=3.13).

Regarding flexibility, one respondent stated the purpose of online learning is “To provide flexible opportunities for students in a system that is traditionally not flexible.” When describing the purpose of meeting individual needs another superintendent noted, “Not all students learn the same way. Online learning gives those students an opportunity for an education who may not be able to attend a brick and mortar school for specific reasons.” Another reported, “Online learning seems best suited to meeting unique, individual needs rather than serving large numbers of students.” Many superintendents viewed the primary purpose of online learning to be credit recovery, with one superintendent commenting, “Online Learning allows us to provide students with an opportunity to fulfill graduation requirements when they need to accrue credits.” The frequent mention of credit retrieval as a purpose could explain the fact that during the 2010-11 school year only 17.7% of those students assessing online programs were considered full-time online students. Most online students are combining online options with other educational options including traditional schools, alternative schools and home school (Nelson, 2012).

Superintendents were in agreement that online learning is not suitable for each student. One superintendent responded, “Online learning is not necessarily the avenue for all. We have found the students who have the best success are those monitored by staff and parents to ensure completion.” Another noted, “It gives students options and opportunities in a variety of
situations young students get themselves into.” One superintendents expressed the opinion, “An online course is not a substitute for a quality in-classroom experience with a strong teacher,” while another commented, “It does not take the place of the teacher.” The misalignment between the purpose and current practice was reported as the antecedent of the concern regarding online learning.

**Research Question #3: Recommendations**

Superintendents in this study provided numerous recommendations for implementation of online learning. A predominate theme that emerged was the importance of blended learning and maintaining regular contact between the student and an adult mentor. Nelson (2012) reported, “Few Washington districts seem to be experimenting with a blended learning model.” Correspondently, several superintendents supported blended learning commenting, “Traditional and online learning together produce the best results.” Other respondents emphasized the importance of regular teacher and student, face-to-face contact noting, “It remains critical to maintaining an effective and sustained online learning program.” Other superintendents reported that building, “Strong face-to-face student-to-teacher relationships and interactions are essential as the mainstay of K-12 education.” Some respondents reiterated the importance of the teacher emphasizing they, “…are still an important component of online learning. The human connection is critical.” Many superintendents noted what one superintendent emphasized, “Online learning and blended classrooms are the future of education. We as educators must have the vision to allow these programs in our existing schools to support and enhance our more traditional academic programs.”

A second recommendation theme that emerged in the comments was to individualize instruction by meeting the unique and distinctive needs of students. Some respondents viewed
online learning as, “…an opportunity for students who do not fit in the traditional classroom setting.” Superintendents mentioned how well their online programs meet the needs of their homebound students, students with special needs, as well as those with social issues.

The third theme that emerged was the recommendation for more control from OSPI, suggesting that the agency needs, “…to create reasonable reporting requirements and funding formulas.” Another superintendent reported, “I think a variety of online learning options should be offered to students, through the OSPI, and not through individual districts.” Further, another superintendent suggested, “Vetted courses should be made available at no cost to districts, funded by the state, so that access to educational services does not become even more inequitable.”

The fourth recommendation theme suggested a closer examination of online learning with one superintendent reporting, “Good grief, how many more hours should a young person spend in a virtual versus actual experience?” Another superintendent suggested, “Online programs exacerbate the problems of regular schools, rather than solve them.” One superintendent simply commented, “In general, online learning is not a meaningful learning experience.”

One superintendent questioned the effectiveness of online learning collaboration reporting:

We know “the breakthrough strategy” for improving the quality of instruction that students receive, and for improving the quality of professional learning for teachers, is the meaningful collaboration of teachers who share students and content. This is not a feature of online instruction, and in fact online programs are a step backward toward
isolation of practice and norms of autonomy versus the norms of collaboration we have been working to establish.

On the other side of the issue one superintendent noted, “We cannot afford to bury our heads in the sand on this issue. Technology will continue to infuse itself into education; we can embrace it or get choked by it.” Finally, a superintendent offered this advice, “The decision to offer online programming should be based on student need, not the administrative prejudices or limitations of the adults in the system.”

Research Questions #4: Demographic Impact on Perception

**District size.** Superintendents in districts with student enrollments exceeding 10,000 felt more strongly that online learning efficiently provided students with opportunities to take courses not offered in the regular setting. In addition, they more strongly expressed the view that online learning should be used as an enhancement to instructional services for specific student populations, such as special needs or gifted students, to a significantly greater degree than superintendents in districts with less than 1,000 students.

In addition, as the student population in a district increased, so did the superintendents’ agreement that online learning provides solid instructional options, greater individualized instruction and support to help students acquire 21st century skills. However, district enrollment size had no effect on perceptions concerning fiscal impacts (see Figure 1).

**Superintendent years of experience.** Superintendent years of experience had the lowest impact on perceptions of the demographics measured. The only category with a noticeable correlation was learner-centered instruction. Respondents with more than 12 years of experience as a superintendent expressed more confidence in the effectiveness of online learning to provide greater individualized instruction to students and therefore better customer service
than those superintendents with less than three years of experience. Although they agreed more strongly, neither group reached a level of agreement that reached a mean of three (see Figure 2).

**Online status.** A district’s online learning status had a greater influence over a superintendent’s perception of online learning than any of the other demographics measured. Superintendents in districts currently providing online learning expressed higher levels of support for online learning than those superintendents whose districts did not currently offer online learning. Superintendents of districts that are currently offering online courses felt that online learning provides students with opportunities to interact globally and share with students and experts. They also felt that online learning provides greater individualized instruction that better meets students’ varying needs.

Superintendents in districts that currently offered online learning trusted the efficiency of online learning options to provide students with opportunities to take courses not offered in the regular setting and they viewed online learning as an enhancement to instructional services for specific student populations such as special needs or gifted students. In addition, they endorsed the proclivity of online learning to better prepare students for their future (see Figure 3).

**Policy Implications**

**National politics.** In Michigan, online learning options are a topic of current discussion through Senate Bill 619. If passed, this policy would lift the current cap in that state on the number of online schools and the number of students they can enroll. This legislation recently passed the Senate with solid backing from Republicans and opposition from Democrats. The legislation is opposed by the Michigan State teachers’ association and is currently being debated in the Michigan House.
Conversely in Mississippi, the Senate just passed a piece of charter schools legislation that specifically excludes the use of virtual charter schools, Senate Bill 2401, which is now being discussed in the House. As it is currently written, this policy would expand educational choice options by permitting charter schools; however, it specifically excludes virtual schools based on the poor record of academic success of online learning programs.

The policy issues related to online learning seem to have clearly defined political lines between Republicans and Democrats. Teacher unions across the nation regularly oppose online options, while conservative educational policy groups like The Heritage Foundation and The Thomas B. Fordham Institute regularly support online learning options. At the heart of the debate for those who oppose the expansion of online learning is their concern over the privatization of public education without independent research to support that full-time online learning is effective. Those in favor advocate for broadening choice, increasing access to content, and promoting the benefits of individualized instruction. Likewise, Washington’s superintendents have expressed similar positions on both sides through this study with the majority of comments and mean scores suggesting leaning toward a need for more oversight, more restrictions, and more control over for-profit providers. Those that support the expansion of online learning with fewer restrictions see more oversight and this majority position as shortsighted.

**Washington politics.** In Washington, Engrossed Substitute House Bill (ESHB) 2065 (2011) has had a significant impact on online programs, particularly the funding. This policy requires ALE funding reductions for the 2011-12 and 2012-13 school years and “has the potential to stunt the growth of online learning in Washington” (Nelson, 2012, p. 12). The policy reduces state basic education funding for ALE programs, including online programs, by 15%. In
his Online Learning Annual Report to the Legislature, Nelson (2012) recommended that online learning should be fully funded.

**Provider politics.** In 2010, K12 Inc., the country’s largest for-profit online provider, became even larger through mergers and acquisitions. As a result they control “over 70% of the online learning market in Washington” (Nelson, 2012). As you would expect, K12 Inc. has become a significant political player, contributing $824,802 to political campaigns nationwide from 2004 to 2011, as reported by the National Institute on Money in State Politics. K12 Inc. political contributions during that time favored Republicans with 69% of their total contributions. Two of the top benefactors were Republicans from Idaho (the Governor and the Superintendent of Public Instruction) receiving $25,891 in contributions from K12 Inc. between 2006-2010. In 2011 Idaho passed a law requiring students to take online courses before graduating from high school.

Online learning had a rough and rapid start in Washington after the passage of SB 5828 in 2005. Most notably, three public officials (a superintendent and two legislators) instrumental in the shaping of this original legislation became employees of what is now K12 Inc. To add to the criticism, state audit findings in 2008 forced three districts to return millions of dollars to the state for incorrectly documenting the number of students taking online courses. In 2011, two superintendents were criticized for legally benefitting from financial kickbacks for enrollments in their online programs. These events were addressed by subsequent legislation in Substitute Senate Bill (SSB) 5410 with the establishment of the Digital Learning Department for oversight in 2009 and most recently in Engrossed Substitute House Bill (ESHB) 2065, which prevents school district employees from receiving any compensation or payment as an incentive to increase student enrollment. Nevertheless, these foibles led to public mistrust of this new
approach to teaching and learning and made many superintendents apprehensive of this option. These perceptions of superintendents surfaced in this study.

Common Core State Standards. Finally, during the 2014-15 school year the National Common Core State Standards will be fully implemented and student achievement will be measured by a new assessment system in Washington. The impact of these new universal standards on online learning programs remains to be seen, but this substantial shift should lead to significant developments among the online learning providers, which in turn will have noteworthy policy implications.

Conclusions

Superintendents in this study affirmed the value of online learning in K-12 education. Superintendents articulated the issues that online learning presents with clarity and they described the purpose of online learning with simplicity. The recommendations gathered from superintendents demonstrate a thorough understanding of the topic and a genuine concern for students. The superintendent perceptions of student online learning issues include concern for the lack of social interaction, the need for students to connect regularly with adult mentors, and the recommendation to assess student disposition for online success before beginning.

It has been over a decade since Augustine-Shaw (2001) completed her research on superintendent perceptions of online learning in Kansas and five years since Robison (2007) completed his research on the superintendent perceptions of online learning in Ohio. Overall, the perceptions of Washington superintendents appear similar. Like previous studies, patterns of resistance to online learning, as a substitute for traditional approaches to educating children, are prevalent. Washington superintendents express similar barriers and challenges to online program implementation, most notably financial barriers. Washington superintendents have similar
apprehensions regarding the quality of online content. Like their Midwest colleagues, superintendents in Washington express strong reservations to the expansion of online learning beyond an alternative experience for some students.

According to Rogers (1962), the diffusion of innovation takes time and “getting a new idea adopted, even when it has obvious advantages is often very difficult” (p. 1), not to mention the complexity of integrating it into a very bureaucratic system. For some, the decision to embrace online learning is not obvious and lacks empirical support (Barbour, 2009). Theoretically, the issue of responding to the current situation of K-12 online learning for superintendents requires adaptive leadership. Heifetz (1994) would describe the current state of online learning in Washington as a Type III situation, that is, “the problem is not clear-cut and technical fixes are not available . . . . Learning is required both to define the problem and implement solutions” (p. 75). Heifetz (1994) explains that with doctors, Type III situations often mean dealing with a “chronic illness and impending death” (p. 75). Survival may depend on the decisions of the superintendent; Christensen (2008) asserts that “educators find themselves at an intersection of unprecedented change and necessary choices” (p. 236).

**Personal revelation.** When I began this study over five years ago I had a different view of online learning. My understanding of online learning at that time was facile and influenced more by media and personal experience than research. I expected this study to help superintendents embrace the notion that school reform was needed and that it should occur through the use of online learning. In retrospect, this research was somewhat limited by the reliance on the Augustine-Shaw (2001) and Robison (2007) survey instrument. These instruments, although both proved to be valid and reliable for this study, were introduced at a time when the profit-motive of online learning was well disguised and effectiveness research was
nonexistent. The research questions for this study sought to describe the issues that impede or support the implementation of online learning with the underlying assumption that online learning should be implemented. The results illustrate a different reality in Washington. Superintendents go beyond just the implementation of online learning and distinctly express the issues and their warranted concerns of online learning itself.

The superintendents in this study send a clear message; online learning may not be “the” way but “a” way to improve student learning. The privatization of public education is at the center of the debate. When profit is the motive, superintendents’ perceptions are suspicious, leery and jaded. While some would contend that choice and competition between districts improves customer service, others believe that competing for students and the dollars attached is an unreliable and foolhardy way to run a public school system. This study suggests some superintendents consider some colleagues as part of the problem; animosity and bitterness are evident among superintendents. Those same superintendents view their colleagues as shortsighted and close-minded.

Recommendations

Based on the conclusions of this study, the following recommendations are made:

1. Regionally: It is recommended that the regional Educational Service Districts continue to host online learning forums and symposiums as a conduit for the adaptive dialogic work needed to reduce the tensions, anxieties and animosity among area superintendents. This mediated discourse will promote understanding and help to develop solutions.

2. Statewide: The Digital Learning Department (DLD) focuses on approval, access and support. The DLD should continue to explore new ways to support superintendents
statewide around the issues of online learning; continuing to host online forums and webinars will help to present nonbiased information to large audiences at little cost.

3. Statewide: Policy makers should continue to support legislation that demands accountability of the online providers by improving completion rates, improving passing rates and improving results as measured by state assessment scores. The recommendations from Digital Learning Now (DLN) to impose a performance-based funding system based on course completion and student success are a step in the right direction.

4. Statewide: Policy makers should continue to examine funding mechanisms that encourage development of blending online learning programs at the local district level in ways that could minimize the impact on district budgets.

5. Nationally: The National Governors Association and the Council of Chief State School Officers should collaborate with online learning providers to assure alignment with the implementation of the National Common Core State Standards.

6. Nationally: The results of this study should be disseminated statewide and could be valuable nationally as other states examine their superintendents’ perceptions to online learning.

Future Research

In addition to the previous discussion, the following are recommendations for future research:

1. This study was an initial attempt to more clearly define and examine the perceptions of all superintendents in Washington regarding K-12 online learning. A case study on
specific superintendents that have partnered with online learning providers and have the largest enrollment is needed.

2. Further research is needed to explore the effectiveness of online learning in Washington State as measured by state assessments. Which online programs show the best academic gains and how do they compare to traditional approaches?

3. This study did not address equity or access. Nelson (2012) found that white students are significantly over-represented and special education students are significantly under-represented in Washington’s online programs. A study of equitable access is needed. How are programs successfully addressing equity and access for all?

4. A longitudinal study of students who have participated in an online learning program over time would provide valuable data. How do the K-12 online learners who continue in an online program for more than one year perform over time?

5. A study of student perceptions would provide valuable data. This research could build on the Student Satisfaction Survey that is already administered by OSPI to all online students and is used to evaluate online providers. Why are so many children, and their parents, making the choice to leave the traditional system? How many return? If they return how have they progressed academically?

6. A study examining the funding models for the 11 states that prohibit charter schools is needed. How are online learning programs in states that forbid charter schools different from those in states that allow them? What online school funding models seem to work in those states?
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Appendix A

Robison (2007) Survey Permission

Date: 5/21/11
To: Dr. Robison

I'm hoping you would allow me to use and modify your Superintendent Online Learning Survey for my study. If you approve, I will indicate how I utilized your survey and your dissertation and cite you appropriately.

I'm also interested in any thoughts you might have on this topic.

Good for you for being such a forward thinker in 2007!

Thanks for you consideration,

Glenn E. Malone

Date: 5/26/11
Reply From: Robison, Scott Robison@ohio.edu

No problem, just cite it properly and you should be fine.

Thanks,
Scott
Appendix B

Augustine-Shaw (2001) Survey Permission

Date: 4/13/11
To: Dr. Augustine-Shaw

I'm hoping you would allow me to use and modify your Superintendent Virtual School Questionnaire for my study. If you approve, I will indicate how I utilized your survey and your dissertation and cite you appropriately.

I'm also interested in any thoughts you might have on this topic. Good for you for being such a forward thinker in 2001!

Thanks for you consideration,

Glenn E. Malone

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Date: 4/13/11
Reply From: Donna Augustine-Shaw daugustine-shaw@cox.net

Mr. Malone,
You may use/modify my survey with appropriate citing. I am glad you find it useful for your topic as well. I would be interested in your summary findings to compare similarities/differences from 2001 to now. The university level has developed strong programs in online learning with K-12 still struggling but with some opportunities and examples out there. Funding, teacher contract issues, the traditional structures of school, parental education, quality offerings, etc. may be continued factors in this development. Good luck and let me know if I can be of further help.

Donna Augustine-Shaw
Appendix C

Survey Introduction Letter

Introduction

Dear Superintendent,

My name is Glenn Malone and I am a Doctoral Candidate in the Educational Leadership program at Washington State University. Professors Gene Sharratt, Gay Selby, and Michele Acker-Hocevar have partnered with me to conduct a statewide study of superintendents. The purpose of this research study is to examine the perceptions, interpretations, and reactions of K-12 superintendents in Washington in response to the rapid growth of K-12 online learning.

The results will be presented to benefit both policy makers and superintendents. Your participation will contribute greatly to the understanding of how superintendents are reacting to online learning and help inform other superintendents to evaluate their options. Furthermore, policy makers need a better understanding of superintendent options and reactions to inform new policies and future actions.

Completing this survey will only take about 15 minutes but the information it provides could impact students across Washington for years to come. We encourage you to consider completing this survey.

Sincerely,

Glenn Malone
Michele Acker-Hocevar
Gay Selby
Gene Sharratt
Appendix D

Survey Consent Page

Research Study Consent

Study Title:
Online Learning in Washington's K-12 Public Schools:
Superintendent Perceptions, Issues and Recommendations

Researchers:
Primary Investigator:
Michele Acker-Hocevar, Associate Professor 509-372-7251
Co-investigator:
Glenn E. Malone, Graduate Student 253-318-6793

Sponsor:
You are being asked to take part in a research study carried out by Gene Sharratt, Gay Selby, Michele Acker-Hocevar and Glenn Malone. Please read this information carefully. Ask the researcher to explain anything you do not understand.

What is this study about?
The purpose of this research study is to examine the perceptions, interpretations, and reactions of K-12 superintendents in Washington in response to the rapid growth of K-12 online learning.
You are being asked to take part because you are a superintendent in the state of Washington.

Will my information be kept private?
The data for this study will be kept confidential to the extent allowed by federal and state law. No published results will identify you, and your name will not be associated with the findings. Under certain circumstances, information that identifies you may be released for internal and external reviews of this project.

Researcher reflections will be noted without superintendent names so individual superintendents are not identifiable. Any response that does have a participants name on it will be redacted prior to coding of the data. All data will be stored in Glenn Malone’s office, or in a secure file server. The results of this study may be published or presented at professional meetings, but the identities of all research participants will remain anonymous. The data for this study will be kept for three years.

Who can I talk to if I have questions?
If you have questions about this study or the information in this form, please contact the researcher Glenn Malone, graduate student, at 253-318-6793 or email malonege@gmail.com, or regular mail at 8701 234th St. Ct. E. Graham, WA 98338.

Your participation in this survey implies your consent to use this data for the study and that you understand the information given to you on this page.
Appendix E

Survey Definition Page

Definition of Online Learning for this Study

In their “Glossary of Terms” the Office of Superintendent of Public Instruction’s Digital Learning Department (DLD) defines an online course as one where:

- More than half of the course content is delivered electronically using the Internet or other computer-based methods.
- More than half of the teaching is conducted from a remote location through an online course learning management system or other online or electronic tools.

Additionally:

- A course can be taught synchronously, asynchronously, or both.
- The role of the teacher is to ensure student learning and success. This role may be accomplished through a variety of teaching methods, including but not limited to: direct instruction; review of assignments; assessment, testing and other progress monitoring; and educational facilitation.
- A remote location is any location where there is no “face-to-face” student-teacher interaction.

The following types of courses do not meet the definition of an "online course":

- A "hybrid" course is one where at least some content is delivered online and at least some of the instruction is delivered online. Hybrid courses can contain some in-person content delivery and/or some in-person instruction. (If both content and instruction are more than half online, then it is considered an "online" course, not a "hybrid".)
- A "web-enhanced" course is one where the instruction takes place in-person, but at least some of the content is delivered online.

According to this definition and for this survey, NovaNET, ODDESSYWARE, and PLATO offer online content but are not considered online learning. In this survey, online learning refers to districts offering online courses as defined above.

The survey requires 15 minutes to complete.
Appendix F

Survey Instrument

Superintendent Online Learning Survey (SOLS)

I. Demographic Info
1. I would describe my district’s status with online learning as:
   a) Not offering online learning options as defined above for students in our school(s)
   b) Considering online learning options as defined above for students, but not yet implemented in our school(s)
   c) Currently offering online learning options as defined above to students in our school(s)
2. The total number of years I have been a superintendent is:
   a) 0-3 years
   b) 4-7 years
   c) 8-11 years
   d) 12+ years
3. The approximate number of students enrolled in my district is:
   a) Less than 100 students
   b) 100 – 500 students
   c) 501 – 1000 students
   d) 1001 – 2500 students
   e) 2501 – 5000 students
   f) 5001 – 10000 students
   g) 10000+ students

II. Purpose
Please respond to the following items using this scale:
SD = Strongly Disagree, D = Disagree, A = Agree, SA = Strongly Agree, NF = Not Familiar
To what extent do you agree or disagree that a PURPOSE of online learning is to provide:
4. students an opportunity to take courses not offered in their regular school setting.
5. an opportunity for a student to avoid a course scheduling conflict.
6. an economical solution to teacher shortages.
7. an opportunity to take a wider variety of Advanced Placement courses.
8. greater individualized instruction to better meet varying learning styles of students.
9. financial resources to a school district.
10. enhanced instructional services for homebound students (i.e., at home, but not by choice).
11. enhanced instructional services for specific student populations, such as special needs or gifted.
12. an opportunity for home-schooled students to take courses through your district.
13. flexible learning opportunities for students (anytime, anyplace).
14. an opportunity to develop the skills needed to learn and work in a technological society.
15. Is there anything else you would like to comment on regarding the PURPOSE of online learning?
   Open-ended Response box

III. Issues
Please respond to the following items using this scale:
SD = Strongly Disagree, D = Disagree, A = Agree, SA = Strongly Agree, NS = Not Sure
To what extent do you agree or disagree that online learning:
16. increases inequities by relying on students’ ability to access technological resources
17. incurs an unjustified financial burden on local schools
18. diminishes parental involvement in students' educational experience
19. incurs an unreasonable financial burden on parents/students
20. requires independent and responsible learners
21. discourages teacher-student interactions in the learning process
22. requires students to have technological skills in order to be successful
23. best serves secondary students (6th – 12th Grade)
24. isolates students from one another in the learning process
25. presents an easy way for students to pass courses
26. detracts from the building of community in schools
27. is void of diversity issues related to language, geographic location, economic and cultural background.
28. Please comment on other ISSUES of online learning you feel should be addressed:

   Open-ended Response box

IV. Recommendations

Please respond to the following items using this scale:
SD = Strongly Disagree, D = Disagree, A = Agree, SA = Strongly Agree, NF = Not Familiar

To what extent do you agree or disagree districts must address the following ISSUES BEFORE IMPLEMENTING an online learning program:
29. Gain the support of the online learning program by teachers and administrators
30. Provide adequate computer equipment for students to take online courses
31. Create policies limiting the number of online courses students can enroll in each semester
32. Manage how the academic records for students taking online courses
33. Decide whether or not schools will provide teachers who are trained and willing to teach online courses
34. Determine whether or not mentors will supervise students to keep them on track and honest with their work
35. Please provide any additional RECOMMENDATIONS regarding ISSUES that must be addressed before implementing an online learning program through your district.

   Open-ended Response box

To what extent do you agree or disagree that online learning:
36. provides an opportunity to globally interact and share with students and experts.
37. provides an opportunity to prepare for online learning experiences beyond high school graduation.
38. provides an opportunity to use technology to improve education.
39. is an appropriate alternative to the traditional classroom educational experience.
40. is an alternative option to the construction of new school buildings.
41. is a school choice option aimed at better customer service.
42. What RECOMMENDATIONS do you have for successful implementation of online learning in Washington’s K-12 public schools?

   Open-ended Response box

V. Implications

Please respond to the following items using this scale:
SD = Strongly Disagree, D = Disagree, A = Agree, SA = Strongly Agree, NF = Not Familiar

To what extent do you agree or disagree that the superintendent SHOULD:
43. play an active role in communicating a shared vision to staff/patrons that includes exploration and implementation of online learning.
44. model technology literacy

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allocate appropriate resources to explore/implement online learning options for students

support online learning opportunities if they help to sustain the educational programs in the community.

As a Superintendent, is there anything else that you would like to comment on regarding the implementation of online learning in Washington State?

*Open-ended Response box*
## Survey Item Origin

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Appendix G

Survey Question Origin

Augustine-Shaw (2001) Survey

Robison (2007) Survey

Pilot Survey Question

"Was this question clear?"