QUALITATIVE CASE STUDY ON THE PERSPECTIVE OF PENNSYLVANIA SUPERINTENDENTS ON DISTANCE EDUCATION IN K-12 PUBLIC SCHOOL DISTRICTS

by

Stephanie Sweeney Pennucci

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

2016

QUALITATIVE CASE STUDY ON THE PERSPECTIVE OF PENNSYLVANIA SUPERINTENDENTS ON DISTANCE EDUCATION IN K-12 PUBLIC SCHOOL DISTRICTS

By Stephanie Sweeney Pennucci

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University, Lynchburg, VA

2016

APPROVED BY:

Gary Kuhne, Ed.D., Committee Chair

Dr. Kristen Ascencao, Ed.D., Committee Member

Dr. Michelle Sims, Ph.D., Committee Member

Scott Watson, Ph.D., Associate Dean, Advanced Programs

ABSTRACT

Distance education is rapidly changing the way K-12 students learn. School districts use it for course recovery, to supplement the curriculum with additional courses, and to offer alternative educational opportunities. Pennsylvania's 500 public school superintendents face a unique challenge in an economic recession, severe cuts in state funding, and competition from cyber charter schools. The purpose of this qualitative intrinsic case study is to understand the impact of distance education on the experiences of Pennsylvania public school superintendents as they deal with the influence of distance education in their programs, particularly the implementation of cyber charter schools. As the educational leaders who are guiding public education and lobbying lawmakers, fifteen school superintendents were interviewed to determine their perspectives on the role and future of distance education in Pennsylvania. The data was coded and themes identified to develop an understanding of the changing role of public education.

Keywords: distance education, cyber charter schools, virtual schools, K-12 education, educational administration, school finance, intrinsic case study, Pennsylvania

Copyright

Dedication

This paper is dedicated to my parents, Ray and Joanne Sweeney, whose love and support instilled in me the belief that I could accomplish this goal. Thank you and I love you.

Acknowledgements

This paper would not have been possible if it weren't for the participants who agreed to give me time out of their busy schedules to discuss my research questions. Many told me that they were paying it forward from those who helped them achieve their degrees and I promise to do the same in the future.

I must extend the sincerest of thanks to the members of my committee for sticking with me through the long process and life changes that occurred during the research and writing of this paper. Dr. Gary Kuhne, thank you for your guidance and encouragement. Dr. Michelle Sims and Dr. Kristen Ascencao, thank you for your thoughtful edits along the way, especially in the final weeks as we rushed to meet the final deadlines.

Dr. Megan Ament, thank you for being a great friend and editor. I will be forever indebted to you for helping me revise the final draft under such tight deadlines.

I always planned on finishing this degree before marriage and children, but I didn't quite make it. To my husband, Daniel, and my daughter, Alessia, thank you for your love, support, and sacrifices over the last two years while I worked to achieve this goal. Dan, I was finishing my classes when we met so this degree program has been a part of our entire relationship. Now that it is finally done I can't wait to see what the next chapter holds for us. Although I intended to have this done before the two of you came into my life, achieving this milestone is much sweeter with you as a part of it.

Table of Contents

List of Tables

List of Abbreviations

Adequate Yearly Progress (AYP)

Center for Research on Education Outcomes (CREDO)

Eastern Lancaster County School District (ELANCO)

Education management organizations (EMO)

Florida Virtual School (FLVS)

Intermediate Unit (IU)

National Education Association (NEA)

National Network of Digital Schools Management (NNDS)

No Child Left Behind (NCLB)

Odyssey Charter High School (OCS)

Pennsylvania Department of Education (PDE)

Pennsylvania School Boards Association (PSBA)

Pennsylvania System of School Assessment (PSSA)

Pennsylvania Training and Technical Assistance Network (PaTTAN)

School Performance Profile (SPP)

Western Pennsylvania Cyber Charter School (WPCCS)

CHAPTER 1: INTRODUCTION

Overview

The traditional method of education where students attend a classroom regularly with peers and a teacher has continued to endure, but has been challenged in recent years with alternative formats. Homeschooling has been around for centuries and continues to be a popular choice for families who determine that it fits their needs better than a traditional education. Some private and charter schools offer different schedules and programs than the traditional public school. More recently, blended and completely online programs have become popular in K-12 educational environments. These virtual classrooms have expanded educational opportunities for millions of students, but have also become an unexpected source of competition for public school districts. In Pennsylvania, cyber charter schools have had a direct impact on the addition of online course availability to school district programs in their efforts to retain students – and the funding tied to them – who leave for these alternative programs. This competition has changed the landscape of public education in Pennsylvania.

Background

The field of education is changing rapidly. Distance education, once a rarity using the postal service, take home videos, and satellite feeds to remote sites, has expanded from kindergarten to graduate school with the incorporation of the Internet. Universities have taken advantage of this format and expanded their reach to students who could never appear regularly on campus due to personal, geographical, or financial constraints. Distance education is also becoming more popular on the K-12 level as students leave public education for a multitude of reasons, including travel, flexible scheduling, bullying, medical issues, teen pregnancy, and discipline (Barbour & Reeves, 2009; Devlin, 2007a; Erb, 2004; Kello, 2012; Negley, 2007;).

Erb (2004) interviewed parents who made the switch for their children and found that the "push factors" for leaving public school districts were more of a factor than the "pull factors" of the cyber program (p. 96). This format was new at the time and most of the parents were investigating homeschooling for their children. They did not care about standardized test scores or school rankings, but rather traditional report cards, interactions and conversations with teachers and administrators as they searched for alternatives for their children, a number of whom were bullied. Their school selection was emotional – protecting their children from being victimized, a situation several had similarly experienced at the same age, because of challenges from a medical condition, or self-esteem issues caused by learning disabilities – not based on policy or state rankings and assessments.

Charter schools have recently become a popular form of alternative education, but they are of great concern to traditional school districts (Ellis, 2008). Charter school law in Pennsylvania states that school districts must sign off on charter schools who wish to operate within their boundaries (Pennsylvania Department of Education, 2012). It was discovered that the law provided that the instruction not be technologically limited, resulting in a few districts giving permission for the creation of cyber charter schools. The unintended consequence of this was that these schools could draw students from anywhere, inside and outside of Pennsylvania. When a child leaves the school district, the funding for that student goes to the charter school. The school districts have no control or influence over the cyber charter schools that draw their students.

Many parents of homeschool children transferred to cyber charter schools (Ellis, 2008; Huerta, d'Entremont, & Gonzalez, 2006). This was an economic decision made by many families. The parents were able to maintain control over the child's education since the cyber

charter school was more individualized than public school. This method of delivery also removed the educational costs of teaching the children at home since the cyber charter school usually covered the cost of a computer, Internet connection, resources and teachers (Huerta, Gonzalez, & d'Entremont, 2006). Parents whose children were being bullied, had medical issues, or were just disillusioned with the local public school (Klein & Poplin, 2008) and a myriad of other reasons also began transferring their children to cyber charter schools. Suddenly school districts were getting bills for hundreds of thousands of dollars for which they had not budgeted (Huerta, Gonzalez, et al., 2006). School districts in Pennsylvania are not in a county system, as there are 500 public school districts of greatly varying size in 67 counties (PDE, 2013); for a small district with a community population of less than 10,000 such a loss in funding can be devastating.

There is great deal of contention about the regulations that public school districts must follow versus those of cyber charter schools. School districts in Pennsylvania are forced to redirect hundreds of thousands of dollars in state funding as tuition payments to cyber charter schools (Trotter, 2001), which are not required to maintain the same financial records as the districts (Huerta, d'Entremont, et.al., 2006). There have been numerous lawsuits, primarily about finances (Ellis, 2008; Taylor, 2002) and constantly changing regulations by the state government in response (Mead, 2003; Senate Education Committee, 2010; Trotter, 2005).

There are many financial challenges in Pennsylvania. The economic downturn, severe education funding cuts at all levels in the state budget passed in July 2011 (including the zeroing out of partial tuition reimbursements to school districts of monies lost to cyber charter schools) (Pennsylvania Budget and Policy Center, 2011), mismanagement of the public employees' pension fund by the State legislature requiring massive payments by school districts over the

next few years (Brandt, 2013), and growth of cyber charter schools have caused financial stress on public school districts (Wilson, 2013). Over 14,000 people, including 3,556 teachers, lost their jobs in Pennsylvania school districts after the 2010-11 school year (Easak, 2011).

Situation to Self

Technology and distance education has been an integral part of my education, but in a completely unintentional way. I was never one who gravitated toward computers, but developed an interest over time because of their necessity in my job as a librarian. My interest in distance education began in 2002 as a graduate student at Clarion University in the Master of Library Science program. I purposely went to the campus because I preferred face-to-face courses even though the program offered a hybrid option with a satellite campus in Harrisburg, PA, about an hour from my home. While on campus, I quickly found out that about one-third of my program would be traditional classroom, one-third would be online via Blackboard, and about one-third would be in a blended format. While I missed the in-person interactions in my online courses, I saw the value in the flexibility of the program. When I decided to pursue a doctorate degree, I did not hesitate to investigate online options because I was comfortable with the format and lived over an hour from many of the closest face-to-face programs. Travel for classes resulting in late nights for at least three years and working full-time did not appeal to me. After carefully checking accreditations and on-campus requirements, I settled on Liberty University's program. About a year after beginning the program, I became an adjunct online instructor teaching library science undergraduate and graduate courses for Clarion University and information literacy and technology courses for Arcadia University. My interest in the role of distance education continues to grow, particularly its growth in the K-12 arena.

As a Pennsylvania educator I have seen first-hand the news reports and struggles that public school districts face as they compete with cyber charter schools for students. In 2011, I, along with other teachers and support staff, were furloughed in an effort to close a $1.3 million budget gap at Eastern Lancaster County (ELANCO) School District (Wallace, 2011). The district could not make these cuts purely for economic reasons, but was able to because there had been a ten year decline in enrollment that at 13% exceeded the minimum requirement of 10% and the elimination of programming (Wallace, 2011). There were many reasons that the district lost funding, including cuts to basic education subsidies from the state, but a new situation at the time was an increase in funding lost to cyber charter schools. The superintendent had talked to the faculty about providing opportunities for students to experience online education when he first came to the district as an assistant superintendent several years before. In the opinion of the administrative team it was now essential that the district begin creating an internal cyber school to try to attempt to draw back those students to recoup the lost funds and also provide the scheduling flexibility for the rest of the student body that the superintendent envisioned. The program was implemented and continues to grow (Stoltzfus, 2014).

As I searched for a new teaching position in the economic downturn, stability of the hiring district was very important to me. One of the questions I asked on my job interview for my current position with the Garnet Valley School District was the impact of cyber charter schools on the district. I wanted to know if I was going to find myself in the same predicament again. At the time it was not a concern, but that has changed drastically in the last five years as the number of students enrolled jumped from a few in 2011 to 42 in 2014-15. After leaving the preliminary interview I began to wonder if every district was being impacted by cyber charter schools in the same way that ELANCO School District was or if it was a regional or

socioeconomic issue. I saw the issues in the news all the time in central Pennsylvania, but here was a wealthier district in another region of the state who did not seem concerned at all.

I decided to focus on superintendents for my study because I have seen how they create the vision for the district. Even though the technology director and central office administrators have a significant impact on the direction of the educational program, it is the superintendent who ultimately drives district forward – or holds it back. I opted to do personal interviews rather than a survey to try to gain more insight into the thought processes and challenges these educational leaders face when dealing with distance education in the K-12 program. Through my preliminary research I observed that this issue had not been addressed in a study like the one I was proposing. There had been Pennsylvania-based studies that researched the perspective of cyber charter leaders (Sherbondy, 2008) and regional case studies of district reactions to cyber charter programs (Kurelja, 2005; Miller, 2012), but none that surveyed a cross-section of superintendents from across the state. This study has an ontological assumption since it will be based on themes that emerge from interviews and is shaped by the social constructivist worldview since it focuses on the experiences of Pennsylvania superintendents (Creswell, 2007).

Problem Statement

The problem is that K-12 distance education is rapidly changing public schools in Pennsylvania and the literature lacks a clear focus on the perspective of public school superintendents, the educational leaders of the state, on this issue. There have been publications about charter and cyber charter schools in Pennsylvania on why parents and students select them (Erb, 2004; Kello, 2012; Marsh, Carr-Chellman, & Sockman, 2009), a case study of three school district responses to charter schools (Kurelja, 2005), cyber school finances (Bearden, 2008; Carr-Chellman & Marsh, 2009), a regional case study of two districts (Miller, 2012), a descriptive

study of Pennsylvania cyber charter schools (2008), special education students in cyber charter schools (Carnahan & Fulton, 2013), litigation pertaining to cyber charter schools (Taylor, 2002), accountability (Huerta, d'Entremont, et. al., 2006), and general articles about the programs (Ellis, 2008; Huerta, Gonzalez, et al., 2006). There is an evident gap in the research literature pertaining to how school district leaders across the state are dealing with the sudden competition. The issue was in the news, but this particular angle had not been formally studied in Pennsylvania.

Purpose Statement

The purpose of this intrinsic case study is to investigate the impact of distance education on the experiences of Pennsylvania public school superintendents as they deal with the changes in their educational programs, including the competition from the implementation of cyber charter schools. At this stage in the research, cyber charter schools are generally defined as public virtual charter schools that may draw students from any location in, or possibly out of, Pennsylvania. There are several theories guiding this study. Charter schools were started with the intention of creating opportunities to try new methodologies and reform current educational practices (Raymond, 2014). The free market theory (Smith, 2008) and decentralization of schools management theory (Krbec, 2001; Rodney, 2010) propose that competition in education will create a more cost effective and better product than currently exist. The theory of multiple intelligences (Gardner, 2006) proposes that there are several different ways people learn and proponents of school reform desire educational forums that cater to individual needs rather than the masses.

Significance of the Study

This study has practical significance because K-12 education is rapidly changing in Pennsylvania. The sudden competition from charter and cyber charter schools for students (and

the funding that travels with them) has forced school districts to adopt alternative methods of education to attract a growing portion of the population seeking a different track than the traditional classroom setting. How superintendents view and respond to this situation is critical to understanding the direction that K-12 education will take in the future. If superintendents view it as a passing fad that can be eliminated with a change in the law, then they may spend more time testifying against it in Harrisburg than setting up an in-house program or forming e-learning consortiums. But if the opposite is true and the superintendents believe this is the beginning of a significant shift in the way schooling will be conducted, then the educational system will require a significant overhaul in technology, digital curriculums, professional development, and teacher training programs.

Interviewing the superintendents is important because during the course of the discussions new themes under this topic may emerge that were previously unknown. Studies conducted that interview school district leaders on this issue are limited (Kurelja, 2005; Miller, 2012) and are focused on a few in-depth case studies. For this project survey would reach a larger participant pool, but would report a limited amount of information and not provide the opportunity to obtain in-depth responses to the research questions. The ability to discover new issues that are not being covered in the media and current research may be missed through a survey.

There are many questions related to the experiences of Pennsylvania superintendents and distance education to be answered. Why students leave for cyber charter schools has been documented (Huerta, d'Entremond, & Gonzalez, 2006; Kello, 2012; Klein & Poplin, 2008; Marsh et al., 2009; Pennsylvania Department of the Auditor General, 2014), but how is that impacting the school districts? Are the superintendents seeing this as an opportunity for a stop-

gap, hoping the law changes, or are they viewing it as a chance to make significant changes to their educational programs? Districts are losing money with each student who transfers to a cyber charter school, but is this a significant impact or merely a nuisance? Perhaps for some, but not all? Does it affect some geographic regions or types of districts (rural/town/suburban/urban) more than others? The fact that cyber charter schools are having a financial impact on Pennsylvania school districts has been well documented (Bearden, 2008; Kurelja, 2005; Miller, 2012; Schafft, Frankenberg, Fuller, Hartman, Kotok, & Mann, 2014), but the current and long term impact viewed by the top administrators across the state has not been studied sufficiently. The information gathered in this study can aid educators, researchers, and legislators in obtaining a fuller picture of the current educational climate in Pennsylvania and what the future may hold.

Research Questions

The research questions in this study serve two purposes regarding the implementation of distance education programs in Pennsylvania school districts. The first is to determine how superintendents perceive the role of distance education in their educational programs. The second purpose is to determine if the impact of cyber charter schools on school districts reported by the media and research literature is occurring throughout the state evenly or if there are certain locations or types of districts that are feeling more of an impact than others.

Main research question

What is the experience of Pennsylvania public school administrators with the implementation of distance education into their programs?

Despite all of the assistance received from others in the local education setting, the superintendent is ultimately responsible for the educational program and that is why they are the focus of this study. There has been research conducted in Pennsylvania on student transfers to

cyber charter schools (Erb, 2004; Kello, 2012; Marsh et al., 2009), case studies on a handful of districts (Kurelja, 2005; Miller, 2012), cyber charter CEO perspectives (Sherbondy, 2008), special education services (Carnahan & Fulton, 2013), and financial considerations regarding distance education (Bearden, 2008; Carr-Chellman & Marsh, 2009), but a study examining a cross-section of the school district superintendent experiences from across the state has not been done.

Sub-question one

What are the perspectives among superintendents with respect to geographic location, rural/suburban/urban, and economic status?

School districts around the country have used distance education to meet educational needs for years (Barbour & Reeves, 2009). Pennsylvania districts are able to deny brick and mortar charter school applications within their boundaries, but they may still face competition from those approved by neighboring districts. The cyber charters, however, can impact districts that had not previously needed to respond to the charter issue since they draw state-wide. It is also assumed that larger districts are more able to absorb the funding redirected to cyber charter schools than smaller districts. This question seeks to understand if location and size of the district influence its attitude toward the need for distance education in the curriculum and the response (if any) taken in reaction to the cyber charter movement.

Sub-question two

What is the perception of the future of distance education in Pennsylvania?

The decision to include distance education in the curriculum is done on an individual basis by districts across the state. Five states require that students take an online course as a

graduation requirement (Evergreen Education Group, 2015), but Pennsylvania is not one of them. This question seeks to understand if superintendents view the distance education movement in the state as a passing fad or a significant shift in the educational system.

Sub-question three

What has been the perceived impact, or lack thereof, of distance education on the school district's program?

School districts are taking a variety of approaches to implementing distance education programs. The level of involvement they want to embark on will impact professional development, use of facilities, technology outlay and support, implementing a digital curriculum, etc. For superintendents who perceive this format as the next step in the evolution of educational practice, they may put a great deal of resources into their program. On the other end of the spectrum, educational leaders who are only concerned with recouping the lost funding may opt to outsource the program and keep the impact as minimal as possible. Reactions can vary depending on the amount of funding that is being lost and the leadership team in place (Kurelja, 2005).

Sub-question four

What is the perspective of public school administrators about why students are leaving public school districts for cyber charter schools?

There has been some research into why students leave traditional schools for cyber charter schools (Barbour & Reeves, 2009; Devlin, 2007a; Erb, 2004; Kello, 2012; Negley, 2007). Homeschool students were early adopters of the cyber charter school programs (Huerta, d'Entremont, et al., 2006). If a district does not have a large homeschool population, what are the

other reasons students leave? If the district does have a large homeschool population that hasn't transferred to cyber charter schools yet, is the district being proactive in reaching out to those families? The purpose of this question is to determine if the experiences of the superintendents interviewed in the study match the research and if they can identify additional reasons students transfer.

Sub-question five

What is the response of public school administrators to the implementation of cyber charter schools?

Some Pennsylvania administrators are creating internal cyber charter schools or joining consortiums to try to draw back students who have left for cyber charter schools (Kurelja, 2005; Miller, 2012). Is every district able to do this or feel the need to make such a large investment? What is the "breaking point" at which administrators feel the need to try to recoup the funding? Charter schools were created with the intention of allowing the free market theory (Smith, 2008) and decentralization of schools management theory (Krbec, 2001; Rodney, 2010) to create an evolution in educational theory and management. Is this competition having its intended impact or are the school districts just reacting in as minimal a manner as possible to gain back lost funding and students? Essentially, is the economic incentive to change having an impact on philosophy and action?

Research Plan

This qualitative study uses an intrinsic case study design because the purpose is to examine experiences that are unique to public school district administrators in Pennsylvania. A case study is the appropriate method for this study since a particular phenomenon is to be

examined in depth, the researcher has little control over the events, and it is a current educational issue (Yin, 2009). In this situation, the case is the entire state of Pennsylvania.

After obtaining IRB approval, maximum variation sampling is used to identify a sample of 16 public school superintendents from six regions around the state. Maximum variation sampling is a form of purposeful sampling that ensures a cross-section of diverse perspectives in the findings (Creswell, 2007). In this study, the type of sampling methodology will obtain a diverse group of participants to attain the broadest picture possible of the current and future state of distance education in Pennsylvania and ensure that participants are not missing from specific demographics or regions. Interviews and document analysis will provide insight into the future of distance education in Pennsylvania public school districts. Data collected will be coded to identify themes (Yin, 2009). As the implementation of distance education is changing public schools in Pennsylvania, this study provides insight from the top educational leaders in the state into the current and future role of the education system.

Delimitations and Limitations

The study is limited to Pennsylvania because it is a unique situation with the charter school laws that are in place and the K-12 structure is different than other states who employ county systems. Only interviewing public school superintendents meant the omission of other public school administrators who were heavily involved in decisions regarding the use of distance education, such as district technology and curriculum directors, and might have been able to provide valuable insight about the future of distance education in Pennsylvania.

The primary limitation of the study is a potential lack of participation, either by a small group of interviewees or the self-censuring of responses. Obtaining an honest viewpoint from each superintendent is critical to the success of the study. Since the maximum variation sample is

selected to fit certain demographic criteria, prior experience with distance education is not a consideration for participation.

Definitions

There are several core terms used in this study regarding school types and the student types in virtual school programs.

School types:

- Charter school – "… an independent public school established and operated under a charter from the local board of school directors. Charter schools must be established as public nonprofit, nonsectarian entities by teachers, parents, institutions of higher education or museums" (Pennsylvania Department of Education, 1997)
- Cyber charter school – "public school entities that provide education through distance learning technology in students' homes…receive their operating charters from PDE, unlike traditional 'brick and mortar' charter schools…academically and financially accountable to PDE" (Pennsylvania School Board Association, 2009, p. 1.)

Student types in virtual schools:

- Blended student– takes both online and traditional classes during a regular school day
- Hybrid student – takes both online and traditional classes but does not regularly attend the online courses at school
- Cyber student – "enrolled exclusively in online classes to fulfill graduation credit requirements"
- Recovery program – "each report period, students who fail in a core class will take failed curricular components concurrent with the next marking period work"

- Remediation program – use online software to "re-teach key components of curriculum in an eight week summer school class

(Pietro, Fuselier & Velto, 2010, n.p.)

Summary

The study proposed in this chapter will provide a significant contribution to the small, but growing literature on distance education and cyber charter schools in Pennsylvania. While the results may be limited to one state due to Pennsylvania's unique charter school laws and educational system, the findings will still be of interest to scholars and educational practitioners researching the issue. Understanding how the educational leaders of the state view a systemic change like adding an e-learning component to their curriculums is critical to predicting the future of K-12 education.

CHAPTER 2: LITERATURE REVIEW

Overview

The research shows that distance education is an accepted form of education, although overall research on K-12 distance education is severely lacking. That which does exist focuses primarily on asynchronous versus synchronous delivery methods, professional development for teachers, expectations of student learners and comparisons of traditional and virtual student performance. There is a broad range of issues that need to be prioritized with online education, including evaluation of course design and delivery, best practice, accountability, access, online learning/learners, professional development, accreditation/standards, funding, and technology (Rice, 2009).

Theoretical Framework

The qualitative case study used in this research project is modeled after Yin (2009). This topic requires a deeper understanding than can be obtained through a survey. The research design is also appropriate because the questions to be answered are "why" and "how" type questions which fit the case study research model (Yin, 2009).

The theory of multiple intelligences has been prevalent in education for decades. This theory consists of intelligences related to music, bodily-kinesthetic, logical-mathematical, linguistic, spatial, interpersonal, and intrapersonal, demonstrating that everyone has a special way of learning and a unique skill set (Gardner, 2006). Gardner does not view his theory as an educational theory, although it has been readily adopted by teachers (Gardner, 2006). Education, according to Gardner (2006), should be tailored to meet individual needs. This theory is important in this study because one selling point of cyber charter schools is that the learning program can be individualized.

The decentralization of schools is a management theory that is altering the educational landscape. This theory gained popularity internationally in the 1990s in politics and business and has spread into educational institutions (Krbec, 2001; Rodney, 2010). Opening the educational market to school choice is supposed to, theoretically at least, create a free market system (Ellis, 2008). Recent school reform initiatives have produced educational entrepreneurs that compete with traditional schools and force them to change their structure. This follows with the increased privatization of education internationally. These outside influences, and loss of funds by public school districts to charter schools, has altered the ability of superintendents to manage their districts in the same manner as their predecessors.

The argument for school reform is often compared to the free market business theory outlined in *Wealth of Nations* (Smith, 2008). While cyber charter schools are technically public schools, they are still competing for funds from the same sources as traditional public schools, which is similar to the free market concept. Some argue that public schools have long held the monopoly on education and application of the free market theories would bring about necessary change through competition. This philosophy has led to the school choice and voucher debates. There is also speculation that the virtual school format has not been widely accepted by public school advocates because of the anticipated loss of funds, not the educational format (Barbour & Reeves, 2009). Economic rather than philosophical conflicts are at the heart of the matter. The Pennsylvania Department of Education advocated a free market philosophy in 2001, evident by the charter legislation and programs such as the Digital School District competition and Link to Learn initiative (*Judge,* 2001). Al Bowman, spokesman for the department, said "We apply a free market ideology to everything else in America except education. We live in an era where you have to provide what students need" (*Judge,* 2001, p. 2). In many ways the issue at hand is

control over the educational system and the funding that goes with it, not the curriculum and delivery methods.

This study has an ontological assumption since it will be based on themes that emerge from interviews and is shaped by the social constructivist worldview since it focuses on the experiences of Pennsylvania superintendents (Creswell, 2007).

Related Literature

History of distance education

Distance education has been in existence since the 20th century and has included delivery through correspondence courses, radio, television, and videoconferencing (Cavanaugh, 2009). Utah's Electronic School, Florida Virtual School (FLVS), and the Concord Consortium's Virtual High School all began in the mid-1990s (Roblyer, 2006). Today, the majority of distance education programs are done via the Internet in either a synchronous or asynchronous manner. Distance education programs, because their expansion could only occur at the rate of the evolution of technology, were often created sporadically and haphazardly within an institution, causing the plan for their creation and execution to often be rewritten. Online learning is not only popular in the United States, it is growing rapidly around the world, including the Virtual Schooling Service in Queensland, Australia, and the Virtual Learning Network in New Zealand (Compton, Davis & Mackey, 2009).

Distance education in K-12 schools. Online learning had been deemed unequal to traditional education for a long time. Today, advances in the quality of online education have led to a change of heart, as well as cost efficiencies and teacher shortages, and created a $50 million market (Booth, 2010). Michigan was the first state to mandate that high school students take an

online course to graduate (Robelen, 2007) and Alabama, Arkansas, Florida and Virginia have since followed suit (Evergreen, 2015).

State-wide virtual schools. Distance education can also be incorporated into the traditional educational program. Schools may offer "virditional" courses that are a hybrid and are 65% online and 35% traditional (Oblender & Glass, 2004, p. 41). In 2010, 25 states were running statewide K-12 online programs, compared to 15 the year before and two states had privately run initiatives and four were in the process of implementation (Support for K-12, 2010). The FLVS, one of the first such programs, was initially designed to supplement, not supplant, what is happening in brick-and-mortar, charter, private, and homeschool environments (Tucker, 2009).

Student achievement. Distance education is an established educational practice, although evolving as technology changes, and has a proven record of achievement when done correctly. Cavanaugh et al. (2004) conducted a meta-analysis of the effectiveness of distance education on K-12 student outcomes. In the 14 studies analyzed, they found that while the results demonstrated that distance education can be as effective as the traditional classroom, consistency in research methods and reporting of data was lacking. The study concluded that "policy-makers and practitioners should continue to move forward in developing and implementing K-12 distance education programs when those programs meet identified needs and when they are designed and managed as carefully as traditional education programs" (Cavanaugh et al., 2004, p. 23).

There are many positives and negatives to virtual schools, but they are not going away. The popularity of virtual schools is increasing and needs to be taken seriously as an educational framework. Greenway and Vanourek (2006) acknowledge this and purport the need for this educational framework to be examined further, particularly in the area of effectiveness for all

students. There is some concern that programs are piloted with honors students, found to be successful, and then used heavily with a different population of lower academically achieving students for credit recovery (Barbour & Mulcahy, 2008; Barbour & Reeves, 2009; Greenway & Vanourek, 2006). Students need a certain amount of technical prowess to succeed in this environment and Oliver, Osborne, Patel and Kleiman (2009) found credit-recovery students self-reporting their skill set lower than accelerated students. They also found self-pacing and motivation to be a difficult task for some students. Much of the distance learning research to date has focused on adult learners producing results that may not be transferrable to a younger population, as well as on the growth of this educational format, anecdotal accounts, types of technology used and comparisons of distance education students and traditional classroom students (Barbour & Reeves, 2009).

Staffing and professional development. Teaching online requires a different skill set than teaching in the classroom. The United States Department of Education, in the draft of the National Educational Technology Plan 2010, called for an increase in online learning K-12, but also acknowledged that colleges of education must instruct future teachers how to perform in this environment (Laster, 2010). Pennsylvania cyber charter CEOs echo this call (Sherbondy, 2008). Without the appropriate knowledge base, future educators will struggle in the digital classroom. Even with experience as an online learner, usually through higher education courses, teachers may not be prepared to make the transition on their own (Compton et al., 2010). For those who do get formal training in online learning, the lack of standardization is concerning to cyber charter C.E.Os (Sherbondy, 2008). Experience in virtual schools as part of the teacher preparation program is key to creating a workforce who can be effective in a full or part-time online program. This participation also has to be active in order to gain the most benefit from it.

Observing body language and interactions in a traditional classroom is different than observing interactions in an online classroom (Compton et al., 2010). Once teachers are in Pennsylvania cyber classrooms, professional development is similar to traditional schools – local Intermediate Unit (IU) programs, Pennsylvania Training and Technical Assistance Network (PaTTAN), Pennsylvania Department of Education (PDE), etc. (Sherbondy, 2008).

Hill and Johnston (2010) propose a new type of teacher will emerge who assists the students with navigating the technology used in instruction and then steps in where only a human could, such as remediating instruction or explaining an idea that cannot be grasped through the digital learning materials. However good teachers can succeed regardless of the situation, as Rice (2006) concludes "that the effectiveness of distance education appears to have more to do with who is teaching, who is learning, and how that learning is accomplished and less to do with the medium" (p. 440).

Archambault and Crippen (2009) found that the larger virtual schools require prior traditional classroom teaching experience, but as a need for online educators increases, this policy may have to be altered to allow the hiring of those fresh from bachelor's programs. This will require a change in the teacher education process. Teacher certification is also state controlled and this may cause problems for programs that cross state lines, although the National Education Association (NEA) promotes focusing on ensuring subject certification over which state certifies the teacher (Robelan, 2007).

Along with a technological skill set, a change in leadership development is necessary. Kowch (2009) found little existing research in the area of cyber school management, but did acknowledge federal educational leaders have recognized it as a hurdle to overcome in school reform. There is no longer the option to sit back and discuss what should or could be happening;

now the conversation must be about what is happening in this area (Stone, 2008). Abrego and Pankake (2010) argue that "ultimately, the role of school leaders should be one of building organizational capacity" that "requires a deep understanding between the concepts of change, initiation, and implementation" (p. 11).

Another area of concern is the type of staffing done in these schools, since in Pennsylvania charter and cyber charter schools only "75% report some form of library or collection of similar resources" and "one-third employ a librarian or library media specialist" to build and maintain that collection (Deuink & Reinsfelder, 2007, p. 39). They often encourage relationships with the local public, school, or academic libraries in lieu of creating an internal program (Deuink & Reinsfelder, 2007). Since many public libraries are strained financially or located too far from the students, this is not likely the best option.

Alternative education. Parents opt to put their children in cyber charter schools for a number of reasons, including frequent travel, additional support for homeschooling, medical issues, alternative placements for students, or for a few courses that are not offered by district (Negley, 2007; Robyler, 2006). Cyber charter schools differ from homeschooling in that the teaching is done by certified teachers, not the parents. The students receive "a computer and software, Internet access, a curriculum and regular assessment as they follow their coursework at home" (Chute, 2001). Students must be online 5.5 hours per day (27.5 hours per week) and truancy, including not attending class or completing assignments, is tracked and referred to the home school district, who has the authority to fine the parents (Devlin, 2007a). Truancy can result in expulsion from the cyber charter school (Urban, 2007).

Most of the literature on cyber charter schools focuses on management and there is not a clear picture of K-12 student achievement using this educational delivery method (Cavanaugh,

2009). However, the work of Roblyer, Davis, Mills, Marshall, and Pape (2008) emphasize the need for identification of factors that may prevent success, a pre-course orientation program and support system for virtual students that will aid in creating a positive, successful educational experience. The dropout rate for online programs can be as high as 60-70% and reports of these numbers can give e-learning a poor reputation, while other programs are more successful (Roblyer, 2006). The reasons for the disparity in dropout rates range from the type of student enrolled (high achieving vs. at risk), calculation formula for dropout rate, and the structure and support of the e-learning community (Roblyer, 2006). A support system and lessons on how to be successful in an online course are important, as Manheim Township High School found out when 30% of the students enrolled in its initial foray into online courses dropped them due to admitted immaturity and lack of discipline (Oblender, 2006). Chen and Hirumi (2004) also developed a reading program to help secondary students improve their reading skills in a virtual environment.

Special education. The ability for special education services to be adequately provided in a virtual environment depends on the nature of the disability. It is illegal for online programs to discriminate or prevent enrollment because of a disability. Many online programs enroll at-risk learners, including those with disabilities, who are doing credit recovery or remediation courses (Reppetto, Cavanaugh, Wayer, & Liu, 2010). Some students who have low-incidence disabilities, are on the autism spectrum, or have serious health issues may benefit from e-learning because of the adaptive technologies available and reduction of social stigmas on a daily basis (Reppetto et al., 2010). There is little research on how special education students fare in online settings. Carnahan and Fulton (2013) studied Pennsylvania's cyber charter schools based on data

from PDE and raised questions about the appropriateness of this format for all learners and curriculum adaptations available for all online learners, not just those in the study.

Homeschooling

Around 2006, 60% of the cyber charter students in Pennsylvania were former homeschoolers (Huerta, d'Entremont, et al., 2006, p. 24) and it is important to understand why they are transitioning to this educational format to understand the increase in virtual charter schools. This transition has captured the attention of researchers because the conservative nature of most homeschool parents would not generally indicate a desire for such a radical educational format (Marsh et al., 2009). Homeschooling is generally chosen by parents because of a lack of confidence in public schools, curriculum, safety and values (Klein & Poplin, 2008). There is less state and local oversight of "non-classroom-based charters" and teachers in this environment are expected to "act as educational consultants and to defer to parents' decisions in managing the processes of teaching and learning" (Huerta, d'Entremont, et al., 2006, p. 24). Safety fears are one of the major reasons parents turn to charter schools and as long as this continues, parents will seek alternatives to traditional public schools (Pennsylvania Department of the Auditor General, 2014). Further research into the relationship between homeschooling and virtual charter schools is necessary to determine the retention rates and if the development of virtual charter school curriculum is directed at the demands and interests of the homeschool population (Klein & Poplin, 2008).

Charter schools and cyber charter schools

Education reform of the traditional public school system began in the 1970s with the creation of magnet and alternative schools (Knight, 2005). Charter schools began in 1991 in Minnesota and all "share two common characteristics: (1) a charter contract that establishes their

authority to exist and binds them to accountability standards; (2) some form of relief from the state statutory and regulatory requirements imposed on traditional public schools" (Mead, 2003, p. 350). They are meant to have the freedom to experiment with educational reform, provide a school choice option, create "greater educational equity across student groups," and create "more engaging professional settings for teachers" (Raymond, 2014, p. 9).

Nationally, charter schools "now comprise more than four percent of the total public school population" with 6,000 of them serving 2.3 million students in 2012-13, an 80% increase since 2009 (Center for Research on Education Outcomes, 2013, p.1). There are now charter schools in 42 states and the District of Columbia and whole school systems in some cities are being replaced with charter schools (Center for Research on Education Outcomes, 2013). Of those 42 states, 27 of them educate 95 percent of all charter students (Center for Research on Education Outcomes, 2013, p. 15). Eight states – Montana, North Dakota, South Dakota, Nebraska, Alabama, Kentucky, West Virginia, and Vermont – do not have charter school laws (Center for Research on Education Outcomes, 2013). Charters are "granted by state boards of education, universities and colleges, and local school boards" (Pistell, 2001, p. 48).

About 75% of the states that allow charter schools also have cyber charter schools (PEW, 2015, p. 10). Pennsylvania has the second highest rate nationally with 28% of charter students attending cyber charter schools (PEW, 2015, p. 10).

Many believe that the innovation and progress that this alternative form of schooling is intended to provide is impeded by current laws and policies that were originally written for traditional schools and now apply to the charter and cyber charters required to give the charter schools the freedom they need to try new educational strategies. The charter school population varies because they are set up based on need or a specific purpose (i.e., STEM or performing

arts) depending on state laws, but there are some national trends shown in Table 2.1. Notably, there is a larger proportion of black students, more students in poverty, fewer special education students, and similar number of English language learners than the traditional schools. The 27 states in the table refer to the participants in a 2013 National Charter School Study by the Center for Research on Education Outcomes (CREDO) that have 95% of the nation's charter students.

Table 2.1

Demographic comparison of students in all US Public Schools, US Charter Schools, and Charters in the 27 States, 2010-11

	All US Public	**US Charters**	**27 State Charters**
Number of Schools	99,749	5,274	5,068
Total Number of Students Enrolled	49,177,617	1,787,466	1,704,418
Students in Poverty	48%	53%	54%
English Language Learners	6%	N/A	9%
Special Education Students	13%	N/A	8%
White Students	52%	36%	35%
Black Students	16%	29%	29%
Hispanic Students	23%	27%	28%
Asian/Pacific Islander Students	5%	3%	3%
Other Students	4%	4%	4%

N/A: Data is not available at this level of disaggregation for this student group (Center for Research on Education Outcomes, 2013, p. 16)

The data in Table 2.1 consists of national averages and within each state, and even regions of each state, the demographics vary even more. Some examples of this variation among charter students in the 27 states in the study are:

- Black students - less than one percent in Utah to 94 percent in the District of Columbia.
- Hispanic students – one percent in Tennessee to 59 percent in New Mexico

- Students in poverty – 18 percent in Nevada to 90 percent in Missouri
- 40 percent of the students were elementary

(Center for Research on Education Outcomes, 2013, p. 19)

When a district sponsors a cyber charter school, it tends to draw students statewide, rather than only from the sponsoring district. The question then becomes who is responsible for the cost of the student – the student's resident district or the district that created the cyber charter school (Huerta, Gonzalez, et al., 2006). This causes a great deal of tension when districts lose funds to alternative schools that they do not have any control over, particularly because of the format (cyber vs. brick-and-mortar).

Cavanaugh (2009) found the small amount of research on academic outcomes, types of students attending cyber schools and variances among state cyber charter school law have created gaps in the literature and difficulty in comparing the studies that do exist. Baseline data is necessary to begin to understand the cyber charter school model and continue to understand the model because of the rapid changes in the practice. DiPietro (2010) concurs that it is difficult to compare virtual schools and the corresponding skill sets of the teachers without an established set of criteria as a baseline.

One of the negatives, real or perceived, often attributed to cyber charter schools is the isolation factor. The social interactions that take place during classes, in the hallways, cafeteria, and buses simply do not take place in the online environment. For those students who attend cyber school because of bullying issues, this lack of interaction is a blessing. Some online programs are taking steps to increase socialization strategies so that teachers and students can get to know each other better and the students are connected to their online peers. Field trips and occasional on-site programs are offered by some cyber charter schools (Mekeel, 2011). Odyssey

Charter High School (OCS) is an online charter school in Las Vegas, NV that began in 1999 and uses a blended learning approach where students are in the school building for one day per week for four hours (Barbour & Plough, 2009). The teachers who were monitoring students were not always able to meet with them during the weekly four hour window, so they experimented with the social networking site Ning to create a closed online community that would allow them to connect with their students. It was used as a curricular and social tool that was eventually expanded from a small pilot group to the entire OCHS community.

Education in Pennsylvania

The Common School System began in 1834 with the signing of the Free School Law and became the modern Pennsylvania Department of Education (PDE) in 1969 (Pennsylvania Department of Education, 2012). Today, there are over 1.75 million public school students in 500 school districts in Pennsylvania (Pennsylvania Budget Policy Center, 2014). The public educational system is operated by local school districts that range in size from a few hundred students to hundreds of thousands. Table 2.2 illustrates the statewide school district and charter school enrollments from the 1997-98 to 2013-14 school years.

Charter schools and cyber charter schools. The Pennsylvania 1997 charter school law states they are "independent schools established and operated under a charter from the local board of school directors and in which students are enrolled or attend" (Taylor, 2002, p. 74). The charter schools are therefore sponsored by school districts as alternative educational programs for students residing there and the administration is aware of the fact that some of their funding will be diverted to the charter school. In Pennsylvania, brick and mortar charter schools are formed in one of two ways: 1) the local school district approves a 3-5 year charter and is responsible for ensuring accountability, or 2) "an existing public school can be converted into a

charter school if 50% of the school staff and parents of its students agree to the conversion" (Democratic House Education Committee, 2014). Charter schools are approved by the district within which they reside, while cyber charter schools are approved by the Department of Education. Public charter schools are expected to adhere to the regulations under No Child Left Behind (NCLB), including attaining Adequate Yearly Progress (AYP).

Table 2.2

Public school enrollment

	District-Run Schools	**Charter Schools**	**Total Public**
1997-98	1,814,169	982	1,815,151
1998-99	1,810,851	5,563	1,816,414
1999-00	1,805,303	11,413	1,816,716
2000-01	1,795,330	18,981	1,814,311
2001-02	1,793,174	28,453	1,821,627
2002-03	1,783,885	32,862	1,816,747
2003-04	1,780,032	41,114	1,821,146
2004-05	1,779,877	48,212	1,828,089
2005-06	1,775,054	55,630	1,830,684
2006-07	1,761,407	59,976	1,821,383
2007-08	1,734,485	67,275	1,801,760
2008-09	1,714,297	73,054	1,787,351
2009-10	1,701,246	79,167	1,780,413
2010-11	1,609,590	90,616	1,781,206
2011-12	1,660,291	105,036	1,765,327
2012-13	1,638,213	119,465	1,757,678
2013-14	1,621,343	128,716	1,750,059

(Pennsylvania Budget and Policy Center, 2014a, p. 2)

Table 2.2 shows the public school enrollment in Pennsylvania between the 1997-98 and 2013-14 school years. This demonstrates the shift in students from school districts to charter schools from the time the charter school law was passed in 1997 through the data collection for this research study in the spring of 2014. It is clear that there has been significant growth in the charter school system each year since the law was passed. In the last year shown, 7.4% of public students are in charter schools, Philadelphia has the highest enrollment with over 60,000 students, and over 6,000 (3.2%) are in cyber charter schools (Pennsylvania Budget and Policy Center, 2014a, p. 1)

As Table 2.3, Table 2.4, Table 2.5, and Table 2.6 demonstrate, not every county has students enrolled in charter schools, but cyber charter schools draw from every county. Many of the lower enrollments of cyber charter schools are occurring upstate where the population is lower and losing a few students has a great impact.

Table 2.3

2013-2014 Highest Charter Enrollments by County

County	**Charter Enrollment**	% of County Public School Enrollment
Philadelphia	60,648	30.41%
Allegheny	6667	4.42%
Chester	4311	4.84%
Delaware	4064	5.53%
York	2595	3.76%
Lehigh	2381	4.69%
Erie	1664	4.20%
Northampton	1656	3.71%
Bucks	1198	1.35%
Montgomery	819	0.75%

(data from Pennsylvania Budget and Policy Center, 2014b, p.1-2)

Table 2.4

2013-2014 Lowest Charter Enrollments by County

County	Charter Enrollment	% of County Public School Enrollment
Blair	18	0.01%
Wayne	15	0.03%
Somerset	12	0.13%
Fulton, Wyoming	8	0.21-0.37%
Lebanon	6	0.03%
Perry, Pike, Snyder	4	0.06-0.08%
Clarion, Crawford, Franklin, Indiana	3	0.02-0.05%
Armstrong	2	0.02%
Elk, Union	1	0.03%
Bradford, Cambria, Cameron, Columbia, Greene, Jefferson, McKean, Montour, Northumberland, Potter, Sullivan, Tioga	0	0%

(data from Pennsylvania Budget and Policy Center, 2014b, p.1-2)

Table 2.5

2013-2014 Highest Cyber Charter Enrollments by County

County	Cyber Charter Enrollment	% of County Public School Enrollment
Philadelphia	6321	3.17%
Allegheny	2628	1.74%
York	1561	2.26%
Delaware	1550	2.11%
Berks	1520	2.21%
Lancaster	1226	1.80%
Westmoreland	1220	2.50%
Dauphin	1136	2.59%
Montgomery	1047	0.96%
Chester	947	1.06%

(data from Pennsylvania Budget and Policy Center, 2014b, p.1-2)

Table 2.6

2013-2014 Lowest Cyber Charter Enrollments by County

County	Cyber Charter Enrollment	% of County Public School Enrollment
Warren	88	1.81%
Huntington	85	1.48%
Juniata	70	2.36%
Fulton	63	2.91%
Elk	61	1.67%
Potter	58	2.37%
Sullivan	34	5.62%
Montour	28	1.20%
Forest	16	3.11%
Cameron	15	2.38%

(data from Pennsylvania Budget and Policy Center, 2014b, p.1-2)

In 1997, cyber charter schools were not on the radar of the Pennsylvania State Legislature, because the only reference to the use of technology in the charter school law included "a single clause in the law provided that 'nothing [in this clause] shall preclude the use of computer and satellite linkages for delivering instruction to students" (Taylor, 2002, p. 74). However, this mention of technology is the 'loophole' that allowed the movement of the charter school into an online format and causing the inter-district conflict. By 2014-15 over 36,000 students from 483 of the 500 school district were enrolled in cyber charter schools costing $426.2 million in taxpayer funds (Democratic House Education Committee, 2015, p. 34).

The first cyber charter school to open was the SusQ-Cyber Charter School which was created by five districts in Northumberland County in 1998 with the intention of serving only the 13 school districts in the Susquehanna Intermediate Unit (Huerta, d'Entremont, et. al., 2006). It

was initially founded after the passage of the Pennsylvania charter school law with three local school districts serving as the founding partners (Kurelja, 2005). The project was sold to the districts that the new charter would be able to provide enrichment opportunities for the students of the participating districts by providing courses that ended up being cheaper than those at the local college and would utilize existing technology. In time, the program evolved into an alternative school after a tragic accident involving a student drew publicity to the school and almost 60 students who were "dropouts, attendance problems, discipline problems, pregnant teens, and home-schooled students" enrolled in the school (Kurelja, 2005, p. 168). Suddenly the districts were paying full tuition, not by the course, for a program they did not sign on for. This situation resulted in a change of change of direction and administration. The school has an unwritten rule that it only accepts students from within the founding IU and in 2001 returned some of the surplus tuition money to the participating districts (Kurelja, 2005).

There are many differences between the regulations for cyber charter school, homeschooling, traditional schools. Lawsuits have been filed in Pennsylvania, notably the one against Western Pennsylvania Cyber Charter School (WPCCS) (now called PA Cyber Charter School) in 2001. WPCCS, the state's second cyber program, was created in 2000 to educate students in the depressed area of Midland, PA, who had been bused to schools in Ohio after the local district was closed in the mid-1980s until Ohio districts were no longer accepting the students (Taylor, 2002). The district tried unsuccessfully to merge with surrounding districts 17 times between 1962 and 1994 and the other districts had space since the county had a 50% population decrease (Kurelja, 2005, p.173). The superintendent, Dr. Nick Trombetta, encouraged the district to apply for a charter school-planning grant as a back-up plan in case the agreement

to send Midland's high school students to East Liverpool School District in Ohio fell through (Kurelja, 2005). The board approved the charter and the cyber program took off.

Enrollment jumped from 200 to 500 students in the first two months with only 12 students from Midland Borough District and the rest from 105 other school districts in 22 counties (Huerta, d'Entremont, et al., 2006). Students who were formerly homeschooled at the cost of their parents were now enrolled in a program that billed various school districts nearly $900,000, causing school districts to challenge the legality of the situation and withhold payments (Taylor, 2002). The state responded by withholding equivalent amounts of funding from each districts' education subsidy and the Pennsylvania School Boards Association (PSBA) and several districts filed a lawsuit challenging the legality of the cyber charter schools in *Pennsylvania School Boards Association v. Zogby* (Brady, Umpstead, & Eckes, 2010). They argued that the cyber schools were formed under a loophole in the 1997 Charter School Law, but the schools were upheld as legal by the state courts (*Judge,* 2001; Taylor, 2002).

Other lawsuits soon followed that challenged policies of the cyber charter schools. One such trial was *Slippery Rock Area School District v. Pennsylvania Cyber Charter School* in which the district lost a case where they were required to pay for a four-year-old to attend kindergarten when the child would have been too young to do so in the district of residence (Brady et al., 2010).

The four lawsuits that were filed did prompt the legislature to give cyber charter approval and annual renewal and oversight to the state, rather than the school districts, unlike brick and mortar charter schools. House Bill 4 was passed in June 2002 and provisions include

> additional requirements applicable only to cyber charter schools, requiring them to provide the state with details about their operation; to maintain administrative

> offices and records physically within the state; to provide students with all necessary equipment; and to disclose relevant information about their school, their staff and their operations to parents (Mead, 2003, p. 359).

In 2005, the issue was again addressed with bills to withhold funding for students who are truant and to clarify district residency (Trotter, 2005). To solve the enrollment issue, funding could be based on course completion instead (Ellis, 2008). The Pennsylvania Senate Education Committee further revised the state's charter school law in May 2010 to include more oversight through the Piccola-Dinniman bill that created the Office of Charter and Cyber Charter Schools (Senate Education Committee, 2010). In recent years, the Pennsylvania Department of Education (PDE) denied 17 applications to establish new charter schools and two cyber charters surrendered their charters after threat of revocation (Democratic House Education Committee, 2015, p. 34).

There continue to be attempts by members of the state legislature to revise the charter and cyber charter legislation. Senator James Roebuck, Chairman of the Democratic House Education Committee, has published three annual reports beginning in 2013 that outline the academic and financial issues surrounding charter and cyber schools in Pennsylvania and attempts at legislative reform to solve these problems (Democratic House Education Committee, 2013; Democratic House Education Committee, 2014; Democratic House Education Committee, 2015).

Charter school management. There is a great deal of debate over the success rate of charter schools, both managerially and academically. Another issue that arises often is the non-profit debate. Pennsylvania cyber charter schools may be funded or operated by private, for-profit education management organizations (EMOs) but all of them:

> …have independent boards of trustees that are organized as 501(c) (3) [non-profit, tax exempt] organizations, and are subject to the regulations of the Pennsylvania State Ethics Commission, the state Sunshine Laws that govern all public school boards, and the Auditor General's oversight powers (Carr-Chellman & Marsh, 2009, p. 52)

Since the company at the top may be a for-profit company, many districts argue that this violates the non-profit requirement of public education.

There have been numerous headlines over the mismanagement of charter operators that resulted in the theft of millions of dollars in public taxpayer funds (Democratic House Education Committee, 2013; Democratic House Education Committee, 2014; Democratic House Education Committee, 2015). In most states, financial mismanagement and/or fraud are the main reason charters are closed, although poor academic performance can also be a reason (PEW, 2015). Some charter schools partner with education management organizations (EMOs) who "provide educational and school operational services" (Carr-Chellman & Marsh, 2009, p. 52). The close ties that many of the charter school boards and management teams have to these for-profit companies has aroused suspicions about the use of the funds and the rules of disclosure that charter and cyber charter schools must follow. The management organizations are allowed to "spend unlimited taxpayer dollars on advertising, political lobbying, 7-figure CEO salaries and other expenses unrelated to educating children" (Democratic House Education Committee, 2015, p. 25). The relationship between EMOs and the cyber charter C.E.O. is not always a smooth one, such as the EMO may try to replicate a program from another state that may not be the best option for the Pennsylvania education system. (Sherbondy, 2008). In other cases there may be a personal relationship between the two organizations. The CEO of the Pennsylvania Cyber

Charter School, Nick Trombetta, also founded and was formerly the president of the National Network of Digital Schools Management Foundation (NNDS), which contracts with the school for management services and curriculum (Pennsylvania Department of the Auditor General, 2012). He did not hold a position with the company during the time of the state audit, but the connection cannot be overlooked, as well as appearance duplication of duties by the EMO and the administrative team in managing the operations (Pennsylvania Department of the Auditor General, 2012). The Auditor General argued that the "management fees increase a charter school's administrative costs and result in less money being available to educate the students" (Bureau of School Audits, 2012, p. 6). Some contracts, such as the one Pennsylvania Cyber Charter School had with the NNDS, are based on a percentage of the annual revenue, not the services contracted (Pennsylvania Department of the Auditor General, 2012). DeJarnatt (2013) points out that cyber charters are

> …Even more vulnerable by self-interested individuals because the parent community is geographically dispersed and less able to easily meet to address concerns; the local school boards have no oversight authority; and the Pennsylvania Department of Education has not exhibited much concern about potential abuses. (p. 3)

Charter and cyber charter schools do not have to be as transparent as the public school districts, even though the charters and cyber charters are classified as public schools, and this has drawn the ire of the districts who are competing for students. "The PA Office of Open Records reported receiving 239 appeals in cases in which charter schools either rejected or failed to answer taxpayer right to know requests (Democratic House Education Committee, 2015, p. 25). Many districts suspected that the cyber charter schools were accumulating a profit since they

believed the school funding formula did not reflect the true cost of educating a cyber student (Delaware County School Boards Legislative Council, 2009). That "true cost" is debatable since there is not a clear figure available.

Einstein Academy had $3.4 million in tuition payments withheld by the state in 2002 for failure to provide quality services to students and soon after were sued by New Forum Publishers, Inc., for using "a free temporary password to copy textbooks and distribute them to students without paying" (Cyber charter school, 2002, p.7). The funding was later released to the school with a list of terms to be met, including an investigation into its operations (Borja, 2002).

Residency disputes have created conflicts between school districts and cyber charter schools. Einstein Academy also tried to bill Gettysburg School District for a student who lived in Dallas, Texas and Norristown School District withheld funding when it could neither verify the addresses, nor the existence of students for whom it was billed (Kumar, 2002). Senator Rick Santorum faced public scrutiny when it was discovered that his family owned a house in Penn Hills School District, which had paid $100,000 over four years in cyber school tuition for five of his six children, during the time the family primarily lived in Virginia (Sen. Santorum, 2005; Trotter, 2004). He returned to homeschooling his children, which had been done for five years prior to attending cyber school, shortly after this became public in local newspapers, although he claimed the accusations were politically driven by a school board member who was also the chairwoman of the Penn Hills Democratic Party not by residency concerns by the administration (Trotter, 2004). The district received a settlement of $55,000 from PDE when it challenged the withholding of the funds that were sent to Pennsylvania Cyber Charter School (*Pa to Pay,* 2006).

PA Cyber CS CEO Nick Trombetta and his accountant were charged by a federal grand jury in 2013 on charges of mail fraud, theft or bribery concerning a program receiving federal

funds, tax conspiracy, and filing a false tax return, ultimately stealing $8 million (U.S. Attorney's Office, 2013). Ironically, it was he who warned of the possibility of this situation in testimony before the PA Senate Education Committee in 2001. He gave seven recommendations for the management of the cyber charter schools:

1. Develop state standards and guidelines for cyber schools.
2. Set a moratorium or limit on the number of cyber schools.
3. Limit enrollment.
4. Limit tuition to actual instructional cost plus a management fee not to exceed the average per-pupil cost of students in the Commonwealth.
5. Provide financial relief to the public school districts affected by cyber schools.
6. Allocate funding for the creation of a Pennsylvania Virtual School District.
7. Encourage Consortia and partnerships with cyber schools.

(Kurelja, 2005, p. 175).

Charter school academic performance. The charter and cyber charter schools have attained a varying degree of academic success. Some charter schools have demonstrated to be quite successful while cyber charter schools have not made adequate yearly progress (AYP) in recent years. A Center for Research on Education Outcomes (CREDO) (2011) study found that overall charter school performance in Pennsylvania did not increase as much as traditional schools and cyber charters performed "substantially lower" than brick and mortar charter schools (p. 20). Hess (2001) found that few charter schools are closed for poor academic performance and that it often requires financial misconduct or a similarly egregious act.

In 2011-12, PDE published a revised calculation of AYP for charter and cyber charter schools using the formula used for school districts, even though the application to do this under

NCLB was not approved by the U.S. Department of Education (Democratic House Education Committee, 2013). Under the revised calculation, the school's "overall student body would not have to meet PSSA proficiency percentage targets," just one of "three grade spans (elementary grades 3-5, middle grades 6-8, and high school grades 9-12)", or a subgroup within the span, had to meet proficiency standards for the whole school to be considered meeting AYP (Democratic House Education Committee, 2013, p. 5). Additionally, only one grade within the span had to meet the math and reading targets (Democratic House Education Committee, 2013).

Table 2.7

School performance comparison based on Adequate Yearly Progress (AYP)

	2010-11			**2011-12** **Existing Standard**			**2011-12** **New PDE standard**		
	Total	Made AYP	%	Total	Made AYP	%	Total	Made AYP	%
School Districts	499	467	94%	499	304	61%	499	304	61%
Public Schools	3096	2325	75%	2898	1459	50%	2744	1368	50%
Charter schools	142	86	61%	144	43	29%	144	76	52%
Cyber Charter Schools	12	2	17%	12	0	0%	12	1	8%

(Democratic House Education Committee, 2013, p. 5)

Table 2.7 shows a comparison of the 2010-11 scores compared to the 2011-12 calculations based on the existing standard and the new PDE standard. The data is broken down by school district, individual school, charter school and cyber charter school. The data for the school districts and individual schools show the overall percentage did not change, but the

number of charter schools who made AYP jumped significantly. Cyber charter schools improved from zero of 12 to one of 12.

Table 2.8

Average School Performance Profile (SPP) Scores (based on a scale of 100)

	Traditional Public Schools	**Charter Schools**	**Cyber Charter Schools**
2012-2013	77.1	66.4	46.8
2013-2014	79.9	64.6	48.8

(Democratic House Education Committee, 2015, p.14)

Table 2.9

Percentage of SPP Scores by Achievement Level

SPP Scores	**Public School**		**Charter School**		**Cyber Charter School**	
	12-13	**13-14**	**12-13**	**13-14**	**12-13**	**13-14**
90-100	15%	13%	2%	3%	0%	0%
80-89.9	32%	33%	17%	13%	0%	0%
70-79.9	27%	29%	24%	22%	0%	0%
60-69.9	14%	15%	24%	29%	19%	14%
Below 60	11%	10%	32%	33%	81%	86%

(Democratic House Education Committee, 2015, p. 15)

In 2012-2013, the AYP measurement system was changed to the School Performance Profile (SPP). Charter schools, especially cyber charter schools, continued to perform worse than traditional school districts. Table 2.8 shows the average scores and the disparity that exits between the three types of public schools in this measurement of academic achievement. The scores are based on a scale of 100 with a 70 considered the minimum success rate; “none of the

14 cyber charter schools had SPP scores over 70" with 8 of them scoring below 50 (Democratic House Education Committee, 2015, p. 14). Table 2.9 shows the breakdown of the scores by percentile showing that the traditional schools and brick and mortar charter schools outscore the cyber charter schools on this measurement.

The length of time a school was open did not have any correlation to the success rate or improvement over time. In 2013-14, 72% of charter schools open less than five years and 63% of those open 10 or more years had SPP scores under 70 (Democratic House Education Committee, 2015, p. 15). All cyber charter schools scored below 70, regardless of how long they were open (Democratic House Education Committee, 2015). Closing failing charter schools is not an easy task; there are "25 failing charter and cyber charter schools that have been in existence more than 10 years with SPP scores still below 60" (Democratic House Education Committee, 2015, p. 17).

It cannot be ignored that poverty impacts academic performance. Table 2.10 demonstrates that there is a correlation between the percentage of economically disadvantaged students and the SPP scores of the brick-and-mortar charter schools.

Table 2.10

2013-2014 Number of Charter Schools by SPP Scores and Percentage of Economically Disadvantaged Students Enrolled

SPP Scores	**% Economically Disadvantaged**				
	75-100%	**50-74%**	**26-49%**	**0-25%**	**Totals**
90-100	0	0	0	4	4
80-89.9	4	5	6	5	20
70-79.9	12	11	6	4	33
60-69.9	32	11	1	1	45
Below 60	29	16	2	4	51
Totals	77	43	15	18	153

(Democratic House Education Committee, 2015, p. 16)

While there are a significant number of charter and cyber charter schools that are struggling with academic performance, quite a few are considered high performing with an SPP score of 80 or above. There were 28 charter schools that met this standard in 2012-13, 24 in 2013-14, 16 that scored 80 or above in both years, and 36 that scored it in one of the two years (Democratic House Education Committee, 2015, p. 19).

A typical high performing charter school is one that:

- was established more than 10 years ago;
- is primarily an elementary and middle school;
- with a student population that is less than 500 students;
- with less than 50% of their student enrollment being economically disadvantaged; and
- with less than 15% of their student enrollment being special education students (Democratic House Education Committee, 2015, p. 20)

Raymond (2014) argues that it is difficult to compare charter schools because there are so many variables as they are given more flexibility in their organizational structure, have a variety in their curricular focus, and some operators are better than others. Hess (2001) notes the catch-22 of charter school regulation. The purpose of the system is loosen regulations to encourage innovation, but the easiest way to monitor the "success" of a program is through set standards to measure against. Cyber charters face an even more diverse student population as they draw from across the state and vary in "location of residence, class, race, religious beliefs, learning styles, gender, ability, interest, culture, educational beliefs, social and cultural capital, computer skills, and prior lived experience" (Carr-Chellman & Marsh, 2009, p. 52). Cyber charter schools often draw from the extremes of the academic spectrum (Mekeel, 2011).

State-run cyber school. There is a movement in Pennsylvania to create one state run cyber charter school, similar to what Florida and Kentucky operate. It was even recommended by the founder of the second cyber charter school in the state (Kurelja, 2005). Florida does not provide equipment to the students and Kentucky requires school districts to pay a per credit fee, but it is still cheaper than tuition in Pennsylvania, and homeschoolers pay their own fees (Chute, 2001). With over a dozen privately-run cyber charter schools currently in place, it may take some time before there is a decision to create one state run school or not.

District run-virtual schools. Traditional public schools being forced to change their ways (adding technology, building structure, adding cyber classes, offering a blended curriculum) due to cyber charter schools was predicted by some cyber CEOs in the mid to late 2000s (Sherbondy, 2008). Many school districts in Pennsylvania have established or are in the process of establishing their own virtual school program to bring back students who left for homeschooling or to attend a cyber charter school, increase academic offerings, or provide as alternative placements for discipline, medical, pregnancy, or other reasons. They hope that by providing comparable alternatives, they can save the tuition money previously paid to cyber charter schools (Devlin, 2009a; Mekeel, 2011). District offerings of online courses also maintain more educational oversight than is required of cyber charter schools, as well as retaining local funding (Ellis, 2008). Some companies, such as Virtual Learning Network, are tapping into that desire to use the local curriculum. Originally conceived as a cyber charter school, the company quickly restructured to partner with rather than compete with school districts (LaRussa, 2008; Moore, 2010).

Some schools have found the internal cyber program to be successful, but faced a slow start with more students who were going to leave the district by entering a virtual school than

recovering those who had already left (Devlin, 2009a). Students who leave a district for a cyber charter school do not receive a degree from the local district, while those who enter the district-run virtual school do (Devlin, 2009a). This can be a difficult decision for students who make the decision to leave their classmates and the district diploma (LaRussa, 2008). Many administrators hope that having a degree from a school district, as well as being able to participate in school community activities, will help draw students into the virtual school program.

There are several virtual school programs that are popular among Pennsylvania school districts. One of the most commonly used, and Pennsylvania based, was Blended Schools, now called Global Personalized Academics. This program was formed in the 1990s in south-central Pennsylvania from a consortium of 45 districts and now has 131 school districts participating in online courses, home-schooling and summer school programs for a cost of $9,500 per year per 100 users (About blendedschools.net, 2009). Lincoln Interactive, A+nywhere Learning System, Florida Virtual School, Apangea, Study Island, Apex Learning, and Calvert Partners are similar programs.

Students in virtual schools participate in the classroom in a number of ways. Some may be attending full-time and never set foot on campus while others may take a blended approach by attending the traditional classroom part-time and go online either in a school computer lab or at a home computer. There may also be students using the program for acceleration, remediation or credit recovery for failed courses. Osceola Area School District in Pennsylvania went $1.9 million in the black after implementing a blended program that drew back cyber charter students and provided remediation for struggling students (*Making*, 2008). The next target for the district is providing more opportunities for students in the gifted program.

Distance education has made many advances since the days of the correspondence course. As school reform remains a hotly contested national issue, alternative educational formats such as charter schools will likely remain. Cyber charter school legislation is evolving, and while it does, school districts must decide if they are simply going to pay the tuition, or create online educational opportunities within the district to compete.

Financial concerns. While many administrators see the value in alternative educational methods for some students, their concerns lie mainly with the tuition formula currently in place, not necessarily with the programs themselves. The current funding system combined with $900 million in K-12 education cuts in 2011 have caused school districts to be strained financially (Democratic House Education Committee, 2013). The current charter tuition system requires "the school district of residence is responsible for providing payment to the cyber charter school regardless of whether the student had been previously enrolled in the school district, a private school, a homeschool program, or another school" (Carr-Chellman & Marsh, 2009, p. 53). The per-pupil expenditure amount is pro-rated if the student does not attend the charter school for the full academic year. This tuition payment is mandated by the state under the 1997 charter school law and school districts have no oversight of the cyber program or student progress despite paying hundreds of thousands of dollars to these schools. This growing expenditure has caused many school districts to investigate the implementation of district-run virtual schools as a cost saving measure.

School districts are paying a great deal of their budget each year to cyber charter schools. In 2008, $74 million dollars was paid to eleven cyber charter schools for 17,000 students (Delaware County School Board Legislative Council, 2009). By 2014-15 the costs to the taxpayers statewide for charter and cyber charter schools was $1.4 billion annually (Democratic

House Education Committee, 2015). The cyber charter schools are open to any Pennsylvania student and the school district the student resides in must pay "80 percent of the district's cost-per-student figure for each child enrolled in cyber charter school, meaning costs can vary greatly from district to district for the same cyber charter school program" (Negley, 2007, para. 10). School districts argue that these payments far exceed the actual costs of running the cyber charter school that does not have to pay for transportation, maintenance and utilities and that they are allowed "to accumulate surpluses with no cap" and do not have the same accountability as school districts (Cyber school funding, 2008). The districts received a reimbursement of 30 percent of what it paid from the state (Devlin, 2007b), until 2011 when that funding was cut (Woodall, 2014). In 2009-10 charter schools received $795 million in tuition and school districts received $227 million in reimbursements, which ended two years later (Democratic House Education Committee, 2013, p.15). For a brief period beginning in 2008, the Pennsylvania Legislature

> provided a reimbursement of up to 41.96% to school districts in which a) 12% or more of the district's resident students have enrolled in a charter school or cyber charter school, b) market value/personal income aid ratio is equal to or greater than .6000, and/or c) the district has made payment equal to or greater than $1 million. (Carr-Chellman & Marsh, 2009, p. 54)

For example, in 2007, Wilson School District in West Lawn had 5,700 students and 38 who attended cyber charter schools (less than 1 percent of the population), which cost $7,400 per traditional student and $13,000 per special education student for a total of $300,000 (Devlin, 2007b).

Cyber charter school managers counter that they do have ongoing costs with "offices, instructional supplies and materials, teachers and administrators" and are not eligible for special funding programs available for school improvement that districts can receive (Sternberg, 2006, p. 13). School districts are in favor of setting a cap on the amount of tuition that they can be billed for and on the other side of the table cyber charter CEOs are uneasy at the prospect of losing a large portion of their funding (Sherbondy, 2008). Proponents of cyber charter schools argue that they have significant expenses, just not the same ones that traditional school districts have. They have to pay for large amounts of technology and infrastructure, staffing, curriculum, space rentals for professional development, testing, and meetings, etc. (Harris, 2014).

Districts are often caught by surprise when receiving a bill for a student who was previously homeschooled or when there is not a local charter school to compete with, since the cyber charter schools can draw students statewide at any time (Chute, 2001). Schools must be aware of the number of children in their district who are homeschooled, although they may not find out until long after the budget is passed that some of the students transferred to cyber charter schools or moved into the district and will be continuing at a cyber school. While school districts are more aware of this issue now, it was not the case 15 years ago when cyber charter schools were just beginning (Chute, 2000). They also do not see reduction in their costs because the students going to cyber charter schools are spread out among the grades and do not provide a significant reduction in class size (Carr-Chellman & Marsh, 2009). There have also been allegations of continuing to bill school districts for students who no longer attend the cyber charter school (Herold, 2013).

Summary

The research shows that distance education is currently an accepted instructional delivery

method. Despite this, the literature also calls for further inquiry into the most effective pedagogical methods and appropriate professional development for online educators. The gap in the literature that this study will explore is the impact distance education is having on public school districts in Pennsylvania through the eyes of the superintendents. Many districts were already utilizing distance learning technology to supplement the curriculum, offer recovery courses or provide alternative forms of education. With the implementation of cyber charter schools and the loss of funding, the creation of internal cyber schools independently by school districts or collectively through consortiums is becoming prevalent in an attempt to recoup some of the lost financing. This competition in public education for students has created a unique situation in Pennsylvania that requires further study and analysis. As states look to write or revise charter law, they investigate what is happening in other areas of the country. When Indiana began creating charter and cyber charter legislation a decade ago, Rapp, Eckes, and Plucker (2006) wrote an Education Policy Brief that included a section with Pennsylvania as an example of the challenges and legal issues that can arise from such legislation. Pennsylvania's situation serves as both a model and warning to other states.

CHAPTER 3: METHODS

Overview

This study examined the perspectives of Pennsylvania public school superintendents on distance education in K-12 schools. Through interviews, document analysis, and information obtained with the Pennsylvania Department of Education, the present and future state of distance education in Pennsylvania as perceived by the educational leaders in public education was ascertained. Themes identified during data analysis were compared to uncover differences in region, rural/suburban/urban, socioeconomic status, and financial concerns.

Design

A qualitative design was chosen for this study over a quantitative model because it allowed for a deeper level of inquiry and emphasis on the perspective and experiences of participants than quantitative research designs do (Creswell, 2009; Daniel, 2012; Rubin & Rubin, 2005; Stake, 2010). A case study was the appropriate research method in this situation because the sub-questions are "how" and "why" types, permitted for the use of a number of different sources of data, and examined contemporary events in which no experimentation was appropriate nor possible (Yin, 2009).

This study followed Yin's (2009) procedures for an embedded, single-case design, which involved examining a phenomenon in-depth. The embedded, single-case design was selected because the educational system in Pennsylvania was different than many other states and could be examined as a unique situation, since case studies are used to find an " 'in-depth' description of some social phenomenon" (p.3) by seeking answers to how and why questions (Yin, 2009). Other states have public virtual school systems, but the educational situation in Pennsylvania was unique because the districts are much smaller than county operated systems in other states and

therefore are more vulnerable to fluctuation in funding. They were also in competition with privately run cyber charter schools for public education funding, rather than a state run e-learning system. Distance education was being incorporated on a district-by-district basis, rather than the entire state moving in one direction. This study uncovered how the experiences of superintendents with distance education was moving K-12 education forward, along with why certain actions were being taken and what the future may hold.

It was assumed during the course of this study that the Pennsylvania legislature would not alter the current cyber charter school funding system or create one state-wide public virtual school and they did not. Should this have happened, the study would still have gathered valuable data regarding distance education in Pennsylvania.

Research Questions

The main research question was: What is the experience of Pennsylvania public school superintendents with the implementation of distance education into their programs? The sub-questions are:

Sub-question one*: Is there variation in perspectives among superintendents with respect to geographic location, rural/suburban/urban and economic status?*

There were probably going to be similarities among reasons that districts chose to incorporate distance education into their programs. This question was designed to uncover the similarities and differences among those decisions that were made based on demographic influences.

Sub-question two: *What is the perception of the future of distance education in Pennsylvania?*

The purpose of this sub-question was to ascertain the direction that the superintendents see distance education in Pennsylvania heading. This form of education was growing, but it was not consistent across the state in each district or at the State level. It was important to understand how the educational leaders of the state were guiding their respective programs to gain an understanding of what the future of K-12 distance education in Pennsylvania may be.

Sub-question three*: What has been the perceived impact, or lack thereof, of distance education on the school district's program?*

Many school districts in Pennsylvania have already implemented some form of distance education into the curriculum through credit recovery and offering additional courses. Any level of distance education incorporation would have an impact on the type of teacher professional development, allocation of funding, usage of space, curriculum development, and hiring practices.

Sub-question four: *What is the perspective of public school administrators about why students are leaving public school districts for cyber charter schools?*

Researchers have begun to investigate why students are leaving traditional public school districts for cyber charter schools (Ahn, 2011; Ellis, 2008; Erb, 2004; Kello, 2012; Klein & Poplin, 2008; Marsh et al., 2009; Mead, 2003; Payne, 2002; Shoaf, 2007; Tankersley & Burnham, 2007; Taylor, 2002). It was important to understand why students were leaving public school districts to determine if these students (and the lost funding) could be recovered by those districts or there were inherent changes that need to be made in public education to meet the needs of this population. These studies primarily focus on how the families and students decide to make the transfer; discussions with administrators about why this happening and how these

school leaders are evolving their own programs to meet the needs of the exiting population requires further study.

Sub-question 5: *What is the response of public school administrators to the implementation of cyber charter schools?*

This question sought to discover the impact that cyber charter schools had, or did not have, on public school districts. The media had given the impression that every school district was struggling under the loss of funding to cyber charter schools. This might not be the case. School districts in wealthier areas might not be as concerned as communities with a weaker tax base. This question also examined if those school districts that are implementing internal cyber schools or joining consortiums to recover students had planned to create such a program on a similar or smaller scale prior, had to create a program they did not want to, and any successes or frustrations experienced in creating such a program.

Setting

Pennsylvania was chosen for this study because there are unique educational challenges that superintendents face. Pennsylvania does not use the county school system; instead, there are 500 individual school districts of varying size, from nearly 190,000 students in the Philadelphia City School District to less than 300 in Austin Area School District (Gombach Group, 2008). It also differs from other states in that the public cyber school options available are not run by the Department of Education, but were created by a loophole in the charter school law and are public schools that draw from all over that state. This has led to very different experiences, and competition for students and funding, for Pennsylvania public school superintendents than their counterparts in other states. Is different than the competition from private schools because the tax dollars follow the student to the charter and cyber charter schools.

Participants

Daniel (2012) recommends evaluating whether it is better to take a census or examine a sample of the target population. With 500 school districts in Pennsylvania, a quantitative survey might allow for contact with all of the superintendents, but it would be beyond the available time and means of this project to attempt a qualitative interview process of this magnitude. Qualitative researchers frequently use nonprobability sampling over probability sampling, which means every element in the population does not have an equal chance of being selected for study (Daniel, 2012). Targeted sampling procedures were necessary to answer the research questions of this study because the variety of variables being examined required a specific cross-section of the population to ensure a balanced comparison.

Nonprobability sampling was more favorable in this case because the study is exploratory in nature, specific elements of the population were being targeted, illustrative examples were required, and it was a case study (Daniel, 2012). Purposive sampling allowed for specific inclusion and exclusion criteria, in this case a cross-section of Pennsylvania school districts, avoiding a disproportionate number of participants from one region or demographic criteria. Maximum variation sampling, a form of purposive sampling, allowed for some control over ensuring a heterogeneous sample that would satisfy the research questions (Creswell, 2007; Daniel, 2012). The goal was not to get a random sample to generalize, but to acquire a range of experiences related to the impact of distance education across Pennsylvania.

A quality sampling frame is critical to making solid choices and consists of a list containing all of the target population members, as well as additional information that will be useful in making the selections (Daniel, 2012). The sampling frame used was the "Urban/Rural" Classification of Schools and Local Education Agencies list on the Pennsylvania Department of

Education (PDE) website, the public school enrollment data from 2012-13, and a map of the Intermediate Units (IU). The classification list was from the 2007-08 and 2009-10 school years, but the data was still useful with a minor adjustment correcting two districts that consolidated, providing names of school districts, rural/suburban/urban locale coding, and the IU (Data Collection Team, 2010). That data was put into an Excel workbook with the enrollment data for each LEA (Data Collection Team, 2013). Since some school districts are working regionally, particularly via the local IU to create cyber programs, the map was used to divide the state into six regions of study and avoid the selection of districts from the same IU (see Appendix D). Each region of the state was set up on a separate page within the workbook and the corresponding IUs were distributed appropriately. Districts were selected randomly to get a mix of IUs, enrollments and locales. Superintendent names and emails were gathered from the district websites and the EdNA (Education Names and Addresses) database (Pennsylvania Department of Education, 2013). Superintendents who are selected for participation for the study were sent an email explaining the nature of the study, link to the consent form and copy of IRB approval and a request to participate. A follow up email was sent two weeks later to those who did not respond. The process was repeated until a pool of 16 participants was gathered.

Procedures

The project began with obtaining IRB approval to conduct the research. The interview questions were reviewed by the superintendents and technology directors in the districts that previously and currently employed the researcher. There remained 498 possible school districts from which to pull participants. Potential participants were then selected and sent an introductory email, interview questions, and consent form via SurveyMonkey. Participants were solicited until a pool of 16 spread evenly around the six regions of the state accepted the invitation. Interviews

were scheduled over the phone or Skype as face-to-face was not possible due to time constraints and distance of many of the participants. Semi-structured individual interviews were done with the superintendents for approximately 30 minutes to one hour. The interviews were recorded using Audacity on my computer and a back-up portable recorder, transcribed, and returned to the participant for review. The transcripts were coded for common themes and the results compared to other data sources including websites, budget and enrollment records, and PDE academic achievement data for accuracy.

Researcher's Role

I have worked as a public school librarian since 2003 in secondary schools in south central and south eastern Pennsylvania. I became interested in distance education due to my experience in completing graduate work and teaching university courses online. I also witnessed the experiences of local school districts within my prior Intermediate Unit and read many news articles on the impact of cyber charter schools, particularly financially, on Pennsylvania public school districts. Assumptions (e.g., all districts are impacted by cyber charter schools, particularly those with large homeschool populations; everyone has some level of distance education incorporated in their program; use of distance education is impacted by socioeconomic issues) are based on these factors as well. My role in this study was to be a human instrument in gathering the data and finding themes in the analysis (Marshall & Rossman, 2011; Stake, 2010) to add to the research understanding this educational shift in Pennsylvania. It was not to sway the participants or to further any specific agenda despite any personal impact that the cyber charter movement may have had on me personally or the school districts that have employed me.

Data Collection

Upon obtaining IRB approval, data collection began for this study. Yin (2009) suggested using multiple types of evidence, creating a database for data, and to maintain a chain of evidence. Background information on cyber charter schools and charter schools in Pennsylvania were obtained from PDE Charter Schools Office website (Charter Schools Office, 2014). Laws were pulled from the School Code. Financial data on school budgets was also obtained (Division of Subsidy Data and Administration, 2013). Journaling and careful record keeping maintained the chain of evidence.

Interviews

Qualitative interviewers guide a conversation with a research participant, or conversational partner, in a case study to discover in-depth answers to research questions to help discover the why and how of a specific phenomenon (Rubin & Rubin, 2005; Yin, 2009). Interviews can be emotional, personal experiences, which is part of their appeal to the qualitative researcher. Rubin and Rubin's (2005) responsive interviewing model acknowledges the fact that the interviewer and interviewee are both human, a bond develops during the interview process and this can affect biases and ethical concerns. A researcher must be aware of personal biases and take action to minimize or compensate for their influence on research. A good interviewer periodically reviews interviews throughout the process to ensure that questions are not being avoided or the interviewee being led in a certain direction (Rubin & Rubin, 2005).

In order to get the level of depth that a qualitative researcher requires, main questions, probes and follow-ups should be planned ahead of time to keep the conversation on task and the researcher should listen carefully for keywords and themes to guide the follow-up questions (Rubin & Rubin, 2005). Open ended main and follow up questions will be composed to conduct

semi-structured interviews, as this type of interview has main questions of equal value that relate to the research problem and the follow up questions add depth to the responses (Rubin & Rubin, 2005). The interview questions guided the study, but the follow-up questions were chosen or altered during the process depending on the responses to the main questions.

The interview questions (see Appendix C) were piloted with two superintendents and two technology directors, each from two different districts that were not included in the final sample as they were my previous and current employers. One district was very concerned with the implementation of cyber charter schools and the loss of funding and one was not as concerned. This removed any bias from my former and current employers in the study, as well as ensured two diverse opinions were reviewing the information. The difference of opinions ensured that the questions were relevant to both ends of the spectrum.

Document Analysis

The results of the interviews were confirmed using data found through document analysis of news, current research, and information obtained from school district websites. News articles were important because there was a perception conveyed by the media that the loss of funding to cyber charter schools was impacting every school district and part of the study was to determine if this was a true representation of what was happening state-wide. Documentation can be a good source of information because it is independent of the case study and is therefore not influenced by it; incomplete documentation collection, however, can lead to bias or be caused by it (Yin, 2009). The news, current research, and school district website information confirmed the themes uncovered in the interviews.

Archival Records

Other useful records in the research process included finances, laws, and demographic data. Like the documentation described previously, the archival records confirmed the themes from the interviews. Budget analysis allowed for the financial comparison of school districts and to confirm or deny the loss or retention of funding to external and internal virtual schools. The PDE website provided demographic, financial, and academic data on school districts, charter schools and cyber charter schools. The Pennsylvania School Code also provided information on the regulation of K-12 education. The archival records were not only used to corroborate the interviews, but to explore financial and demographic trends over time relating to distance education in the public schools. Since the archival records are created for reasons and audiences other than the case study, care was taken when referencing them and they were used with other resources, as outlined in this section, and not alone (Yin, 2009).

Data Analysis

Detailed description

The interviews were transcribed by me and returned to the interviewees for verification to improve credibility through member checking (Rubin & Rubin, 2005; Stake, 2010). A detailed description of each interview was written before comparing the responses for themes and was important to understand how each superintendent perceives the role of distance education in Pennsylvania before the entire sample could be analyzed. A description of each interview was composed to file with the transcript that includes the time, date, and length of the interview, description of participant, and summary of the discussion that aided in accurately guiding analysis at a later date (Rubin & Rubin, 2005).

Themes

Each transcription, upon receipt or waiver of verification, was coded manually to find common themes, similarities and differences in the perspectives of the interviewees. Evaluation of the data was ongoing during the interview process to determine the progress of the study, need for more information and determine the effectiveness of the interview questions (Yin, 2009). Data was organized first by individual interview and then by theme in a final synthesis (Rubin & Rubin, 2005; Stake, 2010). The themes were then analyzed in a final synthesis for trends in regions of the state, rural/suburban/urban, economic variations, opinions of the future of distance education and reactions to the implementation of cyber charter schools. Data was re-evaluated and re-coded when necessary. During the interpretation stage the researcher must once again be wary of introducing bias into the findings (Rubin & Rubin, 2005; Weiss, 1994).

Trustworthiness

Trustworthiness was obtained through triangulation of the interview recordings and verified transcripts through member checking, PDE data, and document analysis. Triangulation strengthened the validity of the results of the research by corroborating the data from independent sources (Yin, 2009). Member checks ensured that the participants were accurately represented by the interview responses by allowing them to review transcripts of the conversations (Stake, 2010). This process was done within a week after the interviews took place to ensure the highest rate of accuracy.

Detailed and accurate record keeping and memoing of the experiences of the researcher and the research process also added to trustworthiness. Any contradiction in the data was examined for error or validity. It was highly recommended that a research journal be kept to

verify information and keep track of ongoing questions (Stake, 2010). These records were used to provide ongoing documentation of research procedures and references, as well as any questions and concerns that arise during the process.

Credibility was achieved by creating open-ended questions that allow the interviewees to express their opinions without the influence of researcher bias. The questions were examined through peer review by the technology director and superintendents at two school districts that are not part of the sample. Dependability was achieved by providing detailed descriptions of the themes discovered in the data analysis. Transferability of the study was questionable since some elements, such as the impact of independent cyber charter schools on public school districts, was a unique situation in Pennsylvania and not applicable to other states with state-run virtual school systems.

Ethical Considerations

Researchers must strive to confront and eliminate any ethical issues that may invalidate the study. Every step is critical, from following the procedures of the IRB to anticipating any potential violations of appropriate research behavior when dealing with human subjects (Marshall & Rossman, 2011). Maintaining anonymity in the reporting of the data is essential. This will be difficult since identities could unintentionally be revealed, or at least narrowed down through the reported data. Careful reporting of data was done to make a concerted effort to eliminate this factor and protect the educational leaders who agreed to participate in this study. A consent form was necessary to make it clear to the interviewee the aim of the study, how the participant was chosen, what was asked, any risks involved, clarify that participation was voluntary, and what will be published (Weiss, 1994; Yin, 2009). Careful and accurate handling of the data was critical to ensuring the validity of the study and my reputation as a researcher. I

also acknowledged personal bias and the impact it may have on my results, since the interviewer has a responsibility to report findings accurately and fairly, while understanding the importance of balancing reporting unflattering material and that which was critical for accuracy (Rubin & Rubin, 2005). It was also important not to be overly critical once I was away from the interview session, but some skepticism was necessary to encourage further analysis and deeper investigations (Stake, 2010). I needed to create interview questions that were not leading and was careful in my data analysis to find the themes that developed in the transcripts and not force my assumptions into the results.

Summary

The research process was simple and straightforward. IRB approval was obtained to interview a pool of 15-20 superintendents selected through a maximized variation sampling technique to ensure the appropriate cross-section evenly distributed around the state. The interview questions were reviewed by the superintendents and technology directors at my current and former employers, the only two districts eliminated from the participation pool to avoid bias. Potential participants were contacted with an introductory email, interview questions, and SurveyMonkey consent form until 16 accepted. The semi-structured interviews were completed individually over the phone or Skype, recorded, transcribed, and returned to the participant to review for accuracy. The transcripts were then coded for common themes which were compared to financial, legal, academic, and demographic records from PDE, news articles, school websites, and current research. The researcher was careful to acknowledge any potential bias caused by personal experience with the subject at hand and strove to ensure that themes developed out of the research, not forced assumptions.

CHAPTER FOUR: FINDINGS

Overview

The findings of the study provided insight into the perspective of superintendents on the inclusion of distance education in Pennsylvania public school districts and the impact of cyber charter schools on that decision. Some of the themes that emerged were not surprising and lined up with the current literature, while others are not often addressed in the media. Unsurprisingly, the financial concerns were the issue that drew the biggest response from the superintendents. Accountability, regulatory differences, and academic achievement were also mentioned frequently. As expected, there were some themes that emerged that are rarely covered or not all. School districts having to deal with truant cyber charter students and diagnosing newly enrolled cyber students as qualifying for special education services are two of those themes.

Participants

The maximized random sampling procedure used to select the participants resulted in a participant group that, considering its small size, provides an adequate cross section of district sizes and geographic types as demonstrated in Table 4.1 and Table 4.2. The final percentages of the participants were close to the state-wide breakdown of all the types and population sizes of the school districts. Table 4.3 shows the breakdown of the state into six regions based on IUs. Dividing the districts in this manner was the easiest way to split up the state into regions and avoid overrepresentation from an IU who may or may not be providing cyber services to local districts. The lack of urban district participation makes it difficult to transfer the study results to that type of school, but the rural, town and suburban types are represented. The participants were not selected based on proximity to urban areas, which tend to have a higher proportion of charter schools

Table 4.1

Participant Demographics

	Participants		State	
Rural	6	37.50%	174	34.8%
Town	5	31.25%	102	20.40%
Suburb	5	31.25%	207	41.40%
City	0	0.00%	17	3.4%
Total	16	100.00%	500	100.00%

State data: Data Collection Team, Division of Data Quality, Pennsylvania Department of Education (2010)

Table 4.2

District Population

	Participants		State	
<1000	3	18.75%	77	15.40%
1000-1999	4	25.00%	156	31.20%
2000-2999	4	25.00%	92	18.40%
3000-3999	1	6.25%	67	13.40%
4000-4999	2	12.50%	37	7.40%
5000-5999	1	6.25%	23	4.60%
>6000	1	6.25%	48	9.60%
Total	16	100.00%	500	100.00%

State data: Data Collection Team, Division of Data Quality, Pennsylvania Department of Education (2013)

Table 4.3

Geographic Breakdown

Region	Intermediate Units
Northwest (NW)	4, 5, 6
North central (NC)	9, 10, 16, 17
Northeast (NE)	18, 19, 20, 21
Southwest (SW)	1, 2, 3, 7, 27, 28
South central (SC)	8, 11, 12, 15
Southeast (SE)	13, 14, 22, 23, 24, 25, 26, 29

Division of Data Services, Office of Educational Technology, Pennsylvania Department of Education (n.d.)

The superintendents interviewed were equally as varied in their experience and tenures, working in a variety of positions and states. Prior to leading their current district, they were also employed not only as teachers and principals, but as a consultant (one), technology director (one), dean of students (one), curriculum director (four), assistant superintendent (five), assistant at an intermediate unit (one). Some had elementary teaching experience, but most were secondary and taught social studies, special education, business, science, and health and physical education. Four superintendents worked as a teacher or administrator in New York, Vermont, New Jersey or West Virginia before Pennsylvania and brought a unique perspective to the interviews.

It was unknown how long each superintendent had served in their current position until the interviews started. Some of them had only been in the district for a few months, while others spent 7-37 years with the same district. While it made speaking about some of the particulars about some aspects of the programs difficult because of the lack of experience within that district, the participants were able to share their experiences with their current or former district. Since the focus of the study was to obtain the perspective of the superintendents and not specific school districts, it was determined that this would not invalidate the responses from the interviews.

The participants are identified in the results by their region and order of interview, i.e. NW1 was the first superintendent interviewed from the NW region. Each region was represented by two to three participants. The participant descriptions are listed in order of the interviews.

NC1

NC1 was an experienced educator who had worked as a teacher, assistant principal and principal at all three levels, curriculum director, and superintendent for more than 20 years in

three different school districts. The participant did not lay claim to being a technology expert, but had a solid grasp of the benefits and pitfalls of district technology initiatives. The interviewee spoke about experiences with cyber programs the current and previous district. NC1 was directly involved with the implementation of the cyber program in the previous district. The district is rural and enrolls less than 1,000 students.

NC2

NC2 has approximately 25 years of experience as a special education teacher, principal, and superintendent in three states. As the leader of a small, rural district the interviewee is very hands on with the program and desires a blended, individualized program for all students. This interview raised several points that needed to be investigated further, including the responsibility of local school district to handle cyber truancy issues and cyber charter school advertising spending. The district is rural and enrolls less than 1,000 students.

NE1

NE1 was the only former technology director in the participant group and therefore had a substantial amount of insight into how technology is integrated into the classroom. Because of this background, this interviewee understood the significant amount of work that is required behind the scenes to get technology initiatives up and running. The district is classified as suburban and enrolls almost 3,500 students.

NC3

NC3 worked in two states and served as a teacher, assistant principal, principal, director of curriculum and instruction, and superintendent. This administrator is tech savvy and brought some initiatives to the district. NC3 was able to provide first-hand experience from the

implementation of Sus-Q Cyber Charter School, a regional initiative that was started through the local intermediate unit. The district is rural and enrolls over 1,500 students.

SE2

SE2 worked in two states and served as a teacher, principal, and superintendent. This superintendent was admittedly not tech savvy, but clearly understood that it was a skill set that was necessary for the students. This was the first participant to raise concerns about cyber charter schools diagnosing new students as requiring special education services after they leave the public school. SE2 was also the only interviewee who mentioned the lack of technology in higher education classrooms versus what is being used K-12. The district is in a town and enrolls almost 3,000 students.

NW2

NW2 has worked as a teacher principal, assistant superintendent, and superintendent over 30 years. This participant was new to the current position so the responses related to both the current and immediate past school districts. Despite being a recent hire, NW2 was well-versed in the numerous technology initiatives going on in the current district. The district is classified as suburban and enrolls less than 1,500 students.

NW3

NW3 worked as a teacher, assistant principal, principal, assistant superintendent, and superintendent in six school districts in Pennsylvania over more than 30 years. This was the first superintendent to mention longer bussing due to closing a school within a public school district as an incentive for parents sending children to a cyber program or starting a brick and mortar charter school. This superintendent has children who are using the district cyber program for

enrichment so there is a personal connection and understanding of the benefits of a flexible schedule. The district is classified as a town and enrolls over 4,500 students.

SE3

The superintendent in this study was a teacher, dean of students, principal and acting superintendent. SE3 uses an iPhone, iPad, and laptop, but does not partake in social media. The district has some technology initiatives, such as moving from computer labs to laptop carts, but many goals are hindered by a severe funding shortage. Despite the challenges, the superintendent is trying to find creative solutions such as BYOD. The district is in a town and has less than 1,000 students.

SE1

The interviewee first served as a school board member before becoming an educator and working as a teacher, assistant principal, principal, assistant superintendent, and superintendent. SE1 uses a mix of personal and district social media. The superintendent of this suburban district leads the largest district in the study with an enrollment of almost 13,000 students.

NW1

The superintendent has over 40 years of experience in education as a teacher, principal, assistant superintendent, superintendent, and intermediate unit administrator. Most of NW1's career was in the same district. NW1 does not use technology beyond email and a smartphone and others handle the social media accounts for the district. The district, however, is very tied into technology initiatives and receives a great deal of support and investment from local industries. The district is in a town and enrolls over 2,000 students.

NE2

NE2 served as a teacher, assistant principal, principal, assistant superintendent, and superintendent and has experience in New York and Pennsylvania. The superintendent uses technology daily and uses social media. The district has a great deal of technology available in the classrooms from Smartboards to iPads and laptops and STEM initiatives in the curriculum are a priority. The district is classified as rural and enrolls almost 5,000 students.

SW3

SW3 has nearly 40 years of experience as a teacher, assistant principal, principal, and superintendent in the same district. The interviewee does not use social media for professional reasons and prefers personal contact to potential miscommunication via email. The superintendent would like to do more initiatives, but the lack of funding prevents taking many of those steps. The rural district has less than 1,500 students.

SW1

SW1 has over 40 years of experience in education as a teacher, principal, central office staff, and superintendent in West Virginia and Pennsylvania. The interviewee uses technology regularly, but avoids social media as a professional decision. The district has some technology initiatives, but struggles with full implementation because of understaffing as a result of furloughs and maintaining technology due to funding shortfalls. Some local industries and the intermediate unit provide technology support. The district is classified as rural and enrolls less than 1,500 students.

SW2

SW2 served as a teacher, assistant principal, principal, director of curriculum, assistant superintendent, and superintendent. The interviewee uses technology and some social media

regularly. There is a push for the district to go 1:1 and paperless. The interviewee was well-versed in the details of the technology initiatives and cyber program. The district is classified as suburban and has almost 4,500 students.

SC1

SC1 has over 30 years of experience in education as a teacher, assistant principal, principal, assistant superintendent, and superintendent. The interviewee has been the superintendent of two school districts. SC1 chooses not to use social media personally for professional reasons, but recognizes how it can be utilized by the district to enhance communication. While the interviewee was not as technology savvy as could be, SC1 felt the district was progressive and understood the details of the technology program. The district is classified as a town and has over 2,000 students.

SC2

SC2 served as a teacher, principal, central office administrator and superintendent in the same district. The interviewee uses technology daily, including a smartphone, computer, iPad, and FaceTime. This superintendent also made the professional decision to refrain from using social media personally, but may join once retired. The superintendent plays a central role in developing the technology vision of the district. The suburban district has almost 3,000 students.

Results

Main research question

What is the experience of Pennsylvania public school administrators with the implementation of distance education into their programs?

The interviews showed, at least for this sample, that cyber charters are impacting all areas of the state. All of the study participants had created or were currently investigating adding

distance education opportunities to their educational programs. Participants who had recently changed districts, such as NC1, brought experience with implementing an online program to the current district. Some were in the process of doing it already, while others were forced to speed up the process due to the financial impact of losing students to cyber charter schools.

The superintendents struggled with the concept of a completely online program for elementary students. NW2 said, "I'm not a proponent of K-6 cyber. In my old district I was not. I'm not a proponent of it now, I just think that there's certain times kids need to be with other kids." NC2 feels similarly and stated, "For children I don't think a 100% cyber program is a good thing."

As NW1 said, and all of the superintendents agreed with similar responses, "clearly the growth of anything online has been driven by the for-profit charter schools. No question about it." NC1 stated:

> Schools today cannot afford to be paying tuition to the cyber charters in the state of Pennsylvania and I think because of that many schools create their own cyber schools or provide, you know, online opportunities for kids that they may not have been forced to do otherwise…For us it is probably fair to say it was a pure financial decision. And again we were paying about $500,000 a year in tuition and that was larger than our transportation budget, our athletic budget and everything. And, uh, I would think probably had this cyber charters not, uh, come into play or if the state didn't force the homeschool to pay tuition to the cyber charters, then, you know, probably some of these district initiatives to offer online courses would probably be delayed or they might not exist at this point.

NE1 said:

> I think if we did anything online it would have been to supplement what we already do…if there was a local need for us to move in that direction I think we would have adjusted to the need, but clearly we did it as a, uh, tactic to, stop the bleeding to keep our kids here.

The phrase "stop the bleeding" was used several times to describe the reason for implementing district cyber programs to combat the loss of funding to the cyber charter schools. The participants may have struggled at times to produce the exact number of students attending charter and cyber charter schools, but the figures that were given for the amount of tuition money being paid were confirmed across the board by the data on the PDE website.

Overall, the superintendents were not against the cyber charter schools as competition. Private schools and homeschooling have been around as long as public schools have and they have co-existed peacefully. The frustration with the cyber charter schools was evident in the financial, accountability and academic concerns, which are addressed more thoroughly in the sub-questions.

Sub-question 1

What are the perspectives among superintendents with respect to geographic location, rural/suburban/urban and economic status?

The needs of the 500 Pennsylvania school districts are diverse, as the population sizes, tax base, and square mileage vary greatly. The participants in this study varied in their opinions on the need for distance education in the K-12 public school and some of this was obviously related to the demographics.

Economic and geographic issues greatly impact the role distance learning can play in the curriculum. Online learning does not have to be an all or nothing situation; it can be on a smaller

scale using a flipped classroom (viewing lessons at home and doing the work in class) or using a hybrid model. There are many schools that have provided device and internet access while on campus, but when the students are working at home it is a different situation. For rural districts that have difficulty in securing certified teachers for specialty areas the ability to fill that course gap virtually is a significant advantage. On the flip side, the geographic location of these districts means local residents may not have access to internet services. NW1 stated, "I keep reminding all of us that we are here for all kids and there are parts of our district that do not have Internet service. But when you're low income, there's another large group that has Internet service, but they might have three kids." Multiple children in the family need to use the same computer or other device each evening to complete their school work and flipped classrooms or frequent online submission of assignments would be difficult for many students. NW2 warns, "We're looking at the flipped classroom concept right now. But what do you do with families of the kids that doesn't have the support?"

Rural superintendents believed that distance education provided learning opportunities that their size and rural location could not otherwise provide. They saw e-learning as an opportunity to expand the course catalog when they could not attract a teacher for a certain subject area, such as a foreign language, or did not have enough student interest to warrant running a full on campus course. NC2 offers driver's education, Mandarin Chinese, and French online, the latter the result of not being able to find a French/Spanish teacher to fill a position.

While the rural districts are taking advantage of implementing the internal cyber schools by creating programs that reach, it was the influence of cyber charters that sped up the process of creating the programs. Four of the rural school districts in the study did not have any charter school students and two had less than five (PDE, 2013). Many of the brick and mortar charter

schools are closer to urban areas and are not impacting the rural districts as much as the town and suburban schools. Most of the draw for these schools was to the cyber charters with NC2 having the lowest at 4 students and NE2 the most at 107, while the rest ranged somewhere in the middle of the spectrum (PDE, 2013). NC3 said, "I think it's the way education is moving…I don't think it would have happened nearly this quickly had those pressures not been there."

Unlike their rural counterparts, larger districts in suburbs or towns that participated in the study did not seem to feel any pressure to implement e-learning programs beyond the competition from cyber charter schools or as part of an internal vision for future programming. They saw the usefulness of hybrid programs, but did not express any urgency to alter the current academic program greatly if the threat of financial loss to cyber charter schools did not exist. None of the participants in these schools cited turning to cyber options to fill teaching vacancies, only using cyber as expanding on their curriculum to provide unique learning opportunities for students. Despite their significantly larger budgets and student populations, they are still feeling the impact of the charter school movement, although not as deeply as the smaller rural schools.

To get a feel for the overall use of technology in each district, the priorities, initiatives and roadblocks were discussed during the interviews. The technology priorities and initiatives varied by district, but many of the roadblocks were similar. The superintendents were not given a list of initiatives to choose from, but rather highlighted what came to mind when asked and their responses are summarized in Table 4.4 and the roadblocks in Table 4.5. The repetition of programs show that many districts are attempting the same or similar initiatives, but there was diversity in how they went about funding them and what was done versus remained on a wish list.

Table 4.4

Technology Initiatives

Technology Initiatives	
• Improving infrastructure to handle an increased number of wireless devices • Updating servers • 1:1 or Bring Your Own Device (BYOD) initiatives • Improving communication through social media (Facebook, Twitter), redesigned website, and/or eAlerts • Smartboards • Television studios • Music labs • Establishing a replacement cycle • Seeking outside funding through grants, partnerships with local industry, establishing local foundations, and IU consortium discounts • Encouraging and funding grassroots initiatives and creativity from teachers	• Vocational programs • Robotics programs • 3D printers • Professional development for faculty Surveys to determine skill levels of faculty and community's technology access • Voice Over Internet Protocol (VOIP) phone systems • Piloting paperless classroom • Online work order systems for maintenance and technology • Electronic voting at school board meetings • AESOP online substitute scheduling program

Many of the technology priorities revolved around improving infrastructure. Six (NW2, NC3, SW1, SC1 SE2, SE3) recently updated the wireless infrastructure while SW3 had buildings so old the walls are probably too thick to allow for it. SW1 needs to replace the servers, but cannot afford to do so. The infrastructure must be updated before technology use can increase. NC2 used their 2009 federal stimulus money to upgrade hardware and wireless connections, figuring it was the most beneficial way to use the onetime infusion of funding.

A number of technology initiatives were highlighted during the interviews. NW1 and NC2 have enough devices to be 1:1, NE1, SW2 and SE1 are trying to do it and SC2 now believes BYOD is a better policy. NC1 said, "When it comes to 1:1 initiatives is that going to be in a PC world or is that gonna be in a Google Chrome book world or is that going to be a, um, like an iPad world?" SW2 also brought up the platform selection issue by saying "finding the right device for the right use…we were all solid on iPad, but we knew it was cost prohibitive, so we've been looking at newer technologies that are less costly." SE1 struggles with the decision of 1:1 or BYOD – the cost of time managing a wide variety of devices versus the cost of providing one device to all students. Whichever platform is selected, individual devices are common, whether it is through a BYOD policy or provided by the district. NC2, NC3, NE2, SW2, SW3, and SE1 highlighted the use of tablets, primarily iPads. NW2 and SW3 are exploring the use of e-readers in the classroom. Ten districts are purchasing more laptops and Chromebooks were a popular choice. The participants across the board stressed the importance of making careful decisions with purchasing technology. SW3 accepts donated hardware from businesses, SC2 does not, and SW1 began leasing computers because they could not afford to buy them.

Social media use varies by district. NC1, NC2, SE1 use Facebook and Twitter, SW2 uses Facebook, and SC2 and SE3 use Twitter. SW3 has not yet set up any district social media accounts. NC1 redesigned the webpage and SC2 set up an app for the district.

Smartboards, highlighted by eight participants, are common in the districts and many superintendents lamented that they are used as projectors rather than on a deeper level. NW1, NW3, and SW2 have television studios and NW2 is exploring adding one. Music labs (SW2), vocational programs (NW1), robotics programs (NW1 and SW1), and 3D printers (NW1) are also found in some of the districts.

NC3, NW2, SE1, and SW2 conducted surveys with parents and/or faculty regarding technology use, needs, and home internet and device access, citing the Bright Bytes survey tool most often. Having an understanding of the community's technology access will drive changes to the curriculum or, if necessary, stop the district from moving too far in one direction.

Other non-curricular district initiatives included heavy technology use at school board meetings, using the AESOP substitute program, online work orders for maintenance and technology, announcement blasts, voice over Internet protocol (VOIP) phone systems, and piloting paperless program. Implementing replacement cycles of technology is critical to spreading out costs over time and ensuring devices stay in working order. NC2, NC3, NE2, and SE1 brought up this issue. NC2 replaces on a 5-6 year cycle and allows teachers to decide if they want a laptop, desktop, or tablet for personal use. NC2 replaces more often with a 3-5 year cycle. NE2 is asking the board for a $250,000 to return to a five year cycle after the recent economy crash disrupted the technology plan. SE1 spends about $3 million per year on a three year lease basis, which comes to about $9-10 million annually on technology.

Table 4.5

Technology Roadblocks

Technology Roadblocks	
• Limited access to Internet service due to cost or geographic location • Multiple students in one family need access to the same device • Lack of a access to device at all at home • Lack of funding to maintain program after initial seed monies received from outside sources • Need more professional development time • Lack of teacher technology skills or disinterest in using it • Too many devices and applications for teachers to be aware of for BYOD initiatives	• Older buildings with thick walls that do not allow for wireless access points to be easily installed • Selecting a device that will last, meets the needs of learners, is age appropriate, and is cost effective – tablet, laptop, brand? • Restrictive Internet filters • Unable to maintain an acceptable replacement cycle • Misassumption that new teachers are proficient with technology and veteran teachers are not – skill level varies and is based on individual

The number one roadblock for technology initiatives was cost. SE3 was facing a $1.65 million deficit and could not afford technology of any kind without outside grant funding. Other districts fund technology programs through Title 1 (NC1 – former district, NE1), district

foundations (NE1, NC3, SC2), business partnerships (NW1, NC2, SW2, SW1), local foundations or grants (NW2, SW3), IU consortium discounts (SW1), EITC (NE1, NC3), and monies from fracking companies (NE2, SW2). NW1 reported the partnership with local industry is viewed as an investment in future employees. SE3 and NW2 are searching for grant monies and SE2, SW3, and SC1 reported that they do not currently receive outside funding or usually avoid it because they do not have money to maintain the initial seed funding. NE1 and NW3 are hoping for hybrid grants from the state budget. Overall the participating districts provide a great deal of access to technology, but once the students leave campus it can be a very different situation.

The lack of home internet and/or device access created a problem for implementing flipped classrooms or virtual programs for NC2, NW1, NW2, NW3, SE3, and SW3. Some areas in northern Pennsylvania require satellite internet, which can be very expensive. NC2 explained that many students "don't have cell service and they don't have Internet service in a lot of our real remote areas." SW3 noted that even when internet providers such as Comcast offer special rates on access and computers some parents still are not interested in it. Some of the districts, such as NW3, SW2, SC1, SC2, SE1, SE2, and SE3, have a student population with a very high percentage of access to devices and internet, but noted that unless the number is at 100% it makes it difficult for teachers to assign work to be completed online outside of the school day.

Other roadblocks identified were too restrictive filters (NW3), staying current (NC3, NC1, SE1), deciding on 1:1 or BYOD (SE1), the size of the technology department (NW1, SW3), finding the right device for the right use (SW2), and implementation time (NE1, SC2).

When asked about teacher technology skills, NC1, NC2, SE1, NE2, SW2, and SC2 noted a lack of teacher technology skills or simply disinterest in using it can be a roadblock to

implementing technology initiatives. SE2 specifically stated that teachers may not want to use technology, but the kids had to learn how to. NC1, NC2, NE1, NW1, and SC2 reported that they did not believe teachers were using the technology available to them as effectively as they could be. NC2, NE2, and SC2 saw Luddite pushback as a roadblock, while NW1 and NW3 acknowledged that new teachers need to have professional development and did not always have the technology skills that people assume they do. NW1 stated that:

> It's not just old folks like me that do not know how to use it. We do have teachers that we hire that do very well with what they needed in college, but that's not what we have here or have a need for here.

NW3 shared similar thoughts:

> I'm seeing some of the newer teachers come in a little more savvy and I'm seeing some veteran teachers picking it up, but then I'm also seeing some new teachers that just don't have the technology skill set that I would assume they would.

NC2 phases in programs because "I have gotten pushback from teachers that are scared of technology" so those who want to participate are the initial participants.

NE1 pointed out that even skilled teachers may have difficulty with BYOD initiatives simply because of the amount of devices and applications they would have to be aware of and be able to troubleshoot. NC3 and NW2 stated that teachers had to be evaluated to individualize professional development needs. SE3 promotes differentiating professional development for teachers similar to differentiating in the classroom. Teacher buy-in is important for the success of technology initiatives and NE1, NE2, NC2, NC3, SW2, and SC1 try to reward teacher creativity with a bottom up technology plan that includes providing requested technology, encouraging

conference attendance and building level technology committees, and providing grant opportunities. NW1 said of creating the district technology plan that "teachers do not like to stay after school, but attendance was near perfect for all seven meetings."

Sub-question 2

What is the perception of the future of distance education in Pennsylvania?

Table 4.6

Positives and Concerns about the Future of Distance Education in K-12 School Districts

Positives	Concerns
• Classrooms will evolve into a hybrid model • Online programs can replace snow days • More flexible scheduling • Healthier schedule – some students skip lunch • Able to offer courses with small enrollment numbers that would normally be dropped or cannot find teachers for due to location • Easier to individualize education and offer remediation and enrichment activities	• Transportation – high school students may be able to do a fluid schedule, but what about other grades? • Maturity, internal motivation, responsibility, and lack of socialization of the students • K-12 is being infused with technology and differentiated, but are colleges and universities?

Ten of the superintendents (NC1, NC2, NE2, SE1, SE2, NW1, NW2, SC1, and SC2) predict that education in Pennsylvania will evolve into a hybrid model. Online learning is not going away any time soon and there were some common positives and concerns that the participants identified. Table 4.6 summarizes the positive aspects of online education and the concerns that the participants expressed.

Many of the districts in the study already have a hybrid model in place as a result of the impact of cyber charter schools. NW2 "would like to see a day when there are no more snow days because every kid can…log on…so that learning doesn't have to stop because you're physically not present." NC1 believes a time will come "where kids spend less physical time in school, whether that is doing additional coursework at home or more of a fluid schedule in terms of coming to classes in the morning or coming to classes in the afternoon." NE1 pointed out that the governor had $10 million set aside in the budget to encourage hybrid education, but it is still too expensive for some districts. SC2 pointed out a logistical problem – transportation. "I think it's going to look very blended and it's going to be very customized. And that will start at the high school level and go backwards because of kids to drive to school."

A hybrid schedule could be healthier for some students, according to SW2:

> We really believe in the human element that building relationships with kids is the most critical aspect of teaching and learning so we never want that aspect to go away. But we also realize that, um, students in the 21st century need a different set of skills. Um, they're more mobile than they ever have been…for years we've had kids who are trying to pack so much into a day that they don't take lunch…we've always imagined that, you know, cyber would help open up spaces in their schedule so they would have a healthier balance in their day.

All agreed that they were not fond of a purely online system, citing maturity, internal motivation, responsibility and, especially, lack of socialization as the main reasons why. NC1 stated:

> I think beyond the courses that are available I think communities readily identify with public schools and everything that comes with public schools, from extracurricular activities, athletics, the arts, clubs, groups. And, you know, I think that's still important for the social development of kids. I don't think cyber schools can do the same, although I know they try and get kids together for various activities, um, I still believe that human beings are social by our very nature and I think that's well served in a school setting, a traditional school setting to meet some of those social needs.

SW3 stated:

> I feel that part of public education is socialization, learning how to deal with people, people you don't really want to interact with, putting up with comments you don't want to hear, and becoming resilient enough as an individual to handle adult life. Unfortunately, I think we live in an era today where parents are protective of their children and don't want them to deal with those kinds of things so cyber charter's the way to go.

SC1 said:

> I do believe that there's a place for hybrid learning, for online learning, blended learning and so on. But it scares me to death to think of the final product we will put out for the kids that are primarily learning online. My personal belief is that it is a mistake and that there is a socialization component that is scary for those

> individuals and how they might meet the 21st century skills…uh, problem solving, collaborating, getting along and working as a team with others to solve issues, things like that. I just don't think working in isolation in front of a computer screen is the best way to do that.

The superintendents were almost evenly split on whether they would have offered such a program on their own or believe they might not have offered one at all or certainly not with the speed with which it was implemented if there had not been a need to recover outgoing funds. Some of the yes votes were with reservation with one noting that the program probably would not be as big.

NC1 believes education will become more of a 24/7 situation and wonders if competencies are going to become more important than seat time. NW3 also believes education will become a 24/7 environment.

Individualized education will become easier with online programs believe NC2 and NE1, a notion that is often supported in the literature (Carr-Chellman & Marsh, 2009). NE1 pointed out that software is becoming more sophisticated beyond remedial programs of the past. NC2 thinks:

> The whole idea of online learning is certainly not going to go away and I'm glad it isn't. I'm thinking it's only going to improve and continue, but I'm really hoping that we really get to the point where we are on an equal playing field. Um, that we're individualizing all students' programs and I think the public's gonna demand that at some point. Because somebody's going to open a school that is going to do that.

SE2 was the only participant to express concern that students will see an increasingly interactive education from K-12, but that college programs will remain more of the traditional lecture style and create a tough adjustment. Noting that CSPAN 3 occasionally films:

> a classroom being taught by a professor and you see very little use of technology. Yeah, you still get a lot of lecture type of series. You know, I wonder how we are going to get the kids ready for that type of environment if we…if they're so used to using technology...and I wonder about that – the transition from K-12 to higher education, how much technology is being used. I mean, students are using it for taking their notes. Students are using it for writing their papers. But I don't think there's a great deal of teaching done through technology.

Sub-question 3

What has been the perceived impact, or lack thereof, of distance education on the school district's program?

The perceived impact of the distance education programs varied by the district. Nearly all viewed the e-learning education opportunities as creating enrichment opportunities that can cater to the desires of each student in an individualized education plan with six opening the program to all students and four restricting it to gifted students. On the other hand, SE1 saw it as simply an opportunity to stop the bleeding of funds out of the district and at the present time only offers it to those who are considering leaving for cyber charter schools.

The desire for an online program to supplement the current curriculum is a noble venture, but the superintendents noted that there are a number of factors that need to be worked out for it to be an effective system. One of the largest was work issues had to be ironed out with the teachers' union, whether it was through a memorandum of understanding (MOU) or through

language in the collective bargaining agreement (CBA). Not only did compensation need to be addressed, but the work schedule for course coverage if it was to be incorporated into the regular workday. The administration also had to allay any faculty fears of layoffs resulting from the addition of virtual programs. Five of the superintendents (SE1, NW1, NE2, SW1, and SC2) reported minimal pushback from the union because the teachers understand the need for the program to recover funds. The NE1 and SC1 teacher unions had an outright boycott of the online program. NW3 and NC2 expressed concerns about potential job loss. NC3, SE2, and NE2 acknowledged that their program was growing and would become a union issue in the near future. Some of the superintendents are purposely keeping the program small and this is helping them to keep the peace with the union since it is not then viewed as a threat at the present time.

The superintendents interviewed who believed that this had become or was going to become an integral part of the district curriculum viewed teacher participation to some degree in the project as imperative for its success. Creating a program that is completely designed in-house by district teachers is a massive undertaking, but that is what NW3 decided to do. NC1 said the having teachers involved was "vitally important" to the success and viewed outsourcing as a weakness. Two districts have a coordinator that administers the program and four have teachers oversee pre-packaged courses. Superintendents in two districts want teacher participation, but the teacher's union is apprehensive and the teachers elected not to participate at this time. SW2 used outside programs because of the speed with which it was necessary to start the process during contract negotiations, but they are in the process of training district faculty to take over the role of monitoring the courses. The implantation process was held up by contract negotiations. SC1, NC2, and NW1 also offer face-to-face teacher tutoring to students participating in a virtual program that has teachers of record supplied by the vendor and hope this service will draw cyber

school students into the local program. NC2 will send a teacher to the student's house "for up to five hours per week in various subjects" with math being the most requested subject.

Table 4.7

Areas to Consider in Creating a Distance Education Program

Questions to Consider

• Determine if the program will be done in-house or outsourced
  o If done in-house then professional development and curriculum time will be needed
  o If outsourced will the district have a limited or no role in the program?
• Decide what student support services will be provided
  o Tutoring
  o Technology
  o Internet access
• Determine the intent of the program
  o bring back cyber charter students
  o remediation
  o enrichment
  o open to all students
• Come to an agreement with the teacher's union
• Create policies that clarify how this program fits into graduation requirements, class rank, attendance, etc.

Table 4.7 highlights a few of the issues that need to be considered when implementing an online program. There are many, many more questions that need to be answered, but these are a few that were mentioned the most often throughout the interviews. The last point, creating policies, was only mentioned a few times and is critical to aligning the online program with the regular program.

Sub-question 4

What is the perspective of public school administrators about why students are leaving public school districts for cyber charter schools?

There are many reasons why students leave school districts for cyber charter schools and Table 4.8 outlines those identified by the participants in this study.

Table 4.8

Reasons for Enrolling in Cyber Charter Schools

Cyber Charter School Enrollment	
• Already enrolled in a CCS and moved into the district • Circumvent graduation requirements of the school district • Temporary move –girls only going during middle school • Parent's travel schedule • Bullied	• Transfer from homeschool to CCS • Pregnancy/child care • Truancy or behavior problems • Parental or student conflict with the school district • Medical leave • Flexible schedule for athletic training or participation in the arts

Homeschool and cyber students. One of the most frustrating situations for the administrators is paying for students who never attended the district at all, as they were homeschooled or attended cyber charter school previously and moved into the district. NC2 explains:

> A lot of times they say those student you would have them in school and it's just now that money is being translated to a cyber school, but in our case, most of our kids that are in cyber charter schools never set foot in our building. These are kids that are homeschooled by their parents and they decide to, for whatever reason, to go with a cyber charter school so we are actually paying money out that we wouldn't have been paying out in a situation. It's not like we have kids here that are new moving into a cyber program. Very few kids that we have that are students here end up going to a cyber program outside of ours.

SC2 would also like a chance to get the students in the district before the parents opt for alternatives:

> We also have a contingency of parents who send them to cyber before they ever get to us so we never get a crack at them, you know, when they are five year olds or four year olds. So that's a problem. We're trying to figure out how to get to those parents and try to encourage them to give us a try before they do that.

The literature notes that many cyber charter school students are former homeschool students whose parents have decided to take advantage of the system that often caters it's curriculum to that parental desires for that particular type of student (Klein & Poplin, 2008). The superintendents in this study agree that that is often the case, although the numbers of homeschool populations varies around the state causing the impact to differ by district with

seven (NW1, NE1, NC2, SE2, SW2, NW3, NE2) citing it as a current issue. A few more are keeping a close eye on the homeschoolers that have not switched over yet, with NC3 noting that a local church has recently begun actively promoting cyber charter schools. It can be nearly impossible to get homeschool students to enroll in a virtual program offered by the local district since the parents often homeschool their children because of religious reasons or philosophical differences with the public education system. However, two superintendents report having a good rapport with such families and encourage them to participate in school activities, athletics, and/or take a few higher level courses on the school campus.

Some participants confirmed that a few students do attend cyber charter schools for the flexible schedule for athletic training (NC3), participation in the arts (SC1), or pregnancy/child care (NW2, NC1, NC3, SW1, SW2). Those students are typically successful and can handle the independent work while pursuing their dreams. This is the student that is usually promoted in the advertisements for cyber charter schools, but is often not the student that most districts report leaving for those schools. NC1 stated that while there were cases of cyber school being used for pregnancy or gifted enhancement:

> I know in some of the advertisements for the various cyber charters in the state you know they always show a world class hockey player, you know, he's gotta practice from such and such to such and such time. We didn't see a single case like that.

The interviewees were most concerned about the student that is truant, defiant, and is looking for a way out of the public school system and is most typical of the students they have observed who try to "escape" public school districts by transferring cyber charter schools. Thirteen superintendents expressed concern that this type of student who is not successful in a

monitored face-to-face situation and question their ability to be successful with the more independent schedule of an online program. NC3 observed that "they don't want to be followed up with and they don't want to be held accountable for their work so they can go to the cyber charters and kind of are more left alone." NW1 said of students leaving the district, "It's primarily, um, right now it's 100% people that had a run-in or their child was suspended or they're tired of getting them here every day or they're tired of the principal calling." NC2 described these situations where students lack the necessary intrinsic motivation:

> A lot of the kids we see take it full time, whether it be in our program or program outside of our school, the kids who have had the least amount of drive and they are kind of escaping the situation, but they are putting themselves in a very difficult position because they are not successful working independently.

SC1 believes that students need to learn the responsibility that comes with going to school every day:

> Unfortunately for the majority it is the student that is not all that motivated and who had trouble with issues of attendance or behavior in school and this is a way to try get away from being held accountable for some of those things and I really do think that is where cyber charters have kind of undermined, uh,…being able to get up in the morning, come on time, dress appropriately, and things like that I think do help out with responsibility and helps prepare kids whether it be college or the workforce or the military or whatever so I think that hurts them…so I would say the majority of kids that are moving in that direction are not the kids that are highly motivated or that we anticipate will be successful.

Often these students believe that the e-learning program will be easier than the traditional program and that is not the case, resulting in these students bouncing back and forth between the two school programs creating a “revolving door”, as several superintendents referred to it, falling further behind all the while and requiring a great deal of remediation when they return to the local district. This revolving door can become quite expensive for the districts. NW1 said, “families that get upset with us the quick answer is "oh great, I'm going to PA Cyber"…And so the student is not successful, a year goes by, we spend $10,000-15,000, they return and our rules aren't any different.”

Elementary students who require more supervision from parents also get caught in the revolving door because, as NW1 explained:

> The other growth we see in the elementary is they are in cyber for six weeks and then they get mad at their kids, kick them off, and re-enter them. And then they have a run-in with us over attendance and then they pull them out again.

Seven superintendents (NC2, SE2 SW1, NW3, NW1, NC1, and SW2) reported that parents enroll their children in cyber charter school because they are angry with the district. According to NW3:

> Every time I turn the corner and make a decision somebody doesn’t like that’s…the first words out of their mouth is ‘I’m going to take my kid to charter school and you are going to have to pay.’ You know, it’s not I’m worried about the education of my kid and I want the competition, it’s I don’t like you, snub my nose at you and off I go.

SW1 similarly said, “We’ll get one kid to come back from cyber school, but then somebody else is mad at the principal because you know their daughter got sent home for something inappropriate, so I’m going to yank my kid out and send them to cyber school.”

Nomadic families already enrolled in cyber charter school affect SW1, SE3, NW1, NC3 and SW3. NC3 stated, “We’ll have kids that move in, you know a lot of those kids are lower income and kind of nomadic and they are…oftentimes a family will move in and we’ll [be] stuck getting the bill. You know they…they’ve enrolled and we’ll never even have seen them.” NW1 noted an increase in low income apartments within the district has attracted a transient population that is already enrolled in cyber charter schools. It can be difficult to keep track of these students, but necessary to avoid paying charges for students who have moved out of the district. SW3 said of the workload involved with keeping track of this population:

> We’re better now than we used to be. There’s better communication. The bills come in through my office and my business manager gets them. She checks out the grade level and then she will call the principal to say are you aware of this name, have you had this student in the past…so on and so forth. They’ll recognize the name or don’t have a clue who the person is. If the student is in the middle school she might call the elementary principal to ask them that. That’s when we send the school resource officer out to knock on the door and say we are so and so, where is such and such and that person will materialize and they are in fact there...the community’s so small, even if they weren’t ours, people talk and we find out if someone’s moved or something. So if they moved and we weren’t aware of it we try to pinpoint an exact date when that occurred and try to get the bill adjusted accordingly.

SC2 pointed out that some students are using cyber charter schools to circumvent the graduation requirements when they are in danger of failing, stating:

> Our high school cyber kids that leave for cyber are leaving because we have 28.5 credits to graduate and the cybers are 24, 21, 22. So, you know, if you're flunking with us, what is the obvious choice? You go to cyber, finish up, fewer credits, you finish on time. So people are using them for all the wrong reasons.

Other reasons for switching to cyber charter school included medical leave (SC1, SE2), a parent's travel schedule (SW2), and bullied or loner children (NE2, SW3). Other trends noted include elementary homeschoolers going to cyber charters for high school and girls who have a hard time in middle school who transfer and return in high school. NC 3 reported that some students use the in-house "cyber option as a way to fill in classes when they're actually going to college at the same time." SW2 loses some students to a local charter school that offers full day kindergarten, which parents prefer to paying for daycare and they stay after being happy with the school.

Truancy. The conversations with the superintendents revealed an administrative issue that is often left out of the literature and is not apparent if one only reads the charter and cyber charter sections of the Pennsylvania School Code. When a cyber charter school student has accumulated three or more unexcused absences, it is the local district, not the cyber charter school, which is required to file truancy charges with the local magistrate (Pennsylvania General Assembly, 2006). Once the district is notified and the appropriate administrator files the required paperwork, the local district is now paying that person to sit in court all day waiting for a hearing on a student that does not even attend their school. Eight of the 16 participants (NC2, NC3, NW1, NW3, NE2, SW1, SW2, SW3, SC1) have dealt with this issue, NE1 had not but heard

about it, three (NW2, SE1, SE2) had not had any requests, SC2 was unsure, and SE3 was not aware that was the law. Most of those who had to handle the truancy issues noted that it was usually the same students who were truant when they were in the local school district. NW3 said:

> Usually as you become aware you go after that and try to address that. Sometimes it is like chasing your tail because you are already dealing with that kid with a truancy issue and then they go to charters and think they're going to get away from ya, and then all the sudden they find out that's just not the case. You're just right back where you were.

Several superintendents expressed concerns about cyber charter schools letting the students be truant and then getting letters saying the student was kicked out and would be returning to the local district rather than deal with the truancy. By this time the student has missed 20-30 days instead of the ten required to go to a hearing. On the delays in reporting, SW1 said:

> At least one principal [is] in magistrate court every week. That's ridiculous, absolutely ridiculous, and it's not our kids, its cyber kids. Yea, yea these are kids that are in cyber school that aren't doing what they're supposed to do, and the cyber schools usually will wait…by our rules, after you've had ten unexcused absences we have the right to take them to the magistrate to force them to come to school, but the cyber schools will wait until they accumulate twenty, thirty absences and then one day we'll get a little notice that will say "Oh, you know, by the way you know, Joe Jones has not participated in the cyber program since December 15 and it's May, you know" And it's like, you've got to be kidding me. It's…so now we have to go to court for this.

On the truancy issue, NW1's experience has been "…immediately they put them out and just send us a letter saying Susie no longer goes to school here. So that's been the more common issue than sending us anything official based on truancy. Just simply drop them." NC2 said, "They don't share grades. They don't share anything else. They don't share IEPs, but they want us to actually go out and file truancy charges against the student who is in their programs." SW2 said, "It costs me a staff member's day, either a police officer or an administrator to go and sit in a magistrate's office for hours on end and waiting for a turn" adding that professional's daily rate to the cost of the cyber charter school tuition.

The superintendents are also frustrated by getting truancy notices for students that they do not have any history on since the child moved into the area and never attended the district. SW3 noted that:

> It's primarily either middle or high school and [the principals] would start the paperwork and sometimes they didn't even know who the student was because it was one of those students we inherited from a district and never even had any kind of a history with them as a district.

Dropout rate. NW1 and SW1 noted correlation between an increase in the dropout rate and students who go to cyber charter schools. Some of these students are doing poorly before they transfer, the new school is not the easier "escape" that it was perceived to be, and they transfer back into the local district. NW1, whose dropout rate is nearly double that of the rest of the study participants, described it in this way:

> …families that get upset with us the quick answer is 'Oh, great, I'm going to PA Cyber' or I'm going on some cyber school. And so the student is not successful, a year goes by, we spend $10,000-$15,000, they return and our rules aren't any

> different. And so, the parent had them out, they missed a year academically, and with high school kids, we are finding that 6 weeks, 8 weeks, of they are of age they are dropping out in a short period of time. So our dropout rate easily tracked by cyber.

SW1 had a similar experience:

> After they've been in cyber school for a year, they come back to us, they rarely have completed any credits and, uh, then they're lost, and so they come to us because the cyber schools actually help them get out because they almost kick them out. And once they kick them out they come to us as a junior or senior with three credits, they cannot graduate, they quit school, and that's a drop out. Reflected as a drop out for the school district.

According to the Pennsylvania School Performance Profile reports (2015), the 16 schools reflected in this study have a dropout rate ranging from 0-1.13%, with most falling in the middle of that range. Of the 12 cyber charter schools that draw from this group, the range was 0-40.65%. The highest ranking schools are 21st Century Cyber CS (7.56%), Achievement House CS (11.47%), Agora Cyber CS (4.62), Central PA Digital Learning Foundation CS (20.18%), Pennsylvania Cyber CS (3.53%), and SusQ-Cyber CS (40.65%). The 17 brick and mortar charter schools are closer to the public school district statistics, with a range of 0-7.02% and only Career Connections CHS (2.9%), Dr. Robert Ketterer CS (2.44%), and Keystone Education Center CS (7.02%) ranking higher.

Student records. SW2 was concerned by two families who left the district to attend cyber charter school as A and B students and then received reports that they failed and had to

repeat the grades. Privacy laws prevent the home district, who was now paying for repetition of the grades, to get any information on attendance or academics without the parental signature.

Sub-question 5

What is the response of public school administrators to the implementation of cyber charter schools?

All of the superintendents who participated in the study took some action to try to recoup students and funding that was going out to charter and cyber charter schools. This also did not appear to be a project that was simply delegated to sub-administrators to handle. The interviewees overall understood the type of program that was being used, the rationale for going in or out of house for it. NC1 personally went door to door promoting the district cyber program.

Districts reported paying $200,000-$1.7 million to charter and cyber charter schools. The amounts per regular student ranged from $8,000 to $20,000 and a special education student was $14,000 to $22,000. Overall, more money was going to cyber charters than to brick and mortar charter schools, but there were a few exceptions.

Transportation. School districts are required to provide transportation to a charter school student if the school is located within the district, is "located not more than ten miles away by the nearest public highway beyond the district boundary," or "is a regional charter school in which the district is participating" (Democratic House Education Committee, 2015, p. 4). Since districts have more control over approving charter schools in their area than cybers, those districts that were within ten miles of urban areas, which typically have a higher concentration of charter schools, were forced to bus to and therefore felt more of an impact from brick and mortar schools. Three participants specifically mentioned increased transportation

costs. SW3 was a small district that did not bus its own students, but had to provide transportation to students attending charter schools outside of its borders.

> We don't bus our students to the regular setting, so that means we don't have to bus students that live inside our district that go to maybe a parochial school that is within a 10 mile radius outside the district…However, under the law we have to bus those charter school kids…Some local legislators found out about that in the last year or so and don't see the logic in that and frankly neither do I. So, ah, that's kind of like an added cost toward the fees they're charging us for…brick and mortar charter, but we have transportation costs on top of that because we don't have our own transportation…It's only going to be applicable to walking school districts. (SW3)

Mandate local program. Public school districts do not have any control over the creation of cyber charter schools since they are approved by the Pennsylvania Department of Education (PDE). Charter schools must apply through the local district and may appeal a denial to the PDE, but the local district usually has control over what is happening within their borders. Many of the participants reported their school boards denying such requests in the past and/or will not be renewing charters granted to currently operating schools. The superintendents are very frustrated with the cyber charters that they have no control over and seem to be losing an increasing number of students to each year. They are dealing with loss of administration time to checking on billing by sending staff into the community to check residency status. It is difficult for them to predict how many students will transfer, which can happen at any time, and preparing a budget is challenging to do. NC2, SW1, and SE2 all believe that if the local school district is

performing better than the cyber charter school the students wants to enroll in and that district offers an online program, the student should have to enroll in the district program.

District cyber programs. There are a number of different options that a district can engage in to create an internal cyber program and they are outlined in Table 4.9. NE1, NW2, SC2, SE1, NW1, and SC1 participate in the programs offered by the local intermediate unit. This creates an interesting funding situation since some of those programs are contracted through the same cyber charter schools to which the districts are originally losing funding. An example of this situation is SE1 who pays $11,000 if the student goes directly to a cyber charter school and $3,600 if the student completes the exact same program via the district virtual program who contracts with that cyber school. All of the superintendents reported that they can offer a full online program to students for $4,000 or less per year, yet they are obligated to pay the full cost per student to the cyber charter schools. NC2, SW1, and SE2 said that the state should require students to attend the local program if one is available before the school has to send money to cyber charter school. SW1 shared that the Pennsylvania School Board Association and the Pennsylvania Association of School Administrators have lobbied for legislation that says the district cyber program must be used if one is available and parents must pay if they prefer another option.

Table 4.9

District Cyber School Options

Joined a consortium*	5
Contracted with vendor	8
Created own curriculum	1
Investigating options	2

**One transitioning from IU consortium to in-house program*

In-house programs have been met with both disdain and support by teachers unions. There has been an epidemic of faculty layoffs in Pennsylvania in recent years (Easak, 2011) and teaching students virtually, especially with pre-packaged programs, has caused many teachers to be suspicious of being replaced by computers and outsourcing. The participants in the study insist this is not going to be the case as they feel it will save jobs by keeping the students and the funding in the local district. Some of the districts, like NW1, market the program carefully and believe the intention to keep the cyber program small has led the teachers to be more accepting of it. However, two of those same superintendents made comments about courses being offered virtually and how much cheaper they were than hiring a teacher. Another commented that education was heading in a hybrid direction, but that the Pennsylvania State Education Association (PSEA) was too powerful to allow such massive teacher layoffs. These comments indicate that some superintendents may actually be considering online programs as a solution to financial concerns on a larger scale than they are willing to admit. In other districts the faculty welcome the opportunity to teach online by writing the courses themselves. For NC1 the courses were purchased, but "all of the teachers that were involved were volunteers, um, but I think they certainly appreciated that they were getting a fairly substantial stipend to work with these kids, so I think it was a win-win." Several districts opted to build the monitoring time into the regular teacher course load.

The rate of success of the district virtual programs varied among the districts. Some recovery of students who left was reported, but for the most part the programs "stopped the bleeding" by preventing more students from leaving and this is how most of the superintendents are focusing their efforts. They know they likely are not going to get students who were previously homeschooled to enroll or those who leave because of behavior issues or the parents

are disgruntled with the school because the program, even if it is outsourced, is still viewed as being part of the very system the families are trying to get away from.

The selling points of the local virtual program are usually that it is a district diploma, students may still participate in extracurricular activities, face to face tutoring by local teachers is often provided, and some districts will provide technology support with a computer and internet access. NW1 charges charter school students to participate in sports, band, and other extracurricular activities. The brick and mortar charter schools are more willing to deduct the cost of participation from the tuition payments, but cyber schools are not which has led to some students opting for the district cyber school over an outside one. A few even offer lunch for those who qualified for free and reduced lunch and attended the program onsite. The superintendents overall believe they have a stronger program than the cyber charter schools because they claim to do more monitoring and meeting with families, two professed to have a more college ready curriculum, one drug tests students, and most offer face to face tutoring. One district reported producing a successful program and believes they have reached the point of selling the program to neighboring districts.

Eight school districts are using the online program for credit recovery and/or summer school and ten are using it for enrichment purposes (six for all students and four for gifted only). Three schools were using the program to offer a specific course that is small or a teacher could not be found for it. Three superintendents see their programs evolving into a hybrid for all students and are actively promoting that, as well as making plans to adapt future renovations to meet this purpose. This is also a view that cyber charter CEOs hold (Sherbondy, 2008). NC1 expects the traditional school model to evolve, stating that:

> I think districts always view themselves as, you know, the 180 days and the 900 hours or the 990 instructional hours, I think technology forces you to rethink all of that, where maybe it's not about seat time and it's more about competencies.

State-run cyber charter. When asked if a state-run cyber charter school, as many states currently have, would be more favorable to the current system, the response was positive. Most saw it as "the answer" that would create more oversight, lower costs if the state directly paid for it at the amount that was really required, eliminate corruption of the private managers, and create more accountability. NC2 questioned the logistics of such a system because of the number of students enrolled in cyber charter schools and the reduction in staff size at PDE. NW1 said, "I cannot understand why the state doesn't order that, particularly in a financial bind that we are all in." NC3 was on board with this program, saying:

> See that, to me, is the answer...the amount of money that cyber charter gets is different based on where the kid comes from. Meanwhile, they're getting the exact same program and have the exact same overhead with no building. Now that makes absolutely no sense. Whereas if you had a state run system, every kid would pay $4000 or $8000 whatever the cost is and it would be the same regardless of which school they came from. That would make so much more sense. Cause right now, the cost that people are paying is not does not correlate to what the actual cost there are to run the program.

SE1 and SE2 agreed that it would probably help control the costs. SW1 suspected that such a program would probably be more affordable. SW2 was more pessimistic about it ever happening in Pennsylvania, declaring:

> If there was a standard state system. It'll never happen though, and because, um, quite frankly the charters have tremendous backing, tremendous resources to buy

> legislation, and that's why legislation hasn't changed in the state of Pennsylvania. There are too many too many politicians that have had their pockets lined by charter funders. It's just, you know, it's just not going to happen. They bought their votes.

Summary

Most of the results of the study lined up consistently with the research; there were not any elements that contradicted what has been published about distance education in Pennsylvania. From the reasons for students leaving to the technology initiatives and roadblocks to the response of the superintendents to the cyber charter schools, the majority of the responses lined up with the media reports and research literature. The superintendents were most concerned with the economic issues, accountability differences between the charter schools and districts, and academic achievement gaps in the state tests than anything else. They did not feel they were competing on a level playing field because of the regulation differences.

The interviews did reveal a few new parts of the issues that are not as heavily publicized. The fact that many of the students transferring are behavioral and attendance problems that the local district then has to go to court for, not the cyber school, when the problems continue is not widely covered in the media. Several superintendents noted that efforts to create a district cyber program do not ensure students will go there because there is not a state mandate to require attending a district program over a lower performing outside option. The push for a hybrid format is gaining momentum, which most of the superintendents do not disagree with, but they are leery about 100% online education, particularly for elementary students. Students being diagnosed as qualifying for special education services, thus resulting in a larger tuition bill, and

the home district not receiving any justification for the diagnosis is rarely covered in the literature.

All of the districts were impacted in some way by the distance education movement and cyber charter schools. The districts in this study are creating a program, outsourcing it, joining a consortium, or investigating these options. For most of the participants, creation of this program to solve one need (bring back cyber charter students and their tuition payments) is also serving other roles (enrichment, remediation, expanding the course catalog). Impact has been negative by causing economic distress, but positive in forcing the district to investigate new educational methods, re-evaluate its product, and implement marketing strategies.

CHAPTER FIVE: DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

Overview

This research project focused on Pennsylvania and the growth of the distance education movement. Distance education, once a rarity using the postal service, take home videos, and satellite feeds to remote sites, has expanded from kindergarten to graduate school with the incorporation of the Internet. Distance education is also becoming more popular on the K-12 level as students leave public education for a multitude of reasons, including travel, flexible scheduling, bullying, medical issues, teen pregnancy, and discipline (Barbour & Reeves, 2009; Devlin, 2007a*;* Erb, 2004; Kello, 2012; Negley, 2007).

The educational system in Pennsylvania is set up differently than other states in that it does not use a county system. The educational program is operated by local school districts that range in size from a few hundred students to hundreds of thousands. Today, there are over 1.75 million public school students in 500 school districts in Pennsylvania (Pennsylvania Budget Policy Center, 2014). In the 2013-14 school year 128,716 of them attended charter and cyber charter schools (Pennsylvania Budget and Policy Center, 2014a).

K-12 education is changing across the country and Pennsylvania is no exception. The passage of the charter and cyber charter school laws have had some influence on that change. The intention of charter school law is to promote innovation (Mead, 2003) and encourage change through free market competition (Ellis, 2008; *Judge,* 2001; Smith, 2008) and decentralization of schools (Krbec, 2001; Rodney, 2010). Since the passage of Act 22 of 1997, aka the Pennsylvania charter school law, traditional school districts began to face competition from another source in addition to private schools and homeschooling. The charter schools presented a new problem in that they were classified as public schools and when students transferred to them they took their

allocated funding with them. In Pennsylvania, brick and mortar charter schools are formed in one of two ways: 1) the local school district approves a 3-5 year charter and is responsible for ensuring accountability or 2) "an existing public school can be converted into a charter school if 50% of the school staff and parents of its students agree to the conversion" (Democratic House Education Committee, 2014). The reference to the use of technology in the charter school law created a 'loophole' that allowed charter schools to move online (Taylor, 2002). By 2014-15 over 36,000 students from 483 of the 500 school district were enrolled in cyber charter schools costing $426.2 million in taxpayer funds (Democratic House Education Committee, 2015, p. 34). Districts have the power to allow or deny brick and mortar charters within their borders, but cyber charters, now authorized by the state, can draw from anywhere in and out of Pennsylvania.

The purpose of this study was to interview 16 Pennsylvania school district superintendents to understand their perspective on the distance education movement, particularly in regards to geographic location, economic status, the future of distance education, the perceived impact on their district, why students are transferring, and the response by their district on the implementation of cyber charter schools. Common themes were identified across these issues and some new ones emerged during the coding process.

Summary of Findings

Overall the superintendents are not concerned with the competition from the cyber charter schools, but rather with the current funding formula, differences in policy regulations when both are classified as public schools, and the academic achievement. The research participants have testified to in Harrisburg and talked individually to state legislators about the laws they believe create an uneven playing field. They welcome the push to improve their

product, but find it difficult to do so when the cyber charter schools and school districts do not have the same exact regulations placed on them.

As expected the larger districts are better able to absorb the tuition payments to cyber charter schools than smaller rural ones, but they are also beginning to feel the strain. There are a number of technology initiatives that the participants are trying from classroom to administrative changes. The biggest roadblocks to these programs are funding, time, and professional development.

The participants agree that distance education in K-12 classrooms is going to continue to grow in Pennsylvania, partially influenced by the cyber charter schools and a hybrid learning movement from PDE. They believe that classrooms will evolve into a hybrid model and a few ponder if seat time or competency achievement will be more important in the future. Online program offerings can allow for flexible scheduling, potentially replace snow days, individualize education, and expand the course offerings. Challenges to this educational method were acknowledged, including transportation of students on a blended schedule, student maturity, internal motivation, responsibility, and lack of socialization.

All of the superintendents in the study saw changes in their district program due to the distance learning movement. Some saw the shift as an opportunity to open up the online courses to all students, not just those who were considering transferring. Even those who had been considering adding an online component to their programs conceded that the process was sped up by the economic impact of the cyber charter school tuition charges. However, not all of the superintendents want to make these changes at the moment and a few are only offering the program to potential transfers or for remediation purposes. The route that each district chose to

take varied based on how big they wanted the program to grow, consortium options easily available to them, and how many students were leaving.

The superintendents identified many of the common reasons that students leave for charter schools across the country – bullying, medical, pregnancy, flexible schedule, homeschool. One superintendent saw the occasional middle school girl who left and then came back in high school. Truancy and behavioral problems are the issues most often cited as parents and students try to "escape" the school districts. Students who move into the district and are already enrolled in a cyber charter school are not on the radar until the bill is received. Another reason for parents sending their children to a cyber charter school or pushing to create a charter school was the closing of a school building, especially an elementary one.

All of the superintendents in the study have taken some action to try to recoup the funding that is leaving with the cyber charter school transfers, whether it was creating an in-house program, outsourcing, or joining a consortium. Despite creating these programs, there is no mandate that a student must attend the district cyber program over a cyber charter school. The retention success rate varied among research participants and most indicated that it "stopped the bleeding." The superintendents are increasing the marketing of their districts by advertising academic achievement and enticing potential cyber students with extracurricular opportunities, tutoring, technology and support, and a local school diploma. The educational leaders are also finding other uses for the programs including remediation, enrichment, and expanding the course catalog for all students.

Discussion

One of the points that was made over and over by the superintendents was that they are not afraid of the competition from cyber charter schools and that if those schools were doing

better than the public school, and not consistently failing based on the state metrics, they would pay for the students to transfer with no questions. The superintendents realize that the competition is causing them to reevaluate their own programs and begin offering services, such as e-learning opportunities, that they may have delayed or not established at all. They have focused on marketing their district through social media, more contact with parents, and conference presentations, actions that they did not have to take in the past. NC2 stated:

> I think the positive thing with cyber charters is that it's making us market ourselves more. It's making people really take a look at the parent because it is, you know…schools have always been able to get away…public schools have always been able to get away with we're the only game in town. And so we really didn't have to go out and market anything. You gotta, you know, you deal with it, this is the way it is, so forth. I think what it's made us do is it has really helped to have that more active engagement with parents.

The realization of the need to implement marketing strategies and actually carrying them out varies depending on the district and is not a universal theme (Hess, Maranto, & Milliman, 2001), but they are actions that districts are going to need to take in the increasingly competitive market (Miller, 2012).

These changes have been positive, but most of the complaints that superintendents have about charter and cyber charter schools have created what most participants have referred to as an "uneven playing field" that they cannot compete on. Six specifically stated that they believe the laws favor charter schools and cyber charter schools over school districts and one testified in Harrisburg about this while several others noted that they spoke and wrote to members of the legislature on the issue. These activities are consistent with actions that have been taken by other

superintendents (Moore, 2010). What they resent most is the funding model, inconsistent rules, and failure to meet the academic testing standards set by the state.

Funding Model

The concerns about the amount of tuition paid are shared by superintendents across the state (Devlin, 2007b; Handler, 2009; Kurelja, 2005; Mekeel, 2011; Miller, 2012; Moore, 2010; Shaw, 2009; Stemberg, 2006; Urban, 2007). Throughout the interviews the superintendents reported that they can educate a student online for under $4,000, yet the cyber charter schools get the full student rate, which varies dramatically by district. This figure is consistent with the amounts being quoted ($3,000-4,500) by other superintendents in the newspapers around the state (Devlin, 2009b; Handler, 2009; Moore, 2010; Shaw, 2009). Sixteen of the 31 states that have cyber charters and the District of Columbia follow the same per student funding level formula, ten fund at lower levels, and other states vary (PEW, 2015, p. 10).

Beyond the tuition costs, school districts are capped at holding an 8-12% fund balance and charter schools are unlimited (Negley, 2007; Pennsylvania School Boards Association, 2009). This variation in the rules for the two forms of public education has the school superintendents crying foul and arguing that they are allowed to profit from the costs since the cyber charter schools are allowed to keep so much "extra" money that school districts are not allowed to keep.

Charter schools are also receiving payments twice for retirement costs. NW1 explained that "the cyber and brick and mortar receive 150% of their retirement costs – 50% from the state and 100% from us…That's the law and that's $70 million divided between them." NW1 further explained that state has noted this in recent audits, so perhaps a change is on the horizon. SE1 and SE2 also highlighted this as a big funding issue. The 'pension double dip', as it is referred to,

was noted as a problem in several state reports and audits (Bureau of School Audits, 2012; Democratic House Education Committee, 2013).

The funding cuts in state aid since 2008 combined with the increase in payments to charter and cyber charter schools has four of the smaller participants concerned about bankruptcy and the possibility of being forced to consolidate. NW1 lamented, "I don't see how districts are going to survive, quite honestly." NE1 said:

> So there's a lot of things that we need to overcome as a school district, but the bottom line is if we as public schools or public school districts do not provide options for kids to stop the bleeding, as I call it…we'll be bankrupt.

SE3 also sees bankruptcy as a realistic future:

> I see schools as bankrupt…I think that there's a dire need in the state of Pennsylvania for funding to change for school districts or school districts aren't going to be able to survive. I think you're going to see, um, consolidation of school district mergers of school districts. Um, and not that that saves any money, but I don't think the little school districts are going to be able to function. Um, there may be, uh, within the next couple years I see if funding doesn't change, there's going to be more state takeovers of schools, uh, because the finances are just not there.

SW1 and NC2 do not see mergers working as a cost saving measure. SC2 believes that it is ironic that the legislature is in favor of more small charter schools, yet they want less school districts and they cannot have it both ways. SW3 made a similar statement:

> I heard a state legislator say at a recent legislative meeting that the talk in the halls in Harrisburg is to consolidate and only have 300 school districts. I'm not so sure

> you'll save money doing that, either, because you have more layers of administrative personnel and other things you wouldn't have before that. In my heart I want to be optimistic, but I guess at this point I'm not.

Two superintendents also reported that when they consolidate schools within the district, especially elementary ones, parents threated to open a charter school because "they're upset about the distance their kids will come" (NW1). NC3, who was aware of the trend, made a similar statement adding that is outcome is a situation "districts have to be aware of when they look to reconfigure or consolidate schools." This trend was also found by Kurelja (2005) in a case study involving the reactions of three Pennsylvania school districts to the charter school movement.

Large homeschool populations, a group that was an early adopter of the cyber charter school movement (Chute, 2001; Kumar, 2002), can cause an imbalance in the funding formula. The districts, who did not have to bear the cost of educating the homeschooled child as the parents did, face the possibility of receiving large tuition bills for students that have not been factored into their student funding formula (Carr-Chellman & Marsh, 2009). Some have even been billed for students who were no longer attending the cyber charter school (Herold, 2013). This issue and the transient student population that stays enrolled in cyber charter schools as they move between school districts, as experienced by districts in this study, require further investigation if a fair funding formula for cyber charter schools is going to be reached. Another topic of interest for further research is how relationships between the district and homeschool students, as a few superintendents in this study tried to cultivate, prevent these students from enrolling in cyber charter schools.

Special Education Diagnosis

Cyber charter schools can diagnose a student as qualifying for special education services, are not required to give the district any record beyond the IEP coversheet (NE2) and can double or nearly double the tuition received from the local district without the district being able to challenge it. This affected eight of the study participants. NW2 stated that this diagnosis and increase in payment was the driving force behind starting the in-house cyber program. "We said, wait a minute, this is kind of a racket because this kid had no learning disabilities when he was there. He was lazy and he didn't come to school" (NW2). SW1 said:

> We have kids quite often that have no special ed diagnosis, maybe they had speech when they were in kindergarten, and they go to cyber school and then, all of the sudden, they have a speech or not a speech special ed designation.

NE2 explained that:

> Basically all we get is the coversheet to the IEP and that's all we are privy to. Uh, and these cybers are out of Harrisburg or they're out of Pittsburgh or they're out of Philly and so we've kind of been at the mercy. Every once in a while we'll put up a fight and we'll have our Director of Special Ed call there and say, 'Wait a minute. I know this kid personally and there is no way.' And they'll say, 'Well, he tested at such and such a level'. We're gonna fight ya on this one. But if we don't know the kid as well or the kid was a homeschooler and we don't really know them at all, then we almost have to eat it because we don't have any history to fight it, you know?

NC2 also questioned how some special education services were being provided to students in the online format, citing a former student who was severely autistic and required a

one to one aide. Aside from an exploratory state data study by Carnahan and Fulton (2013), little research was found in this area.

Under the current law, charter schools are not required to reserve funds received for special education services for that purpose (Democratic House Education Committee, 2015). There is also disagreement over how much funding is required since there are a broad range of mental and physical disabilities among the students that schools serve and the expense of the services required. "In 2012-13 charter schools received more than $350 million in special education revenue from school districts, but spent just $156 million on services for special needs students" (Democratic House Education Committee, 2015, p. 22).

For Profit Management Companies

The superintendents perceive the cyber charter schools to be money making opportunities for private companies as three referred to them purposely as "for-profits." Several of them pointed out the numerous financial scandals involving many administrators of charter and cyber charter schools in recent years which have been well documented (Democratic House Education Committee, 2013; Herold, 2013). Cyber charter schools are often partnered with a for-profit educational management organization (EMO) and this leads to many questions regarding the use of public funds for educational organizations tied so closely with for-profit groups (Carr-Chellman & Marsh, 2009). In 2013, "42 percent of cybers and 30 percent of brick-and-mortar charters paid management companies to manage their schools" (Democratic House Education Committee, 2013, p. 15). The superintendents in this study that questioned the need to pay the full cost-per-pupil to the cyber charter schools when they can offer the same program for significantly less echo the comments made in several news articles in Pennsylvania newspapers (Devlin, 2009b; LaRussa, 2008; Moore, 2010; Negley, 2007; Shaw, 2009).

Academic Achievement

School districts must send the full funding if a student transfers to charter schools and cyber charter schools, even if they consistently perform poorer on all metrics used by the state to evaluate school performance. This flies in the face of school choice being a free market concept, which is families would flock to the higher achieving schools. Many parents make the choice based "push factors" away from the school district and not the "pull factors" of the cyber charter program and do not rely on the same comparative data points that educational leaders do (Erb, 2004). Of the current evaluation system, NC2 said:

> I have a problem where money is being sent to schools that are considered failing and that's really what most of the cybers are right now – they're failing schools. We can debate the merits of a standardized testing accountability system, I'm not completely sold on that either, but it's the system we have and that's what we are all being judged on. Um, I'm all for competition, uh, but I would like it to be on an equal playing field…I could accept that if there was a cyber school that was performing better than us and parents wanted to send their students there then by all means we have to pay for it. But if the school is not performing as well as we are, then they should have to send them to our program or pay for it to go to another program. Because, you know, you are basically looking at the parent knows what is best for their child …How can you justify sending your child to a failing school?

A review of the Pennsylvania School Performance Profile system (2015) shows that during the 2013-14 school year all of the public school buildings (districts as a whole are not given a score) fell within the range of 62.1-95.5, with most of them in the 70s and 80s. The 12

cyber charter schools ranged between 28.9-66, with only Pennsylvania Virtual Charter School (63.4) and 21st Century Cyber Charter School (66) scoring above 60. The brick and mortar schools fared slightly better, ranging from 36.3-92, with 10 scoring above 60.

Dr. Jim Hanak, CEO of the Pennsylvania Leadership Cyber Charter School in 2011, pointed out that the students they enroll are often at the extreme ends of the academic spectrum which account for the test scores (Mekeel, 2011). Participants in this study acknowledge that fact as a challenge the cyber charters face. SW1 stated that "they're not doing anything because the quality of kids they're getting are not good students. They're kids that just don't want to be in school." This indicates that the superintendents do know the cyber charter schools may not be getting the best and brightest and that is reflected in their test scores, but they still do not believe the scores are acceptable. The SusQ-Cyber Charter School found that the students who struggled in their home schools did not have much luck turning the situation around in the cyber program (Kurelja, 2005).

District Administration

The superintendents interviewed are also frustrated by the fact they believe many people do not realize that charter and cyber charter schools are not private schools, but public schools funded by taxpayer dollars, yet do not have to follow many of the same operating mandates as public school districts. NE1 said, "I don't think charters or cyber charters are held to the same standard we are in public education." "Accountability" and "equal playing field" were the terms used most often by the participants to describe the situation. SW3 said:

> I think the traditional public school district can't say to someone well, we're sorry, we don't have any seats available for you. You need to go somewhere else. We're sorry, we heard that you are a discipline problem and you need to go

> somewhere else. We're sorry you're too costly because of your special needs, you need to go somewhere else. As much as cybers and brick and mortar charters are public schools in the state of Pennsylvania, they seem to be allowed to do things that the traditional public school districts aren't allowed to do.

School districts must have all teachers be certified in the subject they are teaching and charter schools, not including special education, only need 75% of teachers to be certified (Democratic House Education Committee, 2015).

Cyber charter schools can also use taxpayer money to advertise on commercials, billboards, sponsoring fireworks at professional baseball games, etc., as was pointed out by NC2, NC3, and SC2. NC2 said on this:

> It really frustrates me that I see cyber charter schools sponsoring fireworks at Harrisburg Senators games. Or they're running television ads or they're buying these mobile homes and running all over with these computer labs in it. People should be outraged because that's taxpayer money and if I sponsored fireworks and used taxpayer money to do that, I could lose my job. And so you see these public schools creating these billboards and that and I don't know if there is really the outrage because I think some people actually think that cyber schools are private schools. That they're not taxpayer funded. I really think they just don't think about it. But if their local district did some of those things, they would go nuts. And I firmly believe that and it's just…again it's kind of like we're not all on an equal playing field. And I don't have a budget that I can do out and put radio ads on and TV ads.

Within the cyber charter community advertising is an issue because they are competing among themselves for the same students (Sherbondy, 2008). The December 2012 Performance Audit Report of Pennsylvania Cyber Charter School revealed that the school spent $1.5 million in 2008-09 and $2 million in 2009-10 on advertising expenses; the company also had a contract with National Network of Digital Schools Management Foundation (NNDS) that included marketing and advertising services so the cost was probably higher than the $3.5 million over the two year period (Pennsylvania Department of the Auditor General, 2012). The same report stated that during the 2008-09 year the school's business expenses totaled $12.6 million, with the $1.5 million spent on advertising alone being more than the total business expenses for 98 percent of the public schools. The management team countered in the report that the advertising costs were necessary to attract students and maintain financial solvency.

Public school administrators have found that their workload has increased because of interactions with charter and cyber charter schools, as was mentioned earlier with checking up on residency status to keep tabs on outgoing finances. Truancy is a concern in any school, but who should be in charge of it needs to be clarified better under the cyber charter school law. Currently truancy legal issues are handed over to the home district to handle, not the cyber school (Devlin, 2007a) even if the cyber charter school makes an effort to track attendance and communicate with parents (Schweigert & Smedley, 2012).

Reasons for Charter School Enrollment

The superintendents in this study believe the students see the cyber charter schools as an "easy out" to the rules and academic rigor of the public school, echoing the concerns of administrators in Lancaster County (Schweigert & Smedley, 2012). They share a concern about the success rate of students who are not intrinsically motivated to learn with those who run cyber

programs seeking what is perceived to be an easier program (Devlin, 2007a). The cyber CEOs also acknowledge that this is what is happening (Sherbondy, 2008). While there is literature (Barbour & Reeves, 2009; Marsh et. al., 2009) and news accounts (Devlin, 2007a; Negley, 2007; Schweigert & Smedley, 2012) about why students leave public schools for cyber charter schools, Carr-Chellman and Marsh (2009) pointed out that during the 2006-07 school year the majority were from 20% of the school districts. This question, as the authors point out, requires further study into the type of student leaving and what is happening in their home school districts that is not occurring in the other 80%.

District cyber school programs

In this study nearly all of the participants created or participate in local cyber school programs. Creating an in-house program requires support from instructional design and technology specialists to create and maintain the program, develop online assessments, adhere to copyright, and establish an overarching vision (Oliver, Kellogg, Townsend, & Brady, 2010). Three of the superintendents said they are creating their own program or would like to eventually. Some of the programs were successful in bringing students back, most were intended to prevent more from leaving and a few are providing additional opportunities for the rest of the student body. Like the research participants, many districts around the state have struggled to bring back students who have left for cyber charter schools after implementing an in-house program, but have shown success in reducing the number of students who leave once the program is in place (Devlin, 2009a).

The ‘revolving door’ problem was discussed by the superintendents and turnover is an issue with cyber charter schools (Devlin, 2007a), who are also frustrated by the situation (Sherbondy, 2008). The study participants believe that a district-run program can prevent the

revolving door of students going between the programs and falling behind. Again, this concern about remediating students is shared among their peers around the state (Moore, 2010).

Most of the superintendents, like NC1 and NW1, reported that the extracurriculars and the participating in the school community are a carrot to draw back students to the district cyber program. In the case *Angstadt v. Midd-West School District*, a cyber charter student was unsuccessful in her attempts to sue to play on the high school team after the administration said it could not determine if she was eligible because of a lack of access to attendance and academic records (Brady et al., 2010; Trotter, 2003). District cyber programs will allow students like her who want to compete, but also prefer a cyber schedule to a traditional program.

State supported cyber school program

The notion of a state-wide cyber charter school appealed to the majority of the superintendents, mostly as a cost savings measure. In 2001, several groups and individuals such as the Charter Schools Project and Nick Trombetta, advocated for a state-wide program as the cyber charter school movement was taking off in Pennsylvania (Chute, 2001; Kurelja, 2005). Other states have created such programs to improve access to specialized courses, such as Advanced Placement or foreign language, and the state may cover all or most of the cost with school districts paying a much smaller fee than in Pennsylvania (Chute, 2001). However, programs the Florida Virtual School that are funded by the state legislature are billed as adding to the regular schools, not replacing them (Kumar, 2002). The superintendents in this study and peers across Pennsylvania are embroiled in competition for the same tax dollars, rather than working together to create learning opportunities in a system like the one in Florida.

Implications

The research findings overall support what has been published in the research literature and reported in the news regarding cyber charter schools and their impact on Pennsylvania school districts. A few new issues were discussed that are not commonly found in the literature, such as who is responsible for handling truancy, the type of student that is transferring, regular education students being diagnosed as special education, and providing transportation for brick and mortar charter schools. All of these areas warrant further study as they are having a large impact on student success and school district budgets.

The Commonwealth of Pennsylvania Government has not been oblivious to the issues covered by this study, but Hess (2004) warns that such regulatory changes can be difficult in a representative democracy where establishing a charter school is an emotional investment by an organized community. When the larger community is not invested one way or another, and the school is not breaking laws, the smaller vocal group can exert more pressure. There have been a number of bills proposed in recent years to address charter and cyber charter school oversight, examining the funding formula, and requiring the State to cover the tuition cost of cyber charter students (Chute, 2001; Democratic House Education Committee, 2013; Democratic House Education Committee, 2014; Democratic House Education Committee, 2015; Devlin, 2007b*;* Emrick & Reese, 2014; Kumar, 2002; Senate Education Committee, 2010). The state Auditor General Eugene DePasquale published a special report in 2014 and called for an oversight board, overhaul of the charter school legislation, and requiring the state to fund charter school attendance instead of the district of residence (Woodall, 2014). However, some of the study participants are not optimistic things will change soon because, as NC3 explained:

> The government knows it's broken, the legislators know it's broken, and it's not being fixed because of the money that's flowing from these cyber charter schools to the pockets of politicians and their campaigns and the advocates they have. It's criminal, from my perspective and I know that that's happening from conversations with legislators and the dollars that have been donated to campaigns and things. So that's just broken and should be fixed. In some where some way, someone's going to come up with the courage to do that. But, aside from that, I think that there's a place for cyber education.

Limitations

One unexpected limitation of the study was the experience of the superintendents. The invitations to participate were sent based on demographic data of the district, but the time the superintendent was in the district was not considered. Several had been on the job for less than a year and one was an acting superintendent (although promoted from the administrative team) so they could not answer all of the questions. This did not leave any major holes in the results as some had served in other districts in the same region and could speak about similar experiences there, but this factor was not taken into consideration when planning the study.

Another limitation was the small sample size of volunteers. The participants all had to respond to the loss of funding to cyber charter schools and elected to discuss that in this study. The study did not draw any participants who did not deal with that issue and it is unclear from the results how many districts are not affected, or not affected significantly enough, to warrant taking such steps. A broader quantitative survey of all public school districts may yield an answer to this question.

Every effort was made to represent Pennsylvania school districts of all sizes in the study and for the most part the maximum randomized sampling technique used worked to provide a fairly representative cross section. However, urban school districts, which are often impacted by charter and cyber charter schools, elected not to participate in the study. This lack of participation makes it difficult to extend all of the findings to that demographic and did not provide the opportunity to obtain any new insight into the use of distance education in urban education. The only mention of the urban setting came from SE3, who had experience in a city school district, and stated that:

> I think, uh, the cyber and charter school movement has done, um, great things in the inner cities…I think some of the movement to the magnet schools, the charter schools, and different things, there's been great success, um, in the inner city. I don't know if we're seeing that same success, and I think it's more of a lack of success, in the suburban and rural charter schools.

Recommendations for Future Research

Many questions arose during the study related to distance education that require further study, most through a larger qualitative, quantitative, or mixed-methods study:

- Is there a correlation between the technology skill set and e-learning experiences of the superintendent and the willingness to adapt online programs into the curriculum?
- Is there a correlation between the technology skill set and e-learning experiences of the teachers and the willingness to adapt online programs into the curriculum?
- What is the perception of Pennsylvania teachers of the incorporation of online programs into the curriculum?

    - Does including faculty in the writing and teaching of courses allay fears of job loss? Does the data support this?

- Lack of transportation and schedule conflicts are typically cited as reasons for failure of dual enrollment programs. Are high schools partnering with colleges and universities that offer online undergraduate programs to resolve these issues?
- Are there any districts that are not affected, or are not significantly affected enough, to create a cyber school or contract via another provider to recoup lost funding to cyber charter schools?
- How many regular education students are cyber charter schools diagnosing as special education and what information is the home district receiving about the services that are being provided?
- When reviewing the SPP database a surprisingly low number of the charter and cyber charter schools drawing from the participant group reported a gifted student population compared to 15 of 16 schools in this study reporting even a small number. Why is there such a discrepancy between the two school systems?
- How much time are administrators of public school districts spending dealing with truancy issues of cyber charter schools? How many of these students were truant while attending the local school district? How many never attended the local school district?
- How are districts handling incorporating virtual programs into the main academic program in regards to GPA, class rank, etc.? NC1 was the only superintendent in this study who noted that this must be discussed and was a concern.

Summary

As a researcher who had some knowledge of the issues going into this project the three areas that surprised me the most were the special education evaluation concerns, the truancy laws, and the regulatory differences. The first two issues are rarely covered in the literature as most of the focus in the media reports has been on financial concerns. I was aware that the whole point of the charter school movement was to provide freedom from some regulations to encourage innovation, but did not understand what that entailed until undergoing this project.

The new issues raised in this study and the questions for further research demonstrate that much is still unknown regarding the use of distance education in Pennsylvania public schools. The focus of the news has often been on the financial impact of cyber charter schools on school districts, but the interviews show there are other issues that need to be explored further. The expense and impact of incorporating a distance education program into the K-12 curriculum and the professional development, technology, facility needs, and schedule restructuring that come along with that have not been studied in-depth. There is a small literature base on the academic achievement of K-12 students in this arena and more needs to be done to develop the teacher training and curricular programs if this is going to be successful on a wide scale. With the rapid growth of cyber charter schools and the replication of programs by school districts, this area of research needs to be done soon and thoroughly simply because of the number of students that are affected daily by this educational delivery method. The programs being implemented by both parties and the impact on student learning, opportunities for remediation and enrichment, and preparation for college also require further study.

The superintendents expressed their frustrations with the funding model, regulatory system, and lack of academic success of the cyber charter schools. The program was born from a

loophole and has expanded exponentially. The true cost of running a cyber program is unclear and difficult to determine (Bearden, 2008). It is not a surprise that there is a difference of opinion between the superintendents and cyber CEOs on what the operating costs are for such a program. The funding model, as fair or unfair as it may be, needs to be revisited with all stakeholders involved in the process.

The difference in regulations for school districts and charter schools, both considered public schools, is a catch-22 situation because the freedom from some regulations to be able to innovate is at the heart of the movement. At the same time, how do you compare the two for success rates if they are completely different systems and rules? Perhaps some of the regulations can be relaxed and others should be tightened. Is the ability of the charter schools to exceed the fund balance that school districts can an ethical use of tax payer funds and necessary for educational reform? The superintendents point to advertising expenses as an example of a gross misuse of funding while the CEOs argue that it is necessary to draw in students and remain financially stable. Both are public schools, but only one has a guaranteed pool to draw from. The funding needs of both systems needs to be studied and changes made if the system is to continue as it currently exists. There are other flaws in the current system, such as the diagnosing of special education students after enrollment without justification to the home district and the handling of truancy cases for cyber students by the home district, that also need to be addressed.

The superintendents frequently pointed to the academic struggles on the state performance exams as proof that the cyber charters are failing, but at the same time conceded that the schools were not drawing the most successful students. The type of student that attends cyber charter schools needs to be explored further as this appears to be a different child than is

commonly advertised in commercials and on billboards. The turnover rate and academic struggles of this population are felt by both parties.

The cyber charter movement in Pennsylvania has accomplished two goals – school choice and educational reform. There are many flaws in the current system, but the charters and cyber charters have provided more school choice options for families that desire them. There are many students and families for whom the traditional public school district just does not accomplish what it needs to or fit into the desired lifestyle or goals. Some charter schools are quite successful and have provided stronger academic opportunities where some school districts were not succeeding. The cyber charter schools, regardless of one's opinion of their success, are reforming the educational system by introducing a new learning format and sparking discussions on what it means to be "in school." PDE is also encouraging a hybrid learning format and all of the superintendents conceded that this was probably the wave of the future. They also acknowledged that they probably would have introduced e-learning options at some point, but across the board it was the cyber charter school competition that sparked the initiative and forced the districts to introduce the programs quicker than intended. For some of the superintendents, the initiative was seen not only as a respite from the cyber charter transfers, but increased opportunities for other students with remediation, enrichment, and expanded course offerings.

As the research in this project demonstrates, education is rapidly changing in Pennsylvania. While other states are implementing similar programs, the nature of the smaller school systems and competition with independent charter and cyber charter schools for public tax dollars is creating a unique situation that warrants further examination, both in the current state and long-term implications. The perspectives of the superintendents in this study give one side of the issue and that of other stakeholders in the educational system needs to be explored

further to obtain the fullest picture possible of the current and future role of distance education in Pennsylvania school districts.

References

About blendedschools.net. (2009, October 4). *Reading Eagle (Reading, PA)*. Retrieved from http://readingeagle.com/article.aspx?id=159818

Abrego, J. J., & Pankake, A. (2010). PK-12 Virtual Schools: The Challenges and Roles of School Leaders. *Educational Considerations*, *37*(2), 7-13.

Ahn, J. (2011). Policy, technology, and practice in cyber charter schools: Framing the issues. *Teachers College Record*, *113*(1), 1-26.

Archambault, L., & Crippen, K. (2009, Summer). K-12 distance educators at work: Who's teaching online across the United States. *Journal of Research on Technology in Education, 41*(4), 363-391.

Barbour, M. K., & Mulcahy, D. (2008). How are they doing?: Examining student achievement in virtual schooling. *Education in Rural Australia*, *18*(2), 63-74.

Barbour, M. K., & Reeves, T. C. (2009). The reality of virtual schools: A review of the literature. *Computers & Education*, *52*(2), 402-416.

Barbour, M., & Plough, C. (2009). Social networking in cyberschooling: Helping to make online learning less isolating. *Tech Trends*, *53*(4), 56-60. http://dx.doi.org/10.1007/s11528-009-0307-5

Bearden, D. L. (2008). *Cyberschool finance: A study of equity and adequacy* (Unpublished doctoral dissertation). Capella University, Minneapolis, MN.

Booth, S. (2010, Winter). At the tipping point: K-12 online learning. *Independent School*, *69*(2), 20,22.

Borja, R. R. (2002, April 10). Pa. releases funds to cyber charter school. *Education Week, 21*(30), 16.

Brady, K. P., Umpstead, R. R., & Eckes, S. E. (2010). Unchartered territory: The current legal landscape of public cyber charter schools. *Brigham Young University Education & Law Journal*, (2), 191-273.

Bureau of School Audits. Pennsylvania Department of the Auditor General. (2012, June). *Charter and cyber charter education funding reform should save taxpayers $365 million annually*. Harrisburg, PA: Author.

Carnahan, C., & Fulton, L. (2013). Virtually forgotten: Special education students in cyber schools. *TechTrends*, *57*(4), 46-52.

Carr-Chellman, A. A., & Marsh, R. M. (2009, July). Pennsylvania cyber school funding: Follow the money. *TechTrends, 53*(4), 49-55. doi:10.1007/s11528-009-0306-6

Cavanaugh, C. (2009, July). Effectiveness of cyber charter schools. *Tech Trends, 53*(4), 28-31.

Cavanaugh, C., Gillan, K. J., Kromrey, J., Hess, M., Blomeyer, R., & Learning Point Associates / North Central Regional Educational Laboratory (NCREL). (2004, October). *The Effects of Distance Education on K-12 Student Outcomes: A Meta-Analysis* (Report No. ED489533). Retrieved from http://eric.ed.gov/?id=ED489533

Center for Research on Education Outcomes (CREDO). (2011, April). *Charter school performance in Pennsylvania*. Retrieved from http://credo.stanford.edu/reports/PA%20State%20Report_20110404_FINAL.pdf

Center for Research on Education Outcomes (CREDO). (2013). *National charter school study*. Retrieved from https://credo.stanford.edu/documents/NCSS%202013%20Final%20Draft.pdf

Charter Schools Office. Pennsylvania Department of Education. (2014). Charter Schools. Retrieved March 1, 2014, from Pennsylvania Department of Education website: http://www.portal.state.pa.us/portal/server.pt/community/charter_schools/7356

Chen, B., & Hirumi, A. (2004, October). *Adapting Reading Intervention for Online Students*. Paper presented at Association for Educational Communications and Technology, Chicago, IL. Retrieved from http://eric.ed.gov/?q=adapting+reading+intervention+for+online+students&id=ED485049

Chute, E. (2001, April 12). New cyber schools face growing backlash. *Pittsburgh Post-Gazette*. Retrieved from http://www.post-gazette.com/headlines/200110412cyber6.asp

Chute, E. (2000, October 9). School districts can be hit with bills for online learning. *Pittsburgh Post-Gazette*. Retrieved from http://www.post-gazette.com/regionstate/20001009cyber1.asp

Compton, L. K. L., Davis, N., & Mackey, J. (2009). Field experience in virtual schools: To be there virtually. *Journal of Technology and Teacher Education, 17*(4), 459-477.

Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches.* Thousand Oaks, CA: Sage.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles: Sage.

Cyber school funding. (2008, January 21). *IssuesPA*. Retrieved March 4, 2010, from Pennsylvania Economy League website: http://www.issuespa.net/print/articles/21982?p=1

Daniel, J. (2012). *Sampling essentials: Practical guidelines for making sampling choices*. Los Angeles: Sage.

Data Collection Team. Division of Data Quality. Pennsylvania Department of Education. (2010, July 27). *Urban-centric and metro-centric locale codes 2007-2008* [Fact sheet]. Retrieved March 1, 2014, from "Urban/rural" classification of schools and local education agencies (LEAs) website: http://www.portal.state.pa.us/portal/server.pt/community/data_and_statistics/7202/school_locale/509783

Data Collection Team. Division of Data Quality. Pennsylvania Department of Education. (2013, May 22). Enrollment Public Schools 2012-13. Retrieved March 1, 2014, from Public School Enrollment Reports website: http://www.portal.state.pa.us/portal/server.pt/community/enrollment/7407/public_school_enrollment_reports/620541

DeJarnatt, S. L. (2013, Fall). Keep following the money: financial accountability and governance of cyber charter schools. *The Urban Lawyer*, *45*(4), 915+.

Delaware County School Boards Legislative Council. (2009, March). *Legislative Summary 3/09*.

Democratic House Education Committee. (2013, March). *Charter & cyber charter school reform update and comprehensive reform legislation* (J. R. Roebuck, Author). Retrieved from http://www.pahouse.com/files/Documents/Newsletter/Charter_and_Cyber_Charter_School_Report.pdf

Democratic House Education Committee. (2014, April). *Charter & Cyber Charter School Reform Update* (J. R. Roebuck, Author). Retrieved from

http://www.pahouse.com/files/Documents/Newsletter/Charter_and_Cyber_Charter_School_Reform_Update.pdf

Democratic House Education Committee. (2015, September). *Charter & cyber charter school reform report* (J. R. Roebuck, Author). Retrieved from http://www.pahouse.com/files/Documents/Newsletter/2015-09-30_09-44-50__2015%20Charter%20School%20Report.pdf

Deuink, A. L., & Reinsfelder, T. (2007). Charting a course. *American Libraries, 38*(9), 58-59.

Devlin, R. (2007a, February 28). Classroom? That's so last century. *Reading Eagle* (Reading, PA). Retrieved from http://readingeagle.com/article.aspx?id=18268

Devlin, R. (2007b, February 28). Cyber school financing being debated. *Reading Eagle* (Reading, PA). Retrieved from http://readingeagle.com/article.aspx?id=18255

Devlin, R. (2009a, October 14). Some Berks districts bringing public schools home. *Reading Eagle* (Reading, PA). Retrieved from http://readingeagle.com/article.aspx?id=159880

Devlin, R. (2009b, December 6). Berks County Intermediate Unit to offer online charter school. *Reading Eagle (Reading, PA)*. Retrieved from http://readingeagle.com/article.aspx?id=174497

DiPietro, M. (2010). Virtual school pedagogy: The instructional practices of K-12 virtual school teachers. *Journal of Educational Computing Research, 42*(3), 327-354. doi:10.2190/EC.42.3.e

Division of Data Services. Office of Educational Technology. Pennsylvania Department of Education. (n.d.). Map of Pennsylvania School Districts and Intermediate Units [Map]. Retrieved from

http://www.dot.state.pa.us/Internet/Bureaus/pdPlanRes.nsf/infoBPR_Education_PA_Intermediate_unit

Division of Subsidy Data and Administration. Bureau of Budget and Fiscal Management. Pennsylvania Department of Education. (2013, May). *Basic education funding 2012-13* [Fact sheet]. Retrieved March 1, 2014, from Pennsylvania Department of Education website: http://www.portal.state.pa.us/portal/server.pt?open=514&objID=509059&mode=2

Easak, S. (2011, September 15). Survey: State lost more than 14,000 school jobs. *The Morning Call (Allentown, PA)*. Retrieved from http://articles.mcall.com/2011-09-15/news/mc-pa-teacher-job-cuts-20110915_1_school-jobs-federal-stimulus-tom-corbett

Ellis, K. (2008, Spring). Cyber charter schools: Evolution, issues, and opportunities in funding and localized oversight. *Educational Horizons, 86*(3), 142-152.

Emrick, J., & Reese, M. (2014, February 10). Reform of Pa. charter schools long overdue. *The Mercury (Pottstown, PA)*, Op-ed. Retrieved from http://www.pottsmerc.com/

Erb, R. E. (2004). *From traditional public school to cyber charter: How parents decide* (Doctoral dissertation, Pennsylvania State University, State College, PA).

Evergreen Education Group. (2015). *Keeping pace with K-12 digital learning: An annual review of policy and practice*. Retrieved from http://www.kpk12.com/wp-content/uploads/Evergreen_KeepingPace_2015.pdf

Flaum, R. (2009, December 22). Online classes booming; local districts play catch-up. *York Dispatch*. Retrieved from http://www.yorkdispatch.com/sections/features/ci_13799283

Gardner, H. (2006). *Multiple intelligences: New horizons* (Completely rev. and updated. ed.). New York: BasicBooks.

Gombach Group. (2008). *Pennsylvania public school districts (K-12).* Retrieved from http://www.livingplaces.com/PA/Pennsylvania_School_Districts.html

Greenway, R., & Vanourek, G. (2006). The virtual revolution: Understanding online schools. *Education Next*, *6*(2), 34-41.

Handler, M. D. (2009, October 19). Change would save taxpayers money. *Reading Eagle (Reading, PA)*, Op-ed. Retrieved from http://readingeagle.com/article.aspx?id=161638

Harris, M. (2014, March 30). Pennsylvania's charter school funding debate no closer to resolution. *Pittsburgh Tribune-Review*. Retrieved from http://triblive.com/news/allegheny/5803146-74/charter-cyber-schools

Herold, B. (2013, January 22). Ex-workers claim cyber-charter operator manipulated enrollment figures. Retrieved April 22, 2014, from The Notebook website: http://thenotebook.org/blog/135532/ex-workers-claim-operator-cyber-charters-played-games-enrollment-figures

Hess, F. M., Maranto, R. A., & Milliman, S. (2001). Coping with competition: The impact of charter schooling on public school outreach in Arizona. *Policy Studies Journal, 29*(3), 388-404.

Hess, F. M. (2004). The Political Challenge of Charter School Regulation. *The Phi Delta Kappan*, *85*(7), 508–512.

Hess, F. M. (2001). Whaddya mean you want to close my school? The politics of regulatory accountability in charter schooling. *Education and Urban Society, 33*(2), 141-156.

Hill, P., & Johnston, M. (2010). In the future, diverse approaches to schooling. *The Phi Delta Kappan*, *92*(3), 43–47.

Huerta, L. A., Gonzalez, M.-F., & D'Entremont, C. (2006). Cyber and homeschool charter schools: Adopting policy to new forms of public schooling. *Peabody Journal of Education, 81*(1), 103-139. doi:10.1207/S15327930pje8101_6

Huerta, L. A., D'Entremont, C., & Gonzalez, M.-F. (2006, September). Cyber charter schools: Can accountability keep pace with innovation? *Phi Delta Kappan, 88*(1), 23-30.

Judge: Districts must pay for cyber education. (2001, July 1). Retrieved March 4, 2010, from eSchool News website: http://www.eschoolnews.com/2001/07/01/judge-districts-must-pay-for-cyber-education/

Kello, M. A. (2012). *Understanding the attitudes and perceptions of families that chose non-traditional educational services: Cyber-charter schools and public choice* (Unpublished doctoral dissertation). Wilkes University, Wilkes-Barre, PA.

Klein, C., & Poplin, M. (2008). Families homeschooling in a virtual charter school system. *Marriage & Family Review*, *43*(3/4), 369-395.

Knight, W. B. (2005). Charter schools: Reconnecting youth at risk through technology-based instruction. *Visual Arts Research*, *31*(1), 103-116.

Kowch, E. (2009, July/August). New capabilities for cyber charter school leadership. *TechTrends, 53*(4), 41-48. doi:10.1007/s11528-009-0305-7

Krbec, D. (2001). Measuring schools' competitiveness: a preliminary analysis of a recent model's constructions. *Enterprise in Transition: International Conference Proceedings: 2001*, 118-127.

Kumar, A. (2002, November). Classrooms in the air. *Governing, 16*(2), 48-50.

Kurelja, J. M. (2005). *Challenges and opportunities presented by charter schools: The responses of three Pennsylvania school districts* (Unpublished doctoral dissertation). Pennsylvania State University, State College, PA.

LaRussa, T. (2008, February 17). School districts battle cyber with cyber. *Pittsburgh Tribune-Review*. Retrieved from http://www.pittsburghlive.com/x/pittsburghtrip/news/cityregion/print_552834.html

Laster, J. (2010, March 26). Colleges of education are urged to focus on online learning. *Chronicle of Higher Education, 56*(28), A14.

Marsh, R. M., Carr-Chellman, A. A., & Sockman, B. R. (2009). Selecting silicon: Why parents choose cybercharter schools. *TechTrends: Linking Research and Practice to Improve Learning*, *53*(4), 32-36.

Marshall, C., & Rossman, G. B. (2011). *Designing qualitative research* (5th ed.). Los Angeles: Sage.

Mead, J. F. (2003, Summer). Devilish details: Exploring features of charter school statutes that blur the public/private distinction. *Harvard Journal on Legislation, 40*(2), 349-94.

Mekeel, D. (2011, August 11). Cybercharter schools: At home with classes. *Reading Eagle (Reading, PA)*. Retrieved from http://readingeagle.com/article.aspx?id=325424

Miller, N. J. (2012). *The perceptions of district leaders of cyber charter schools in the Commonwealth of Pennsylvania* (Unpublished doctoral dissertation). Pennsylvania State University, State College, PA.

Moore, D. (2010, February 20). Districts eye cyber school option: New model cuts costs, allows more control by homeschools. *The News-Item - McClatchy-Tribune Information Services*. Retrieved from http://it.tmcnet.com/news/2010/02/20/4633481.htm

Nathan, J. (2004). A Response to Frederick Hess: Some Questions for Advocates of Public Education. *The Phi Delta Kappan, 85*(6), 442–450.

Negley, E. (2007, June 15). State's cyberschools: Remote learning, little control? *Reading Eagle (Reading Eagle)*. Retrieved from http://readingeagle.com/article.aspx?id=45425

Oblender, T. E., & Glass, J. (2004, October). 5 reasons to offer online courses. *Principal Leadership, 5*(2), 40-42.

Oblender, T. E. (2006, August). It's 'virditional': A hybrid model in Manheim Township. *School Administrator, 63*(7), 22-23.

Oliver, K., Osborne, J., Patel, R., & Kleiman, G. (2009). Issues surrounding the deployment of a new statewide virtual public school. *Quarterly Review of Distance Education, 10*(1), 37-49.

Oliver, K., Kellogg, S., Townsend, L., & Brady, K. (2010). Needs of elementary and middle school teachers developing online courses for a virtual school. *Distance Education, 31*(1), 55-75. doi:10.1080/01587911003725022

Pa. to pay for tuition of Senator's children. (2006, September 13). *Education Week, 26*(3), 29.

Payne, E. J. (2002, September). Whose student is it, anyway? *The American School Board Journal, 189*(9), 47-8.

Pennsylvania Budget and Policy Center. (2011, July 13). Education funding in final 2011-12 budget. Retrieved June 22, 2013, from http://pennbpc.org/education-funding-final-2011-12-budget

Pennsylvania Budget and Policy Center. (2014a, November 18). Education Facts Sheet. Retrieved December 6, 2015, from Pennsylvania Budget and Policy Center website: https://pennbpc.org/category/issue-tags/education/education-facts

Pennsylvania Budget and Policy Center. (2014b, November 18). *2013-14 Charter/Cyber Charter Enrollment by County*. Retrieved February 28, 2016, from Education Facts website: https://pennbpc.org/sites/pennbpc.org/files/Charter-Enrollment-by-County_0.pdf

Pennsylvania Department of Education. (1997, June 12). Summary of charter school legislation. Retrieved March 7, 2010, from Pennsylvania Department of Education website: http://www.portal.state.pa.us/portal/server.pt/community/charter_school_regulations/7359/summary_of_charter_school_legislation/508170

Pennsylvania Department of Education. (2012). Charter schools. Retrieved February 1, 2012, from Pennsylvania Department of Education website: http://www.portal.state.pa.us/portal/server.pt/community/charter_schools/7356

Pennsylvania Department of Education. (2013). EdNA Database. Retrieved March 1, 2014, from EdNA (Education Names and Addresses) website: http://www.edna.ed.state.pa.us/Screens/wfHome.aspx

Pennsylvania Department of the Auditor General. (2012, December). *Pennsylvania Cyber Charter School, Beaver County, Pennsylvania, Performance Audit Report*. Harrisburg, PA: Author.

Pennsylvania Department of the Auditor General. (2014, May). *Pennsylvania charter school accountability and transparency: Time for a tune-up*. Retrieved from http://www.paauditor.gov/media/default/reports/RPT_Charter_School_%20Report%20051214_final.pdf

Pennsylvania General Assembly. (2006, August 8). Compulsory attendance and truancy education plan. Retrieved April 19, 2014, from Pennsylvania Department of Education website:

http://www.portal.state.pa.us/portal/server.pt/community/purdon%27s_statutes/7503/compulsory_attendance_and_truancy_elimination_plan/507353

Pennsylvania School Boards Association. (2009, August). *Briefing sheet: Cyber Charter Schools* [Pamphlet]. Retrieved from http://www.psba.org

PEW Charitable Trusts. (2015, December). *How charter school governance in Pennsylvania and Philadelphia measures up*. Retrieved from http://www.thenotebook.org/uploads/files/69780696703927361-charterschoolgovernance.pdf

Pietro, D., Fuselier, C., & Velto, C. (2010, February 23). *Lions Online Academy (LOLA): New Brighton Area School District's virtual academy*. Workshop presented at PETE&C Conference, Hershey, PA.

Pistell, L. T. (2001). Charter school risk management. *Risk Management*, *27*(6), 48.

Rapp, K. E., Eckes, S. E., & Plucker, J. A. (2006). *Education Policy Brief: Vol. 4(3). Cyber charter schools in Indiana: Policy implications of the current statutory language*. Retrieved from http://ceep.indiana.edu/projects/PDF/PB_V4N3_Winter_2006_CyberCharter.pdf

Repetto, J., Cavanaugh, C., Wayer, N., & Liu, F. (2010). Virtual high schools: Improving outcomes for students with disabilities. *The Quarterly Review of Distance Education, 11*(2), 91-104.

Rice, K. (2006). A comprehensive look at distance education in the K-12 context. *Journal of Research on Technology in Education*, *38*(4), 425-448.

Rice, K. (2009). Priorities in K-12 distance education: A Delphi study examining multiple perspectives on policy, practice, and research. *Journal of Educational Technology & Society*, *12*(3), 163-177.

Robelen, E. W. (2007, March 29). E-learning curve. *Education Week*, *26*(30), 34-36.

Roblyer, M. D., Davis, L., Mills, S., Marshall, J., & Pape, L. (2008). Toward practical procedures for predicting and promoting success in virtual school students. *The American Journal of Distance Education*, *22* (2), 90-109.

Roblyer, M. D. (2006). Virtually successful: Defeating the dropout problem through online school programs. *Phi Delta Kappan*, *88*(1), 31-36.

Rodney, B. D. (2010). Virtual schools: The nexus between parental autonomy and centralized management of K-12 education. *Journal of Philosophy & History of Education*, *60*, 221-225.

Rubin, H. J., & Rubin, I. (2005). *Qualitative interviewing: the art of hearing data* (2nd ed.). Thousand Oaks, Calif.: Sage.

Saul, S. (2011, December 12). Profits and questions at online charter schools. *The New York Times*. Retrieved from http://www.nytimes.com/2011/12/13/education/online-schools-score-better-on-wall-street-than-in-classrooms.html?_r=0

Schafft, K. A., Frankenberg, E., Fuller, E., Hartman, W., Kotok, S., & Mann, B. (2014, June). *Assessing the enrollment trends and financial impacts of charter schools on rural and non-rural school districts in Pennsylvania*. Retrieved from http://www.rural.palegislature.us/documents/reports/Charter_School_2014.pdf

Schweigert, M. B., & Smedley, C. (2012, November 11). Who is taking attendance at cyber-charter schools? *Lancaster Online*. Retrieved from http://lancasteronline.com/news/who-

is-taking-the-attendance-at-cyber-charter-schools/article_0f7b4826-5f42-503c-9956-0a74ceaa73e6.html

Sen. Santorum benefits from charter school aid. (2005, January). *Church & State, 58*(1).

Senate Education Committee acts on charter school oversight bill. (2010, May 4). *States News Service*.

Sherbondy, K. (2008). *A descriptive study of cyber charter schools in Pennsylvania* (Doctoral dissertation, University of Pittsburgh, Pittsburgh, PA).

Shoaf, L. M. (2007). Perceived advantages and disadvantages of an online charter school. *American Journal of Distance Education*, *21*(4), 185-198.

Smith, Adam. (2008). *Wealth of nations*. S.l: Dolphin Books. Kindle edition.

Stemberg, R. (2006, August). Fuzzy funding of online delivery. *School Administrator, 63*(7), 13.

Stoltzfus, J. (2014, February 26). Elanco's virtual learning program is gaining momentum. *LancasterOnline (Lancaster, PA)*. Retrieved from http://lancasteronline.com/elanco/news/elanco-s-virtual-learning-program-is-gaining-momentum/article_5444e660-9e65-11e3-bcdf-0017a43b2370.html

Stone, A. (2008, January). The holistic model for blended learning: A new model for K-12 district-level cyber schools. *International Journal of Information & Communication Technology Education, 4*(1), 56-71.

Support for K-12 online learning grows. (2010, January). *T H E Journal, 37*(1), 7.

Tankersley, W. J., & Burnham, J. F. (2007). Distance education in Georgia's public school districts: Baseline data on utilization and the perceived barriers to implementation and expansion. *Online Journal of Distance Learning Administration*, *10*(4), 5.

Taylor, K. R. (2002, November). The other school-choice debate. *Principal Leadership, 3*(3), 73-7.

Trotter, A. (2001, October 31). Online charter schools expensive, Pa. districts say. *Education Week, 21*(9), 4.

Trotter, A. (2005, July 13). Bills would restrict enrollment in Pa. online charter schools. *Education Week, 24*(42), 25.

Trotter, A. (2003, September 17). Pa. 'cyber charter' student ineligible for hoops team. *Education Week*, *23*(3), 4.

Trotter, A. (2004, December 1). Pa. Senator's residency at issue in charter row. *Education Week*, *24*(14), 13.

Tucker, B. (2009). Florida's online option. *Education Next*, *9*(3), 12-18.

Urban, K. (2007, November 18). Cyber charter schools vie with districts for funding. *Tribune Democrat (Johnstown, PA)*. Retrieved from http://www.tribune-democrat.com/local/local_story_322002529.html

U.S. Attorney's Office, Western District of Pennsylvania. (2013, August 23). Former CEO of PA Cyber Nick Trombetta and CPA Neal Prence charged in elaborate fraud scheme [Press release]. Retrieved from https://www.fbi.gov/pittsburgh/press-releases/2013/former-ceo-of-pa-cyber-nick-trombetta-and-cpa-neal-prence-charged-in-elaborate-fraud-scheme

Wallace, B. (2011, January 24). Eastern Lancaster County School District plans to lay off 15 teachers. *LancasterOnline (Lancaster, PA)*. Retrieved from http://lancasteronline.com/news/eastern-lancaster-county-school-district-plans-to-lay-off-teachers/article_b79669cb-aa94-5b68-9fe2-024433e55772.html

Wilson, S. (2013, April 4). Schools look for funding fix. *Susquehanna Independent Weekender*. Retrieved from http://independentweekender.com/ index.php/2013/04/04/schools-look-for-funding-fix/#.UcYdKJzNlW1

Woodall, M. (2014, May 13). State auditor rips charter school oversight. *Philly.com*. Retrieved from http://articles.philly.com/2014-05-14/news/49823808_1_charter-schools-charter-office-robert-fayfich

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: SAGE Publications.

Appendix A: IRB Approval

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

February 6, 2014

Stephanie Sweeney Pennucci
IRB Approval 1738.020614: Qualitative Case Study on the Perspective of Selected Pennsylvania Superintendents on Distance Education in K-12 Public School Districts

Dear Stephanie,

We are pleased to inform you that your above study has been approved by the Liberty IRB. This approval is extended to you for one year. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Please retain this letter for your records. Also, if you are conducting research as part of the requirements for a master's thesis or doctoral dissertation, this approval letter should be included as an appendix to your completed thesis or dissertation.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

Fernando Garzon, Psy.D.
Professor, IRB Chair
Counseling

(434) 592-4054

LIBERTY
UNIVERSITY.

Liberty University | Training Champions for Christ since 1971

1971 UNIVERSITY BLVD. LYNCHBURG, VA. 24515 IRB@LIBERTY.EDU FAX (434) 522-0506 WWW.LIBERTY.EDU

Appendix B: Consent form (Survey Monkey)

Qualitative Case Study on the Perspective of Selected Pennsylvania Superintendents on Distance Education in K-12 Public School Districts

Stephanie Sweeney Pennucci

Liberty University

School of Education

You are invited to be in a research study of the perspective of superintendents on the role of distance education in public school districts in Pennsylvania. You were selected as a possible participant because you are a public school superintendent. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Stephanie Sweeney Pennucci, doctoral candidate in the Liberty University School of Education.

Background Information:

The purpose of this study is to examine the role of distance education in public school districts in Pennsylvania, including the impact and influence of cyber charter schools.

Procedures:

If you agree to be in this study, I would ask you to do the following things:
During an interview lasting approximately 30 minutes, you will be asked about your perspective as a superintendent on the current and future role of distance education in K-12 public school districts in Pennsylvania. The interviews will be recorded and you will have the opportunity to review the transcripts. The use of distance education in your district will be discussed, as well as the impact and influence of cyber charter schools on your school program.

Risks and Benefits of being in the Study:

The study has minimal risk. The participants and districts will not be named or included in the dissertation, although potentially identifying demographic data must be reported for comparisons of the participant responses, including, but not limited to, geographic region, rural/suburban/urban, and school size.

There is no direct benefit to participation.

Compensation:

Participants will not be compensated for participation.

Confidentiality:

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to the records. Data gathered in this study may be used as a basis for further research into this area by the researcher at a later date.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships. Recordings of interviews will be destroyed if a participant decides to withdraw from the study.

Contacts and Questions:

The researcher conducting this study is Stephanie Sweeney Pennucci. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at ssweeney@liberty.edu or 610-781-4466. Her dissertation chair is Dr. Gary Kuhne and can be contacted at gwkuhne@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Suite 1837, Lynchburg, VA 24515 or email at irb@liberty.edu.

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐I understand the interviews will involve audio- -recording and give my consent to being recorded. I will be given the opportunity to review transcripts of the recordings for accuracy.

Signature: _____ Date: _____

Signature of Investigator:_____ Date: _____

IRB Code Numbers:

IRB Expiration Date:

Appendix C: Interview Questions

Demographic data (gathered pre-interview from PDE website)

Administration
- District
- Superintendent
- Address
- Phone number
- Email

District
- County
- IU
- Population (student)
- District square miles
- Number of schools (E, M, H, other)

Interview Questions

Superintendent background
- Experience
  - Years teaching & subject
  - Years in administration & levels
- What is your personal use of technology?
  - Devices
  - Web 2.0
- What is your professional use of technology?
  - Devices
  - Web 2.0

Educational Technology
- What is the role of educational technology in your district?
- What are your priorities for implementing technology initiatives?
- What do you see as the biggest hindrances to technology initiatives?
- What factors drive technology initiatives in your district?
- What have been the greatest roadblocks for your district?
- What have been the biggest supports for your technology program (i.e. grants, collaboration, outside programs)?

Distance education
- How has the online learning movement influenced the operations of your district?
- Has this movement caused you to take steps in e-learning that you either did not intend to take or were forced to take sooner than you may have been ready for?
- How has distance learning impacted student learning?
- Which group(s) of students have benefited the most from e-learning?

- What impact have cyber charter schools had on your district?
    - Financially
    - Curricularly
- When did cyber charter schools start to have a significant impact on your district?
    - Have you had to deal with truancy issues?
- What advantages/disadvantages do public schools have over cyber charter schools and vice versa?
- What has been the reaction of the teachers' union?
- What is the home access of technology like for your students?
- What do you think of a state-run cyber school system?

Appendix D: Intermediate Unit Map