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**THE PERCEPTIONS OF DISTRICT LEADERS OF CYBER CHARTER
SCHOOLS IN THE COMMONWEALTH OF PENNSYLVANIA**

A Dissertation in

Educational Leadership

by

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ABSTRACT

Given the growth of cyber charter schools in the Commonwealth of Pennsylvania, more research is needed in this new wave of school reform. In fact, little research currently addresses the perceptions that district leaders have in regard to cyber charter schools and that is what this study proposed to address. District leaders interviewed included superintendents, curriculum specialists, building principals, and teachers' union representatives among others.

This qualitative study explored the perceptions of district leaders regarding the cyber charter schools through in-depth studies of two districts located in the Intermediate Appalachia Unit 8. Specifically, the two case studies sought to address each district's current involvement with cyber charter schools and the perceptions of district leaders to be disposed either favorably or unfavorably toward cyber charter schools. Finally, the study sought to explore the responses of districts to the cyber charter school challenge.

Data collection occurred over a three month period and included conversational interviews with respondents from both districts as well as analysis of a variety of relevant documents. The researcher analyzed data through finding common themes among the research responses. Thus, the research resulted in a thick, rich description of each district in terms of their perceptions of cyber charter schools.

Three conclusions were drawn from the research. First, the cyber revolution has brought significant challenges and lasting changes to traditional conceptions of schooling. Second, public schools appear to be generally ill-prepared to meet these new cyber charter challenges, relying on more reactive, imitative responses rather than

proactive, innovative initiatives. Third, school leaders, on the whole, do not appear to perceive the cyber challenge as a major threat and are preoccupied with other issues. Finally, there were a number of recommendations for practice and for further research.

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differently. Her courage and fight goes far, far beyond anything contained in this research study.

CHAPTER 1

INTRODUCTION

As public education has evolved in the United States, some argue that it has become more bureaucratic and cumbersome, much to the detriment of student achievement. Accepting this argument, freedom from regulation and mediocrity would seem to be the logical next step. Stemming from the Reagan era, charter schools are one representation of this next logical step, emphasizing the elements of competition, selectivity, and deregulation. Charter schools are public schools that operate under contracts—or charters—that “...are designed to be publicly accountable, as well as creative, flexible, and responsive to parent and student needs” (United States Department of Education Office of Educational Research and Improvement, 1998, p. 2). Since the first charter school was established in Minnesota in 1991, this new conception of schooling has competed with the traditional brick-and-mortar schools in terms of quality teachers and student achievement, and this competition has grown drastically in the past two decades as other states, such as California and Pennsylvania, followed Minnesota’s lead. It was expected that charter schools, which provide for school choice, would logically establish competition and, thus, provide better products in terms of student performance.

For well over a decade in the Commonwealth of Pennsylvania, the competition between brick-and-mortar charter schools and brick-and-mortar traditional schools has grown. Since the inception of charter schools, students who were formerly enrolled in a traditional public school could take their state-funded per pupil allocation to a charter

school of choice. With the growth of the internet, yet another form of competition in terms of school choice surfaced in the Commonwealth. This resulted in the establishment of cyber charter schools. Unlike the brick-and-mortar charter schools that were physically located in a certain area and could accept only students within a certain geographical region, a new form of charter school evolved that had no such boundaries or constraints. The growth in competition for school choice has gone beyond the brick-and-mortar charter school movement to now include cyber charter education. The cyber charter school provides yet another alternative for parents who are unhappy with their children's school placement.

A Brief Overview of Charter Schools and Cyber Charter Schools

Many factors helped to pave the way for school choice. One of the most important of these factors is globalization. As globalization is taking hold, "...many of the traditional boundaries between the world of public organizations and the world market and non-public organizations are breaking down" (Boyd, 2000, p. 243). Even without charter schools, school choice is forcing schools to reinvent themselves to achieve higher levels of performance measured by standardized tests, college enrollment figures, graduation rates, attendance, and various other categories. In this environment, it is no wonder that the charter movement took off in the United States.

The school choice issue is a main outcome of the landmark *No Child Left Behind* (NCLB) legislation in 2002. Under NCLB, standardized tests are administered each year. The students' scores from these tests determine their respective school's progress in

meeting certain thresholds called adequate yearly progress (AYP). If a school does not meet its AYP, the law permits school choice (including charter schools) for each child who attends a school that does not meet the levels as mandated by AYP (United States Department of Education, n.d.). Competition remains a fundamental element to school improvement regardless of race, gender, socioeconomic background, as well as graduation rate and attendance (all of which NCLB measures). Whether it's a direct or indirect result of a schools' failure to meet adequate yearly progress, the fundamental right of school choice remains a significant alternative under NCLB.

Long before the No Child Left Behind legislation, Reich (1991) warned of the global web of economics where workers must be equipped to compete, thus, lending more urgency for the charter school movement. The argument was that since the outcomes as measured by student test performance showed that students' skills learned in the public school did not meet the standards for individuals in the workforce, there was a fear that America's future workforce would not be prepared to compete on a global scale. Thus, the demand for an alternative to the public school escalated. The rationale was that providing an option for choice in the form of a charter school would not only provide competition but also a viable alternative where students could learn the necessary skills for the workforce. In addition to the global web of economics that demanded greater skill-sets for its workers upon graduation than in the past, the Internet came into play. With the Internet, many Americans gained the ability to communicate with one another via the computer without ever leaving the confines of one's own home. Fears of economic vulnerability came together with political forces and advances in information technology to help spur the movement towards cyber charter schools.

In 1997, Governor Tom Ridge opened the door to charter schools in Pennsylvania with the signing of Act 22, the Pennsylvania Charter School Law. These charter schools were to be schools of choice in the form of the traditional brick-and-mortar institutions, but without all of the burdensome regulations and bureaucratic structures that accompanied public schools. “Charter schools have introduced many benefits to the public school system such as expanding local control, creating uniquely mission-driven schools, and increasing flexibility in hiring and governance” (Ahn, 2010, p. 1). In the decade following Act 22, charter schools eventually evolved into cyber charter schools. While Act 22 enabled communities to create schools that were independent from the existing school district, the intent of the legislation was to open the gates to the establishment of new brick-and-mortar charter schools. The notion of a cyber charter school was never addressed. Nonetheless, the act laid the necessary groundwork for the development and growth of cyber charter schools.

“Distance education, distance learning, e-learning, web-based instruction, virtual schools, and on-line learning are all terms used interchangeably to describe this broad, somewhat confusing, and constantly changing field of nontraditional instruction” (Rice, 2006, p. 426). This study used the term cyber charter school as it represents a full-time public school institution that complies with cyber charter school laws in the Commonwealth of Pennsylvania. Specifically, in Pennsylvania, a cyber charter school is:

...an independent public school established and operated under a charter from the Department of Education and in which the school uses technology in order to provide a significant portion of its curriculum and to deliver a significant portion

of instruction to its students through the Internet or other electronic means (Charter School Law, Act 88, 2002, p. 15).

Since the 1990's, in Pennsylvania and elsewhere, the idea of learning on-line through cyber charter schools has seen rapid acceptance and growth. "The widespread adoption of personal computing and the Internet has evolved separately from, but in parallel to, the charter movement" (Ahn, 2011, p. 1.). Cyber charter schools "...are quietly gaining momentum across the country and have begun to challenge traditional definitions of public schooling by delivering instruction from beyond the classroom walls of traditional 'brick-and-mortar' school houses" (Huerta & Gonzalez, 2006, p. 104). This cyber charter school movement has seen such expansive growth for many reasons. A University of Western Michigan study (n.d.) of charter schools showed the reasons for students leaving the public school for a charter school included perceptions of higher quality, greater safety, and better teachers. Another possible reason for the growth is that "...from a pedagogical perspective, cyber schools might introduce new ways of delivering education", such as students "...learning at their own pace and outside of the constraints of the traditional school hours" (Ahn, 2011, p. 2). Thus, many students may end up "...with a more personalized experience than their peers in large public schools" (Ahn, 2010, p. 1). Erb's (2002) study specifically addressed cyber charter schools in Pennsylvania and found that "push" factors such as bullying and disagreements between parents and administrators were important reasons why parents deemed cyber schools a viable alternative. Gray's (2005) study of virtual schools in the state of Colorado found that the cyber environment provided a more fluid atmosphere for learning as opposed to

the tight structure of the brick-and-mortar schools, even though parental support was needed for success.

Research documenting and examining cyber learning in K-12 settings has only recently begun to be published with no significant difference cited between student achievement gains in cyber education versus traditional classroom instruction (Ahn, 2011; Berge & Clark, 2005). Cyber charter schools "... promise to radically alter how we deliver education to youth" (Ahn, 2010, p. 1). This echoes Christensen's (2008) assertion that "...one day, schools will find themselves using most of their resources to do the non-instructional jobs that cannot be done online and find themselves teaching fewer and fewer courses through traditional monolithic instruction" (p. 104). While these studies provide some feedback about cyber charter schools, little is known about perceptions of district leaders (including superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives) in school districts as they confront an increasing loss of students and resources to cyber charter schools.

Pennsylvania Cyber Charter Schools

Both the number of and the enrollment in cyber charters schools has grown substantively in the last decade. Tracing the growth from the first cyber charter school established in 1998 to the eleven cyber charter schools currently in operation in the Commonwealth, it seems clear that cyber charter schools are here to stay. Recognizing this, in 2001 the Pennsylvania legislature passed the Charter Law, Act 88, which specifically addressed the need for cyber charter school rules and regulations. With Act 88, among a myriad of other new regulations, cyber charter schools had to be approved

and more closely monitored by the Commonwealth in terms of budget, curriculum, and attendance.

Several years later, knowing that cyber charter schools were not going away and that public school districts were losing ever more students (and funding) to cyber schools, the Commonwealth passed Act 61 in 2008. This act proposed the creation of a commission at the state level to investigate the creation of a statewide cyber charter school for high school students. Finally, in 2010, the General Assembly of Pennsylvania passed House Resolution Number 592 directing a study on the cost of establishing some type of a Pennsylvania Virtual Learning Program. Thus, Pennsylvania would continue to look at ways utilize some version of cyber schools in public education.

Meanwhile, Livoti (2010) notes that cyber charter schools continue to provide a new way for Pennsylvania students to learn as parents become more involved with their child's education because strong parent involvement is key. Additionally, students learn at their own pace, and cyber charters allow more time to be focused on teaching as opposed to brick-and-mortar schools that consume much of this time with classroom management. Still, others question the quality of education at Pennsylvania cyber charter schools as a little over nine percent of cyber charter schools made adequate yearly progress as defined under No Child Left Behind in 2010, while almost 74% of traditional brick-and-mortar schools did so (Virtual Meanderings, 2010). Even more recently, with resources continuing to grow more scarce, the Auditor General, Jack Wagner, of Pennsylvania has questioned cyber school funding and the actual cost per student as he has recommended a moratorium on authorizing any more cyber charter schools (Bureau

of School Audits, 2010). Thus, cyber charter schools continue to ignite controversy and skepticism as well as promise.

Christensen, Horn and Johnson's (2008) *Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns* addresses the fact that technology is changing the landscape of public education. They also discuss how this disruptive innovation has "...reached into the mainstream in the form of virtual chartered schools, perhaps most notably in Colorado and Pennsylvania" (p. 104). As the cyber charter schools in the Commonwealth of Pennsylvania become more entrenched features of the educational landscape, it seems important to determine what perceptions already exist among school district leaders with regard to this new form of education.

Problem Statement and Research Questions

The purpose of this study was to examine the perceptions of district leaders (including superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives) in two Intermediate Unit 8 school districts about the role of cyber charter schools in their district.

The specific questions to be examined included:

- 1) What is the district's current involvement with cyber charter schools?
- 2) What perceptions do district leaders hold toward cyber charter schools that are favorable? What perceptions do district leaders hold toward cyber charter schools that are unfavorable?
- 3) How did each of the respondents characterize the response of their district to the cyber charter school challenge?

Significance of Study

Examining the perceptions of district leaders (including superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives) in Pennsylvania's Intermediate Unit (IU) 8 regarding the current role of cyber charter schools and the possible consequences of the rapid growth of this new form of schooling is important on many levels. Cyber charter schools are here to stay; therefore, learning more about cyber charter schools is important and relevant for policy makers, practitioners, and researchers.

Policies regarding cyber charter schools continue to evolve regarding funding, and rules and regulations encompassing everything from enrollment to curriculum. Knowing the perceptions and rationale of superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives will help policy makers and educators to better grasp this new educational phenomenon, including shedding light on current weaknesses as well as strengths of cyber charter schools, how long the cyber charter movement might last, and how might it continue to evolve.

In addition to gaining perspective on the longevity and evolution of cyber charter schools, developing a firm understanding of district leaders' perceptions of cyber education is important so as to better prepare districts to cope with the growing numbers of students who participate and who will participate in a cyber education. As charter school law is still relatively new in the Commonwealth of Pennsylvania, and with Act 22 and Act 88 specifically addressing cyber charters, there might still be a need for additional policies in regard to it. Policy makers may use this information to help guide

education, for example, when it comes to curriculum or state standards, regardless of whether it is cyber charter or the traditional school. It seems likely that the perceptions school district leaders (including superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives) have about cyber charter schools will likely influence the continued growth and development of cyber charter schools in the Commonwealth of Pennsylvania. This might be in relation to the creation of more cyber charter schools or modifications of the ones already in existence to help better serve students.

Additionally, this research impacts practitioners. For example, superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives may provide suggestions and constructive criticisms regarding the cyber charter schools. Educators and others may use this information to improve education in terms of instruction and delivery of curriculum, whether it is in the cyber charter or traditional environment. Moreover, with resources dwindling in public education and self-preservation a must, district leaders may convey other needs when it comes to dealing with cyber charter education. By investigating the perceptions of those practitioners who are closest to the action—superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives—one may be able to better see future trends regarding cyber education and public education in general. This study should provide leaders with a clearer perspective on what the future holds for cyber charter schools in the Commonwealth of Pennsylvania.

This study will also add to the growing research focused on cyber charter schools. As previously mentioned, cyber charter schools are a new form of education that has only

recently started to take off and represent an intriguing new trend in education. Therefore, it is of no surprise that there is little research on cyber charter schools in comparison to the traditional brick-and-mortar schools and this study will add to what exists in what is sure to be a growing area. Thus, this study will contribute to the literature on cyber education, perhaps pointing the way for other studies in this area. Finally, practitioners of both cyber and brick-and-mortar schools, policy-makers, and researchers may find this study helpful in developing procedures, policies, and recommendations to improve cyber and traditional education for students in the Commonwealth of Pennsylvania and beyond.

CHAPTER 2

REVIEW OF RELATED LITERATURE

The literature review encompasses the evolution of the cyber charter school. They began with the growing concept of school choice, addressing the politics and economics of change. From there, it discusses home education both on the national level and in the Commonwealth of Pennsylvania. The review then addresses charter schools nationally and within Pennsylvania; the charter model presents a viable alternative to the traditional public brick-and-mortar school. With the advent of the World Wide Web, the cyber charter school soon evolved as a form of school choice (both nationally and in the Commonwealth of Pennsylvania) and grew quickly.

The intent of the literature review is to provide understanding of the history and issues of the cyber charter school movement. Beyond this, it should provide for a better understanding of the perspectives district leaders (including superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives) bring to their current beliefs about cyber charter schools in the Commonwealth of Pennsylvania.

Beginnings of Choice

Politics, Economics, and Globalization

In 1983, *A Nation at Risk*, by the National Commission on Excellence, helped to create the groundwork for school choice as it called attention to the growing concern over student achievement in American public schools. Beginning with the explanation that

“History is not kind to idlers” (p. 6), the National Commission on Excellence (1983) went on to say, “The world is indeed one global village. We live among determined, well-educated, and strongly motivated competitors” (p. 6). Warning the American public that we were falling behind other countries in the race for academic excellence, the groundbreaking report put the spotlight on what appeared to be the crumbling educational structure. The idea of school choice began to take hold as a way to create a competitive environment that could push schools toward greater accomplishments. Riding on the wave of *A Nation at Risk*, conservatives “ridiculed liberals...for throwing money at the problem of educational failure, as both camps looked toward more privatized and cost-efficient administrative models” (Trend, 2001, p. 1). This was not the first time that education was part of the political process, but it was arguably one of the stronger forces in the school choice movement (Trend, 2001).

It is obvious that economics and politics were closely intertwined as evidenced by trends in globalization. Globalization acted as a catalyst for political change; additionally, globalization acted as an economic catalyst for change. Reich (1991) addressed the concept of economics in terms of globalization by looking ahead to 21st century capitalism. The world was shrinking in terms of economics as barriers to trade had begun to slowly dissolve. Economic competition became worldwide. Boyd (2000) stated that

Clearly, global economic trends have brought worldwide competition and moved developed nations from ‘smoke stack’ to ‘high tech’ industries requiring a workforce with greater intellectual and problem solving skills. Public schools are

being challenged to educate the masses, not just the elite, to much higher skill levels then in the past. (p. 229)

The U.S. Department of Education Office of Innovation and Improvement (2007) noted the need for a better and differently prepared U.S. workforce by stating that “Today’s global economy has created a high demand for intellectually strong workers, capable of solving complex problems and developing innovative services and products” (p. 2).

These economic and political pressures worked hand in hand in creating pressure on schools, as Zucker and Kozma (2003) suggested, to raise standards and achievement for all students in the late 1980’s and 1990’s, even those who attended underserved schools. Beginning in the 1980’s, political pressure to address the concerns presented in *A Nation at Risk* seriously questioned the quality of public education. In addition to political pressure, economic pressures coming from both loss of funding in an ailing economy as well as an emphasis on less government, forced public schools to do more with less. Moreover, globalization acted as an additional economic pressure as the world began to shrink as competition from abroad became widespread, compelling the need for a more skilled and better educated work force. While those such as historian of education and education policy analyst Diane Ravitch argued that choice could erode schools, others disputed “...the notion that choice is counter to the common good and point to the inherent value of parents’ and students’ freedom to choose the schools they attend” (Hadderman, 2002, p. 84). Thus, economic and political pressures have played a role in the direction of American public education.

The effort to raise standards and achievement, coupled with advances in technology, led to changes in policy. As Judy Estrin (2009) emphasized in *Closing the*

Innovation Gap: Reigniting the Spark of Creativity in a Global Economy, politicians and leaders will need to evaluate policy on every level, especially on that of the federal, in light of the effects on innovation when it comes to K-12 education. Meanwhile, on a global scale in such places such as Asia, for example, institutions had "...grown to meet the needs, acceleration of technology, high growth rates of Internet usage, and large untapped market for Internet learning" (Latchem & Insung, 2010, p. 81). The same imperatives existed in America with regard to technology. As technology continued to grow exponentially, there was a pressing need to focus on the ability to change in "...discovering developing, and applying new ideas, products, services and business models" (Estrin, 2009, p. 153).

Change Takes Hold

The political and economical climate created through the late 20th and early 21st centuries provided the impetus for school choice as a means to address the perennial under-achievement of the traditional public schools. Tyack and Cuban (1995) addressed the issue of the difficulty of educational change and how the American educational system had long-held a vision of utopian change versus the common sense change that actually takes place in a school. Tyack and Cuban spoke of the U. S. educational system's resistance to change, and took note that most changes have been gradual and incremental. Boyd (2000) echoed this and characterized four waves of reform or change, beginning with the first, termed intensifying, that came after *A Nation at Risk* from 1983-1986 and that focused on raising standards and rigor. The second, termed restructuring, dealt with school-based management and decentralization. The third, in the 1990s,

known as systemic, created national tests and standards for students and for teachers. Finally, the fourth wave, school choice, gave parents the ability to choose the school they felt best fitted their needs. Beyond these four waves, however, technology provided yet another form of change that would significantly influence education. Christensen, Horn and Johnson (2008) shared how advances in technology will not only change American education but in fact, disrupt and force it to change—in everything from student assessment, to curriculum, to the classroom instruction itself. Larry Rosen, Ph. D., (2010) echoed this by stating that the “...bottom line is that the educational system must develop new, technologically based models to replace the old textbook-based classroom” (p. 200). Many of the seeds of the new educational system were becoming evident in the explosive growth in homeschooling and distance education (Collins & Halverson, 2009).

Home Education

Home education alternatives have existed for decades. Home education gave parents the choice to educate children themselves, usually at home, providing learning that is individualized, flexible and often taught by the mother (Hadderman, 2002). According to Ray (2008, para.1), home education was “...an age-old traditional educational practice that a decade ago appeared to be cutting-edge and ‘alternative’ but is now bordering on ‘mainstream’ in the United States. It may be the fastest-growing form of education in the United States (at 5% to 12% per year).” In 1999 “...there were 850,000 home-schooled students in the United States...” and that number has well “...surpassed 2 million...” today, showing this growing trend (Christensen, Horn, &

Johnson, 2008, p. 94). Many parents believed they could do a better job educating their child at home as they were willing to sacrifice money, time, career advancement, and space for a classroom (Hadderman, 2002). The major reason parents chose home education "...was their concern about the environment of the schools, such as safety, drugs, or negative peer pressure" (Collins & Halverson, 2009, p. 63). Ray (2008) determined that the reasons parents opted out of the traditional brick-and-mortar school for home education included the following:

- customized or individualized the curriculum and learning environment for each child
- accomplished more academically than in schools
- used pedagogical approaches other than those typical in institutional schools
- enhanced family relationships between children and parents and among siblings
- provided guided and reasoned social interactions with youthful peers and adults
- provided a safer environment for children and youth, because of physical violence, drugs and alcohol, psychological abuse, and improper and unhealthy sexuality associated with institutional schools
- taught a particular set of values, beliefs, and worldview.

By the late 1980's, all fifty states had authorized some form of home education (Hadderman, 2002). In 1988, the Pennsylvania legislature passed the Pennsylvania Home School Law known as Act 169. This Act amended the Pennsylvania School Code to allow parents or guardians to home educate their children as an option to compulsory

school attendance at a traditional public brick-and-mortar school. Although tracking the total number of students involved in home education is not easy because many students end up back in public schools, statistics show a steady decline in the number of home-educated students from 24,415 in the 2002-2003 school year to 22,136 at the end of the 2006-2007 school year (Hadderman, 2002; The Pennsylvania Department of Education, 2008). Prior to 2002-2003, there had been steady growth of home-educated students as far back as 1993-1994 with 13,385 students (The Pennsylvania Department of Education, 2008). Fewer parents in the state saw home education as an option for their children. As it would turn out, many of these home-educated students were slowly migrating to cyber charter schools because the curriculum materials helped to organize learning content, leaving parents and others to play the role of facilitators (Collins & Halverson, 2009). This would especially ring true in Pennsylvania. Moreover, as discussed later, there were several similar benefits shared between "...homeschooling or distance education in the form of cyber schools" (Luber, 2009, p. 29).

Charter Schools

In addition to the option of home education, in the last 10-12 years, public charter schools have emerged to pursue alternative ways of meeting the high academic standards that are essential for today's students (Klein, 2006). Thus, charter schools provided school choice in addition to home education. Additionally, charter schools afforded yet another means to meet the needs of all students. Charters laws were meant to provide a means for "...pupils and community members to establish and maintain schools that operate independently from the existing school district structure..." (Charter School Law,

1997, p. 1). These charter schools (and later cyber charter schools) fell into Boyd's (2000) "R's" of school reform of reinventing (the school model) and replacing (the brick-and-mortar). Charter schools themselves have acted as catalysts of reform as they have stimulated improvements in the broader education system as "...seven out of eight national and state studies that evaluated charters' effects on their home districts demonstrate a 'positive ripple effect'..." (Hadderman, 2002, p. 5). In other words, charter schools helped to make the traditional public schools better simply by competing with them by providing for school choice. Still, the Hoover Institution's (1998) policy review of *A Nation Still at Risk* in 1998 declared that not much had changed fifteen years after *A Nation at Risk*. In fact, three of the ten breakthrough changes cited by the Hoover Institution's (1998) review for the 21st century include recommendations for school choice:

- At minimum, every American child must have the right to attend the (redefined) public school of his choice.
- Every state needs a strong charter school law, the kind that confers true freedom and flexibility on individual schools, that provides every charter school with adequate resources, and that holds it strictly accountable for its results.
- More school choice—beyond charter schools—other providers must be available as well. (para. 37)

Although NCLB attempted to take a step in the direction of promoting school choice and accountability, most students do not have this option. For example, under NCLB, if a school within a district was not proficient, the student could attend any other school in

that district. However, many school districts did not have multiple schools for the student to choose and, if they did, it may not have been practical for the student to travel a long distance. Furthermore, other than brick-and-mortar charter and cyber charter schools, there truly were not many other options in this country in terms of school choice as noted by the Hoover Institution. For instance, most students did not attend the public school of choice, not every state had a strong charter school law and there were few states, if any, with more options beyond charters schools.

School choice gained national momentum as the first charter school law passed in the state of Minnesota in 1991, followed shortly thereafter by California in 1992 and six additional states in 1993. Overall, these early charter schools were established by state law, allowed to operate with fewer mandates, and offered greater flexibility and less supervision than traditional public schools. There were 5,700 charter schools in the United States in 2011 (Center for Education Reform, 2012). Just a few years earlier the number of charter schools was 3,600; thus the number of charter schools grew 58% in just a few years (Huerta, d'Entremont, & Gonzalez, 2006). This put the number of charter school students at well over 1.9 million across the United States (Center for Education Reform, 2012).

Commonwealth of Pennsylvania

School choice in the form of charter schools grew rapidly in Pennsylvania. In 2011, the number of charter schools in the Commonwealth of Pennsylvania grew to 162 with a total enrollment of over 90,000 students (Pennsylvania Coalition of Public Charter Schools, 2012). This was an increase from the 55,760 students enrolled in 120 schools in

the state during the 2006-2007 school year (National Center of Education Statistics, 2007).

As stated previously, it was under the administration of Governor Tom Ridge (1995-2001) that charter schools were established. With the passage of Act 22 in 1997, the legislature introduced school choice in the form of charter schools in the Commonwealth of Pennsylvania. These charter schools were to operate independently from the existing school district.

With passage of this Act, Pennsylvania became the 27th state to approve charter school reform (Huerta et al., 2006). Charter School Law (1997), as covered in Act 22, defined a charter school as “...an independent public school established and operated under a charter from the local board of school directors and in which students are enrolled or attend” (p. 226). This Act went on to define both a charter school as well as a regional charter school. The schools were defined as regional in that the school directors from a specifically identified area or region approved the charter of the school. After approval at the local level, the application went on to the state for the final approval. According to the Charter School Law (1997), these charter schools were meant to accomplish all of the following:

- 1) Improve student learning
- 2) Increase learning opportunities for all pupils
- 3) Encourage the use of different and innovative teaching methods
- 4) Create new professional opportunities for teachers, including the opportunity to be responsible for the learning

- 5) Provide parents and pupils with expanded choices in the types of educational opportunities that are available within the public school system
- 6) Hold the schools established under this act accountable for meeting measurable academic standards and provide the school with a method to establish accountability systems. (para. 2).

As indicated in a survey from the University of Western Michigan (n.d.), the top three reasons Pennsylvania parents chose to have their child leave the traditional public school and attend the charter school were good teachers and high quality of instruction, safety, and academic standards. Students' reasons for attending charter schools included the idea that their parents thought the school was better for them; the school had better computers and other equipment; and many of their friends were attending the school (University of Western Michigan, n.d.). After the charter school law was established in 1997, a study also shared where the students were prior to attending the charter schools. For instance, in the span of years between 1998 and 2000, of the students attending the Pennsylvania charter schools, nearly 80% had previously attended public schools. The remaining 20% attending Pennsylvania charter schools were comprised of those who had previously attended private schools (16%) and those who had been home-educated (a little over 1%) (University of Western Michigan, n.d.).

At the time of Act 22's passage, the legislature most likely intended the charter school law to create school choice and competition—a competition based on a choice between a traditional public brick-and-mortar school or a newly established brick-and-mortar charter school. Thus, with Act 22, Pennsylvania followed the nation's lead in economics and politics of the times for school choice. Act 22 made no mention of the

cyber charter school since it was written before the idea of a cyber school even existed. However, the World Wide Web was well on its way to creating the perfect scenario to set up the cyber charter school concept. The introduction and rapid establishment of the World Wide Web changed the educational landscape exponentially, "...making learning of all kinds at any level a practical reality for all people, not only in the U.S., but also all around the world" (Hassard & Dias, 2009, p. 485). The combination of economics, politics and worldwide accessibility of the Internet created the perfect incubator for the advent of the cyber charter school.

Cyber Charter Schools

Before addressing cyber charters schools specifically, it is important to note some important aspects/differences regarding web-based or online learning. Watson (2005) shared some key definitions regarding important aspects/differences of web-based or online learning:

Online learning program: An educational organization that develops and offers online instruction and content. An online learning program may be a cyber school or a supplemental online program.

Cyber school: An online learning program in which students enroll and earn credit towards academic advancement based on successful completion of the courses (or other designated learning opportunities) provided by the school. In some states, many cyber schools are charter schools. Cyber schools enroll students full-time.

Supplemental online program: An online learning program that offers individual courses or other learning opportunities to students who are otherwise enrolled in

physical schools or cyber schools. Credit for successful completion of these learning opportunities is awarded by the physical school or cyber school in which each student is enrolled.

Statewide online program: An online learning program created by legislation or by a state-level agency, and/or administered by a state department of education or another state-level agency, and/or directly funded by a state appropriation or grant for the purpose of providing online learning opportunities across the state. (p. 20).

Some cyber charter schools offered blended learning which mixes learning through live communication with that of delayed online time. The live communication provided for instant feedback to the student and teacher as if both individuals were located in a room together. This was different from the delayed online time when both teacher and student communicated when it was convenient for each (for example, a teacher checked the email at the end of the day, after the students had already completed the assignment). More specifically, cyber charter schools provided for "...tools that allow synchronous (i.e., real time) and asynchronous communication between student and teacher, as well as among students" (Watson, Gemin, Evergreen Education Group, & Coffey, 2010, p. 5). This permitted more varied communications in the cyber charter setting. Furthermore, new cognitive abilities enhanced by students using technology translate into the skills of our transformed world and play right into the cyber charter school model. Some of these skills indentified by Klopfer, Osterweil, Grof, and Haas (2009) include:

The ability to process information very quickly;

The ability to determine what is and is not of relevance to them;

The ability to process information in parallel, at the same time and from a range of different sources (p. 6).

Some would argue that in using technology in the innovative form of a cyber charter school, for example, students should be able to sharpen those skills necessary to survive in the 21st century.

The words virtual and cyber are often used interchangeably in defining this new charter school concept that is computer-based and uses the World Wide Web to deliver curriculum and instruction to students. In the Commonwealth of Pennsylvania, a cyber school, by definition, is a charter school. In his study of virtual schools in the United States, Clark (2001) defined virtual charter schools in the following manner: “state chartered entities including public school districts, non-profit and for-profit organizations that operate public charter schools exempt from rules and regulations. Charter school legislation has a major impact on how these schools operate” (p. 5). In other words, the charter school laws, originally intended to address brick-and-mortar charter schools, were now extended to also cover the cyber charter schools. Online learning and thus cyber charter schools were taking off nationwide. Representing a 47% growth in online learning since 2006, by “...2008, 44 states offered significant learning options for an estimated 1,030,000 students who are enrolled in online or blended full-time supplemental courses” (Kowch, 2009, p. 41). This large growth would also be reflected in Pennsylvania.

Thus, for the Commonwealth of Pennsylvania, Act 22 defined and provided the framework for the early cyber charter schools even though the law uses neither the word cyber nor virtual in the text. In 1997, with Act 22, Pennsylvania’s law provided no

guidance as to what a cyber school was. As long as it followed the charter law and adhered to the six points listed previously, the cyber charter school could operate. Beyond legal prescriptions of Act 22, it was difficult to explain how cyber charter schools operated in Pennsylvania. However, speaking in more general terms, there were four basic distinctions between the traditional brick-and-mortar school and the cyber charter school. In a cyber charter school, learning occurred primarily outside of a classroom and often in isolation from peers and instruction was delivered through an alternative medium (usually a computer) (Huerta et al., 2006) . Other distinctions between the traditional brick-and-mortar school and cyber charter schools included the fact that schools enrolled students who did not previously attend public schools, especially home-educated students, and schools did not conform to district enrollment lines and could draw students from across a given state (Huerta et al., 2006).

These general distinctions between the traditional brick-and-mortar and the cyber charter school can be applied at both the state level in Pennsylvania as well as the national level. Moreover, cyber charters in Pennsylvania, especially, had students who were formally home-educated. Like anything new, however, the concept of the cyber charter school continued to evolve for each state, just as with the traditional brick-and-mortar schools.

In the late nineties and early 2000 when it became obvious to practitioners and policy makers that cyber charters in the Commonwealth of Pennsylvania were becoming vastly different from each other and because it was such a novel concept, the Pennsylvania Department of Education (2001) engaged KPMG Consulting to conduct a Cyber Charter Schools Review. Among other findings, the review found that the cyber

school offered students in the Commonwealth of Pennsylvania several opportunities including, anytime anywhere learning that meets the needs of students who required flexible schedules or those students who had limitations. Cyber charter schools also offered an option for students to obtain a high school diploma rather than a GED or for students who for any reason could not or choose not to attend a brick-and-mortar school (Pennsylvania Department of Education, 2001). Cyber charters provided for expansion of public educational options for home-educated students, greater accessibility to a wide range of college level, advanced placement and language courses as well as the ability to slow down or accelerate learning for students who wanted to work at their own pace (Pennsylvania Department of Education, 2001). Finally, cyber charter schools provided a more adaptive curriculum for some special education students and yet another opportunity to participate in the public education system (Pennsylvania Department of Education, 2001).

With cyber charter schools, there were no boundaries, no district lines, and no brick-and-mortar buildings to which to report. There were also other major differences. In particular, the cyber charter school, following the parameters set by Act 22, provided curriculum, enrolled and educated students over the Internet with only 75% percent of its teachers needing to be certified to teach in that subject area (Charter School Law, 1997). Public brick-and-mortar schools, on the other hand, had to maintain all teachers with proper certifications or risk penalties that included loss of state subsidy.

Before Pennsylvania's first cyber charter school, cyber charter schools had already existed, for example, in the state of Florida. The Florida Virtual School (FLVS) "...is perhaps the best known..." of the supplementary virtual schools, working "...under

the motto, any time, any place, any path, any pace” (Christensen et al, 2008, p. 96). In the relatively brief existence of cyber charters, the Florida Virtual School was considered by many to be a premier leader in cyber schools across the nation and Florida represented one of the many states that had developed its own virtual school (Zucker, 2008). It was important to address FLVS as it was known as one of the earliest, most successful models of cyber education in the country, not to mention “...one of the most important reform stories in education...” as it addressed many the many needs for students in education (Peterson, 2010, p. 231). Prior to Pennsylvania’s first cyber school, in 1996, the Florida legislature provided over six million dollars of funding to start an on-line Florida high school; this cyber school comprised 70% of students from public schools, 21% from home education and 9% from private schools (Trotter, 2001). It was important to note Florida’s statistics of cyber school students in comparison to Pennsylvania’s in order to better realize the impact on funding to be addressed later.

The proportion of Pennsylvania’s charter school students who previously attended public schools is similar to that of Florida; however, when comparing cyber charter school enrollment, the number of formerly home-educated students in Pennsylvania eclipses Florida’s and swells to 60% of the cyber school population (Huerta et al., 2006). This impact of the home education numbers and cyber charters will come into play later with the issue of funding and accountability and, therefore, should be noted.

In addition to the majority of Pennsylvania cyber students having come from the home-educated population (60%), 33% previously attended brick-and-mortar schools and the findings did not note the other 7% (The Pennsylvania Department of Education, 2001). The Pennsylvania Department of Education (2001) review noted that of all the

students, 12% of the cyber population was comprised of students with special education needs. The Pennsylvania Department of Education (2001) Cyber Charter Schools Review showed that a significant number of those attending the cyber schools were students seeking to accelerate or enrich their course work, students who were professional athletes/entertainers, students in need of a non-traditional training due to medical conditions or other mental or physical health related circumstances, or students who were employed, receiving homebound instruction, or previously home schooled by parents. Although a large population of Pennsylvania home-educated students would migrate to cyber charters, it is important to note that unlike home education, cyber charter schools were part of the public education system where curricula must meet state standards, teachers must be certified, and students must take all assessments required by federal and state laws (Watson et al., 2010).

“The self discipline that students need to be successful does not magically appear when they log on to a virtual school at home” (Schomburg & Rippeth, 2009, p. 36).

Without administrators or teachers who monitored attendance as in the traditional brick-and-mortar environment, one would have thought that a vast majority of cyber education students were highly motivated individuals. Surprisingly, a large percentage of cyber education students were found to be from the “at risk” population of students. An “at risk” student was defined as a student who was likely to fail out of school (Archambault, Diamond, Coffey, Foures-Aalbu, Richardson, Zygoris-Coe, Brown, Cavanaugh, 2010). In a survey of cyber charters throughout North America,

twenty-five percent of respondents reported that more than 75% of their enrolled students would be considered ‘at-risk’, while 21% indicated that 51-75% of their

students would be classified with this designation. Twenty-nine percent reported that at risk students made up 26-50% of their student enrollments. Finally, 17% indicated that 11-25% of their student enrollments were ‘at risk’, and 8% reported that at-risk students made up less than 10% of their student population.

(Archambault, et. al, 2010, p. 4)

The “at-risk” population represented a group with needs to be met. Cyber charter schools were there to meet these needs both in Pennsylvania and the nation.

Although research in the areas of general technology and Internet use in schools is fairly abundant, a paucity of research exists when examining high school students enrolled in virtual schools, and the research base is smaller still when the population of students is furthered narrowed to elementary grades (Rice, 2006, p. 430).

Nonetheless, some research for cyber charters school exists. Like the University of Western Michigan findings as to why students attend Pennsylvania charter schools, Erb (2004) shows similar reasons for students opting for Pennsylvania cyber charters. In her study of one cyber charter, Erb found that push factors such as health and safety concerns were significant factors in transferring to a cyber charter school from a traditional brick-and-mortar. Other reasons for opting for a cyber charter school fall under the motto of the Virtual School in Florida, which include: “any time, any place, any path, any pace”. From a pedagogical perspective, cyber charter schools offer a more flexible means of delivering education to all students, including the ability to reach those students in underserved populations as well as those who are not (Ahn, 2011; Tucker, 2007).

Then, there is the concept of personalization where students can move at their own pace as cyber charter schools can “...erase the artificial boundary between academic learning that takes place during the school day and that which occurs at home or during after school hours” (Tucker, 2007, p. 3). Overall, cyber charter schools and technology in general represent alternatives for filling curriculum gaps, flexibility in scheduling, credit recovery, convenience, and opportunities for individualized learning (Collins & Halverson, 2009; Rice, 2006; Tucker, 2007).

Next, because of the often apparent lack of social interaction as students in cyber charter schools are often at home working away from classmates, there is the perceived lack of socialization skills. Ironically, recent research has indicated “...that the social skills of students enrolled in full-time, on-line public schools are superior to or not significantly different than the social skills of students enrolled in public schools” (Ash, 2009, p. 5).

Finally, there is the issue of student achievement. The verdict is still out on cyber charters’ potential to increase student achievement since “...significant challenges remain concerning how to measure and evaluate...” a cyber charter school’s ability to do just this, even though “...the major theory behind charter school reform is that, through increased school choice, autonomy, and flexibility, these new schools (cyber) can improve student achievement...” (Ahn, 2011, p. 4). The evidence that currently exists shows no major differences in student achievement between those engaged in distance learning and those engaged in more traditional settings (Ahn, 2011). Rice notes that “...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”

(2006, p. 440). Other research, however, shows that cyber charter students are not performing as well as their counterparts. For instance, in Ohio, research shows virtual charter middle schools lagging substantially behind classroom-based charter schools in terms of student achievement (Zimmer, Gill, Booker, Lavertu, Sass, & Witte, 2009). Even more telling and specific for Pennsylvania is the CEDO National Charter School Study (2011) which found that “performance at cyber charter schools (in Pennsylvania) was substantially lower than the performance at brick-and-mortar charters with 100% of cyber charters performing significantly worse than their traditional public school counterparts in both reading and math” (p. 20).

The SusQ Cyber Charter School, founded as a regional charter school in 1998 by three school districts under Act 22, became the first cyber charter in the state of Pennsylvania to accept students in grades 9-12 from the regional area of the Susquehanna Intermediate Unit only (Huerta et al., 2006). In the next five years, the number of cyber charter schools in Pennsylvania grew to eleven. Issues and concerns, including the direction and accountability of cyber charter schools, began to grow along with the number of cyber charter schools and number of students attending. Not surprisingly, litigation resulted because of Act 22’s lack of clarity with regard to cyber charter schools as huge funds moved from brick-and-mortars to cybers (Ellis, 2008). Litigation began to rage in Pennsylvania (as well as Texas and Ohio) in regard to cyber course charges as critics and a few policy makers began to question whether cyber charter schools were simply versions of homeschooling, undeserving of public funding (Hadderman, 2002).

“In 2001, facing financial drain from cyber charter schools, school districts refused to pay student funds to the cyber charter schools...” and joined the Pennsylvania

School Boards Association (PSBA) in filing a lawsuit (Watson, 2005, p. 80). The parties claimed that the cyber charter schools were in fact home school charters and were creating a huge drain of resources from the traditional public school districts. The court upheld the legality of the cyber charters, stating that they were protected under Pennsylvania law and the court also found that the Pennsylvania Department of Education should have provided due process for school districts and permitted them to "...challenge the validity of the tuition bills before redirecting payments to the cyber charters..." (Huerta et al., 2006, p. 128). Prior to this, the Department of Education was simply taking the funds from districts without due process, an item to which PSBA took exception.

The first real cyber charter law in Pennsylvania followed the PSBA lawsuit and the Pennsylvania Department of Education contracted KPMG Consulting to perform a cyber charter school review of all the schools in Pennsylvania. In 2002, the Pennsylvania legislature passed Act 88, the Cyber Charter School Law, which addressed cyber charter schools specifically. This gave the cyber charter movement in Pennsylvania a legal framework from which to work. Unlike Act 22, Act 88 now requires that the cyber charter schools be approved by the state and not simply by local school boards or regions.

In addition to the state now having authority to grant a charter as opposed to a regional or local board, Act 88 also provides a definition of a cyber charter school:

Cyber charter school shall mean an independent public school established and operated under a charter from the Department of Education in which the school uses technology in order to provide a significant portion of its curriculum and

deliver a significant portion of instruction to its students through the Internet or other electronic means. (Charter School Law, 2002, p. 15)

With the passage of Act 88, the state made it clear that applications for new cyber charters as well as re-charters for existing cyber charter schools (to be done every five years) would be centralized through the Department of Education. In essence, this defined cyber charter schools as viable entities, established the state department as the sole authorizer of these entities, and instituted legislation that "...clearly defined how local school districts would interact with the new cyber charters" (Ahn, 2011, p. 7).

In the spring of 2008, word began to spread that the Pennsylvania Department of Education was looking into creating its own state-run cyber school. This seemed to be a next logical step in that the number of cyber or virtual state-run schools in the nation had jumped from five in 1997 (beginning with the states of Florida and Utah) to twenty-eight in 2006 (New Students are Logging in to Virtual Schools, 2006). These state-run cyber schools were providing everything from credit recovery to summer school enrichment to Advanced Placement courses to enrolling students full-time. In the summer of 2008, the Pennsylvania legislature passed Act 61 (House Bill 1067) regarding the creation of a Virtual High School Commission to study the possibility of a state-run virtual (cyber) high school. As stated:

The Virtual High School study commission is established within the Department of Education to examine the feasibility and costs associated with creating a state-operated, Internet based high school, to be known as the Pennsylvania Virtual High School, which would provide secondary students throughout this commonwealth with access to a wide range of learning services. (p. 13)

In January 2010, the General Assembly of Pennsylvania passed House Resolution Number 592 directing the “...Legislative Budget and Finance Committee to study the costs associated with the State’s establishing the Pennsylvania Virtual Learning Program and conducting a study of the funding models used by other states with comparable programs” (p. 1). Only time would tell if the concept of a state virtual high school would come to fruition.

Meanwhile the number of students attending cyber charters schools in the Commonwealth as well as the nation continued to grow. Since the cyber charter schools were still relatively new, there were few guidelines or models to follow. This newfound frontier of the cyber charter with no geographical barriers had presented accountability barriers, in addition to funding, equity and quality assurance issues as well as accreditation (National Forum on Education, 2006; Salsberry, 2010; Virtual School Forum Report, 2002; Watson, 2005). Probably the most pressing issue continued to be funding, especially with the economic uncertainty during the financial crisis that began in 2008, both across the nation as well as Pennsylvania.

Cyber Charter Funding

Funding for all charter schools is provided by school districts through the charter school law, Act 22 of 1997. The law specifies that charter school funding is the responsibility of school districts; there is no direct state funding or funding formula for charter schools. The law makes no distinction between brick-and-mortar or cyber charter schools; school districts face identical funding requirements for both types of charter

schools. There is, however, a difference between the funding charter schools receive for regular education students and special education students, with the latter receiving considerably more funding on a per student basis.

The formula used to calculate the districts' funding responsibility is specified in Act 22. It results in a per student tuition rate for the district to be paid to charter schools.

For non-special education students, the charter school shall receive for each student enrolled no less than the budgeted total expenditure per average daily membership of the prior school year... minus the budgeted expenditures of the district of residence for nonpublic school programs; adult education programs; community/junior college programs; student transportation services; for special education programs; facilities acquisition, construction and improvement services; and other financing uses, including debt service and fund transfers as provided in the Manual of Accounting and Related Financial Procedures for Pennsylvania School Systems established by the department. This amount shall be paid by the district of residence of each student.

The calculation is based on an individual district's expenditures and number of students. As a result, each district has a different tuition rate for their students attending charter schools. This results in a given charter school receiving different funding amounts for students from different districts, even though they are enrolled in the same charter school and receiving the same educational program. Moreover, the tuition for special education students enrolled in cyber charters is also calculated under the charter school funding formula from Act 22. A separate calculation determines a special education

amount that is added to the regular education amount to yield a substantially larger payment to charter schools for special education students.

For special education students, the charter school shall receive for each student enrolled the same funding as for each non-special education student as provided (as above quote), plus an additional amount as determined by dividing the district of residence's total special education expenditure by the product of multiplying the combined percentage (0.16) times the district of residence's total average daily membership for the prior school year. This amount shall be paid by the district of residence of each student.

Again, the special education funding amount is dependent upon an individual district's expenditures and special education students and all districts have different rates.

Figure 2.1 demonstrates an example of a district calculation of the tuition cost for a cyber school student: for both a non-special education student and a special student following PDE-363 form. The calculation is based upon expenditures and estimated daily membership.

Figure 2.1. Funding for Charter Schools – Calculation of Selected Expenditure per Average Daily Membership as Based on PDE-363 Form

FOR NON-SPECIAL EDUCATION STUDENTS	
TOTAL EXPENDITURES	<u>\$89,000,000.00</u> (a)
Minus TOTAL DEDUCTIONS	<u>\$37,000,000.00</u> (b)
SELECTED EXPENDITURES (a-b)	<u>\$52,000,000.00</u> (c)
ESTIMATED AVERAGE DAILY MEMBERSHIP	<u>8,000</u> (d)
FUNDING FOR NONSPECIAL EDUCATION STUDENTS (c-d)	
(SELECTED EXPENDITURES PER ESTIMATED AVERAGE DAILY MEMBERSHIP)	<u>\$6,500.00</u> (e)

FOR SPECIAL EDUCATION STUDENTS	
SPECIAL EDUCATION EXPENDITURES	<u>\$13,000,000</u> (f)
Minus SPECIAL EDUCATION DEDUCTIONS*	<u>\$7,000,000</u> (g)
SELECTED EXPENDITURES (g-h)	<u>\$6,000,000</u> (h)
ESTIMATED AVERAGE DAILY MEMBERSHIP multiplied by 0.16 (d x 0.16)	<u>1280</u> (i)
SPECIAL EDUCATION EXPENDITURES divided by 0.16 AVERAGE DAILY MEMBERSHIP (h/i)	<u>\$4,687.50</u> (j)
FUNDING FOR SPECIAL EDUCATION STUDENTS (e+j)	
*Deductions for special education include any special education expenditures that are federally funded.	<u>\$11,187.50</u> (k)

(PDE, 2010)

In this example, for every non-special education student enrolled in the cyber charter school, the district has to pay \$6,500 for tuition to the cyber charter school, and for every special education student, the district has to pay \$11,187.50 to the cyber charter school. The cyber charter school would bill the district of residence for each cyber charter

student's tuition. If the school district of residence refuses to pay the cyber charter school, the cyber charter school then notifies the Pennsylvania Department of Education. In turn, the Pennsylvania Department of Education pays the cyber charter school directly and then deducts an amount equal to the tuition from the basic education subsidy from that district of residence.

The fiscal impact on Pennsylvania school districts from funding mandates for students attending cyber charter schools can be substantial. As the number of students who leave the district for cyber charter schools increases, two things happen to the funding formula calculation. First, unless there are sufficient numbers leaving to allow a reduction in district personnel, the district will not be able to reduce expenditures for the remaining students. Second, there are fewer students in the district upon which to calculate the per student cost. Consequently, in the formula, the numerator (district-selected expenditures) stays constant and the denominator (number of district students) decreases with the result being that the district's tuition rate increases. Operationally, the more students who leave for a cyber charter school for the year the higher tuition payment per student to cyber charter schools. For example, if the district in Figure 2.1 above average daily membership drops to 7,500 (with five hundred students [or approximately 6%] leaving for a cyber charter school), the tuition per student increases to over \$6,900 (a jump from \$6,500) for a non-special education student. Thus, the more students who leave for cyber charters, the greater the total cost will be as a result of more students and a higher tuition cost for each. Conversely, the fewer who leave, the less the cost. To be able to reduce the personnel expenditures in a district, enough students in the same grade and school, must leave for a cyber charter to be able to eliminate a teaching

position. Otherwise, if the students leaving are scattered throughout the district, the district cannot easily reduce staff or programs to adjust for the loss of tuition. The imbalance occurs because districts have to pay out an average cost per pupil (tuition rate), but only can realize marginal cost savings (essentially zero unless they are able to reduce personnel).

As resources continued to grow scarce for the funding of education, the effectiveness of cyber charter schools and actual cost for educating students enrolled in these schools has come into question. Skepticism as to the actual cost per child in a cyber charter had become an issue as Pennsylvania engaged in fierce debate about the equity issues involved as some districts lost students, and the funds that go with them (Collins & Halverson, 2009). In fact, the Auditor General, Jack Wagner, of Pennsylvania issued a report, concluding the current methods for funding cyber charter schools "...are inequitable, inefficient, and bear no relationship to the actual cost of educating the students attending these schools" (Bureau of School Audits, 2010, p. 2). The report recommended a moratorium on authorizing any more cyber charter schools until "...the flawed charter school funding mechanisms are equitable and reasonable for charter and cyber charter schools, for sending districts and Pennsylvania taxpayers" (Bureau of School Audits, 2010, p. 1). In addition to the recommendation of a moratorium on more cyber schools, Jack Wagner's report (2010) revealed that cyber charter schools had lower per-pupil costs than brick-and-mortar charter schools. Additionally, Wagner (2010) found that cyber charters had a cumulative unreserved-undesignated fund balance of 13% of their cumulative annual expenditures, while school districts carried a fund balance of 7% of cumulative expenditures. (Pennsylvania law limits most school districts to a

maximum of 8% of annual expenditures). This seemed to indicate that cyber schools did not have the expenditures like those of traditional schools, thus supporting the argument that the cost per pupil for cyber charters was less than that of the traditional schools.

In *Regulating Virtual Schools: A New Policy Challenge*, Donovan (2012) shared the concern that data for costs (for cyber charters) are only recently emerging and that the overall question remains of how much it really costs to send a student to a cyber school. Perhaps the cost for educating students was much less expensive in cyber charter schools, making this new form of education a more "...capital-intensive industry, one where technological innovation progresses as rapidly as other sectors of the economy...", needing fewer teachers and employees and thus transforming education (Peterson, 2010, p. 232). The whole concept of cyber charter schools is completely different from the traditional brick-and-mortar school. "Creating regulations for virtual schools is challenging for lawmakers. The usual policies on funding, enrollment and attendance do not apply, requiring solutions for an education model that is still evolving" (Donovan, 2012, p. 11).

Viable questions pertaining to cyber charter schools were once again making headlines across the state. Regardless of the outcome, cyber charters or some form of online, virtual education would most likely remain in Pennsylvania as well as the nation. Education utilizing some form of technology was not going to disappear as young individuals across the nation had embraced it in their daily lives each and every day. A case in point was that behind Generation "Y" (those individuals born in the 1980's and early 1990's) was the "I" Generation where little research had been done in regard to pre-school, elementary school and secondary school age children. However, "...interviews with parents with more than two thousand of them (the "i" Generation) show that they are embracing technology and media much earlier than their older brothers and sisters"

(Rosen, 2010, p. 20). Thus, the cyber charter school would survive in some form to meet the needs of this changing population.

Summary

Boyd (2000) spoke of the more radical “R’s” of school reform, one of which was reinventing, which included new models of schools and systems. With the Internet, the concept of the cyber charter school was reinventing education and through the evolution of the cyber charter, one was able to see how and why this new school concept was flourishing. The cyber charter was a result of what former U.S. Secretary of Education, Rod Paige (2001-2005) once stated: “This is the 21st Century. Ours is the world of 24-hour news cycles, global markets and instant messaging. Our education system should reflect the times we are living in” (Virtual School Forum Report, 2002, p. 2). The cyber charter was simply a reflection of our times in which we live. Hassard and Diaz (2009) proclaimed that “the Internet is perhaps the most transformative technology in history, reshaping business, media, entertainment, and society in astonishing ways. But for all its power, it is just now beginning to be tapped to transform education” (p. 485). Cyber charter schools have begun to transform education. Cyber charter schools have answered the call for innovation in education as they continue to prepare students for a “...future in which waves of technology innovation keep coming faster and faster—with iGeners as the early adopters”; thus, “rewiring” education as we know it (Rosen, 2010, p. 200). With 11 cyber charter schools already operating in Pennsylvania, it is obvious that this new form of education is here to stay. Thus, this study proposes to examine the

perceptions of district leaders (including superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives) in two Intermediate Unit 8 school districts about the role of cyber charter schools in their district and the possible consequences of the rapid growth of this new form of schooling.

CHAPTER 3

METHODOLOGY

The evolution of cyber charter schools in Pennsylvania exhibits how quickly this new form of schooling has flourished in the state. It started with Act 22 in 1997 with the framework for charter schools. This quickly breathed life into the cyber charter school movement as access to the World Wide Web grew across both the nation and the world. Since the first cyber charter began in Pennsylvania as a regional cyber charter school in 1998, this new form of public education grew and challenged the traditional brick-and-mortar schools. The cyber charter school's funding soon began to impact the traditional brick-and-mortar school as high percentages of formerly home-educated students opted for this means of education, thus impacting local resources. It was not until 2002, with Act 88, that the state government formally addressed the cyber charter school. At that time, there were eleven cyber charter schools in Pennsylvania that competed with the traditional brick-and-mortar public schools. In the summer of 2008, the Pennsylvania Legislature passed Act 60, House Bill 1067, establishing a Virtual High School Commission to study the possibility of creating a state-run virtual (cyber) school.

Torn between the traditional brick-and-mortar school and accepting the online revolution, school districts have found themselves cornered in a fast changing world. While likely realizing that cyber charter education is not simply going to go away, there is a lack of empirical research that focuses on how school districts perceive this rising challenge to traditional brick-and-mortar education, the factors that shaped these perceptions, and the districts' likely responses to this challenge.

The purpose of this study was to examine the perceptions of district leaders (including superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives) in two Intermediate Unit 8 school districts about the role of cyber charter schools in their district.

The specific questions to be examined included:

- 1) What is the district's current involvement with cyber charter schools?
- 2) What perceptions do district leaders hold toward cyber charter schools that are favorable? What perceptions do district leaders hold toward cyber charter schools that are unfavorable?
- 3) How did each of the respondents characterize the response of the district to the cyber charter school challenge?

Logic and Rationale for Approach

This dissertation used a qualitative approach because, as Rist (1992) states, "The qualitative approach would contend that to understand the current conditions of education, one must describe and analyze in an ecologically valid manner the values, behaviors, setting and interactions of participants in educational settings" (p. 440). Since the study sought to investigate the perceptions of district leaders in school districts in Intermediate Unit 8 about the current role of cyber charter schools and the possible consequences of the rapid growth of this new form of schooling for their district, it made sense to use the qualitative approach as the participants in each district would offer insight into this purpose. Additionally, McMillan (2008) supports a qualitative approach when the "...situational context is very important in understanding behavior..." (p. 273),

as it likely will be in this study. Owens (1982) emphasizes that views of knowing and understanding social and organizational phenomena are an important part of naturalistic inquiry, and that the outcome provides understanding, insight, and meaning. Qualitative research reveals how parts work together to form a whole. Merriam (1998; 2002) shares five characteristics of qualitative research that include: (1) the emic, where understanding the phenomena is important from the participant's view, not the researcher's; (2) the researcher is the primary instrument for gathering the data and performing the analysis; (3) qualitative research usually involves fieldwork; (4) primarily uses inductive research strategies that build on concepts; and (5) the product is usually richly descriptive in terms of words.

When applying the above characteristics to this study, the emic was obvious in that the perceptions of the current role of cyber charter schools and the possible consequences of the rapid growth of this new form of schooling are important from various school district individuals' (participants) points of view, not the researcher's. As well, the researcher was the primary means of data collection from the participants and the data collection and analysis will work inductively to build concepts in a richly descriptive manner. "Qualitative methods permit the evaluation researcher to study selected issues in depth and detail; the fact that data collection is not constrained by predetermined categories of analysis contributes to the depth and detail of the qualitative data" (Patton, 1990, p. 165). Qualitative research takes place in the natural setting and is emergent in the sense that the research questions may change and be refined as the inquirer learns what to ask (Creswell, 2003). Interview questions for individuals from

school districts may change based upon initial survey results as well as how the interviews themselves unfold.

This qualitative approach allowed the researcher to examine a real-world situation as it occurred naturally from a holistic perspective where the phenomenon studied was understood as a complex system that is more than the sum of its parts (Patton, 1990). Capturing the perceptions of the leaders in the identified school districts certainly falls into this designation of a complex system.

Research Design

The overall research design for this dissertation was a case study. Merriam (1998) states that a "...researcher selects a case study design because of the nature of the research problem and the questions being asked" (p. 41). Moreover, a case study is best when one cannot easily separate variables from the context and this approach best answers the questions of "how" and "why" (Merriam, 1998). Yin (1994) echoes these same aspects of a case study, saying that it is impossible to separate the phenomena's variables from their context. Furthermore, a case study can be written on different analytic levels, including a merely factual level, an interpretive level, and an evaluative or judgmental level (Lincoln & Guba, 1985). This research was written on the interpretive level in that the researcher found common themes and categories from interviews and documents. These common themes were the result of an interpretive analysis of the data. The researcher analyzed the results from the interviews by coding, then categorizing and finally creating themes for each of the two case study districts. Additionally, the

researcher drew conclusions from these results as well as made recommendations for further study. All of this required an interpretive analysis. More recent research from Donmoyer and Galloway (2010) asserts that “thick description-oriented case study research, which has the potential to cultivate insight, also matters and needs to be moved back from the margins of the field and reinstated as a viable strategy for helping practitioners understand the nuances and subtleties of educational reform” (p. 24). Responses to these questions also helped to open the door to analysis in examining the perceptions of district leaders about the role of cyber charter schools in their district on various levels.

A case study is also particularistic in that it focuses on a particular situation, event, program, or phenomenon and examines “a specific instance but illuminate(s) a general problem” (Merriam, 1998, p. 30). This case study did just that as it examined district leaders’ perceptions about the nature of the cyber charter school challenge.

Additionally, a case study offers the advantage of providing a rich, thick description of the phenomena under study and illustrating “the complexities of a situation—the fact that not one but many factors contributed to it” (Merriam, 1998, p. 30). Finally, it is heuristic in that it illuminates and adds to the reader’s understanding of the phenomena of interest and may bring about discovery of new meaning (Merriam, 1998). Through interviews and document analysis, this case study provided this kind of thick, rich description to illuminate the readers’ understanding of school district leaders’ (including superintendents, technology coordinators, curriculum specialists, building principals, and teachers’ union representatives) perceptions of cyber charter schools.

Site and Sample Selection

Purposeful sampling was used in this study to select the districts of interest. McMillan (2008) speaks of purposeful sampling and how "...the researcher selects particular individuals or cases because they will be particularly informative about the topic" (p. 119). Creswell (2008) states that in purposeful sampling "...researchers intentionally select individuals and sites to learn or understand the central phenomenon" (p. 214). Sampling is purposive in that it is meant "...to define a sample that is in some sense representative of a population to which it is desired to generalize" (Lincoln & Guba, 1985, p. 199). More specifically, McMillan (2008) refers to critical case sampling in choosing those entities that will better illustrate a phenomena in unique and dramatic ways. Identifying two districts for the focus of this case study, instead of just one district, made sense as the intent was to investigate the perceptions of district leaders (including superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives) in school districts in Intermediate Unit 8 about the current role of cyber charter schools and the possible consequences of the rapid growth of this new form of schooling for their district. The researcher purposely chose the two school districts so as to provide a wider perspective of district leaders' current involvement with, perceptions of, and response to cyber charter schools in Pennsylvania.

The researcher first used a brief survey (Appendix A) of all 35 school districts located in the Appalachia Intermediate Unit 8. The survey was conducted in order to get a sense of the perceptions of superintendents about the current role of and their current relationship to cyber charter schools, and the survey was used to select the case study districts. This was especially appropriate for this study as it made sense to identify and

seek data from those districts that have clear views and perspectives on the issue of interest. It is important to emphasize that first and foremost, the survey was designed to identify a sample of the districts for the two case studies that would be accessible to this research study. Next, the survey was meant to provide a selection of districts that seem to have the most extensive experience dealing with cyber charter schools.

The identification of the two districts took place after the initial survey (Appendix A) had been completed. The selection of the sites for the case studies was contingent on the ability of the researcher to gain access to the site as well as the extent and depth of the district's involvement with cyber charters as could be deduced from the survey. Rist (1982) speaks of gaining access as "...one of the most critical phrases of qualitative research" (p. 442). The researcher has networked with current cyber charter schools in the Commonwealth of Pennsylvania and has worked closely with many of the superintendents in IU 8 as well as other district personnel. This familiarity was an asset in gaining entry and access to the case study districts.

Survey Results and Site Selections

Data collection for the survey took place over a three month period beginning in January of 2011. The surveys were mailed and returned within a five week period. Twenty-four of the thirty-five surveys were returned yielding a response rate of 69%. After the surveys were returned, the researcher separated the completed district surveys into two categories. The first category included the districts that indicated a willingness to participate in the interview process and the second category included those districts

that declined to participate. Of the twenty-four returned surveys, sixteen districts indicated that they would be willing to participate as a case study district.

Tables 3.1 through 3.4 show results from the survey questions for those districts that returned them. These results, along with accessibility, helped the researcher to determine which districts to select as case study districts. As shown in Table 3.1, districts with more students involved in cyber schools were more likely to be willing to participate in the case study. Both districts selected had 30 or more students enrolled in cyber charter schools. This was one of the key criteria used in selecting the case study school districts.

Table 3.1. Number of Students per District Enrolled in Cyber Charter Schools

Number of Students	Districts Willing to Participate in Case Study	Districts Not Willing to Participate	All Respondents
0-10 Students	2	5	7
11-20 Students	5	0	5
21-30 Students	1	3	4
31-40 Students	5	0	5
41 + Students	3	0	3
Total	16	8	24

Survey respondents whose students were enrolled in more than five different cyber charter schools were more likely to be willing to participate in the case study as shown in Table 3.2. This was a second key criterion used when determining which districts would be used in the case study. It was assumed that the more cyber schools with which the district was involved, the more varied experiences the district would have.

Table 3.2. The Number of Different Cyber Charter Schools in which Students were Enrolled

Number of Cyber Schools	Districts Willing to Participate in Case Study	Districts Not Willing to Participate	All Respondents
0-2 Cyber Schools	0	2	2
3-5 Cyber Schools	10	5	15
6-8 Cyber Schools	3	1	4
9-11 Cyber Schools	3	0	3
Total	16	8	24

The third criterion for selecting the case study schools was the length of involvement the districts had with cyber charter schools. As evidenced in Table 3.3, the longer the district's involvement with cyber charter schools the more willing they were to participate in the case study. This was beneficial as the districts with a longer involvement would have more experience and longitudinal data to share.

Table 3.3. Length of Time that Cyber Charter Schools have had a Presence in the District

Number of Years of Cyber Charter School Involvement	Districts Willing to Participate in Case Study	Districts Not Willing to Participate	All Respondents
Not present at this time	0	0	0
0-2 years	0	0	0
3-5 years	1	4	5
6-8 years	8	4	12
9-11 years	4	0	4
11+ years	3	0	3
Total	16	8	24

Districts which experienced an increase in cyber charter school enrollment were more likely to be willing to participate in the case study as shown in Table 3.4. It was assumed that districts that experienced larger increases in cyber involvement would likely have greater insights into and knowledge of cyber charter schools.

Table 3.4. Student Enrollment in Cyber Charter Schools Over the Past Five Years

	Districts Willing to Participate in Case Study	Districts Not Willing to Participate in Case Study	All Respondents
Increased drastically	4	0	4
Increased moderately	8	5	13
Remained the same	2	3	5
Decreased moderately	2	0	2
Decreased drastically	0	0	0
None - no students attending	0	0	0
Total	16	8	24

Tables 3.1 through 3.4 narrowed down the number of school districts that might serve as potential case study districts. The higher number of cyber school students, experience with a larger number of cyber charter schools, longer involvement with cyber charter schools, greater number of students leaving the district for cyber charters in the last five years and accessibility were the basis for the selection of the two case study schools. Two districts that met these criteria and were accessible were the ones chosen as the case study districts.

The researcher phoned the contact listed on each respective case study district survey. After a brief conversation with contacts from both case study districts, emails

were exchanged and site visits were arranged, at the convenience of each district, to meet with participants for interviews.

Institutional Review Board (IRB) Procedures for the Case Studies

For the case studies, the researcher purposely chose districts within the Intermediate Unit 8 based on data from the surveys. There was a question on the survey about whether or not the respondent would be willing to participate in a more intense phase of the study that required a site visit. After narrowing the pool of districts that may participate, the researcher contacted superintendents to verify which two districts would participate in the actual case studies. The researcher provided an overview of the study to the superintendent (Appendix B). For some districts, this entire process may have required school board approval. This was not the case, however, in this study

Once a district agreed to participate, the researcher completed an application for Institutional Review Board approval for this study. This application helped to ensure confidentiality for the participants and provided for informed consent. With guarantees of confidentiality and respondent anonymity, the participants were exposed to no more than “minimal risk.” The interviews fell into category two of the Exemption Review for the interview portion because the research only involved interviews with school personnel. An Informed Consent form (Appendix C) was sent to the superintendent and other initial contacts (technology coordinator, building principals, curriculum directors, and business managers, etc.) who the researcher interviewed in each district participating in the case study. As other potential interviewees were added to the study, the researcher

provided additional Informed Consent as needed. Confidentiality guaranteed the information was stored in a locked file cabinet and that all computer data were password protected and the researcher coded all names with numbers and pseudonyms. After receiving permission, the researcher gathered information about the selected districts and the demographics of the district by studying the website of each district. This information assisted the researcher in becoming familiar with the districts. The researcher was familiar with many of the schools in this area, thus, making this an easier task.

Contact was made with key informants via the telephone or email to arrange a convenient time to meet regarding the interviews and document analysis. Logical choices for key informants to interview included the superintendent, technology leaders, curriculum directors, building principals and business managers since these would be the individuals most likely to have first-hand knowledge regarding interactions with cyber charter schools. The researcher would also look to these individuals for names of others to interview within the respective district for this study. The researcher asked for permission to audio record the interviews so as to be sure the information was accurate for the data analysis.

Gaining a positive rapport with trust and confidence is key (Marshall & Rossman, 2006; McMillian, 2008). The researcher briefly presented an overview of the study, after introducing himself and helping the participant to learn about the researcher to create a level of comfort and trust. The researcher followed the interview protocol, asking the interview questions with follow-up questions as needed (Appendix D). Additional interviews with other participants occurred, depending on recommendations from those participants already scheduled for interviews. In the document analysis portion of the

study, there must be an IRB review, however, it is category four because it involves the collection or study of existing data, documents, or records. It is important to note that information that the researcher records cannot identify participants directly or through identifiers. Thus, the researcher must give particular care in this area.

With document analysis, an Informed Consent form (Appendix C) was sent to the initial contacts. The researcher obtained documents from these contacts in each district as part of the case study. The researcher followed the same process in establishing a rapport with the participants from the interviews in obtaining the documents from school districts. The researcher provided additional Informed Consent forms to other contacts as needed, depending upon who provided documents. This form was similar to the interview form and, likewise, guaranteed the information would be stored in a locked file cabinet. Additionally, all computer data were password protected and the researcher coded all individual and place names with either numbers or pseudonyms.

Data Collection

The Case Study

According to Fontana and Frey (2003) “Interviewing is one of the most common and powerful ways in which we try to understand our fellow humans” and the “...most common form of interviewing involves individual, face-to-face verbal exchange” (pp. 118-119). Interviews are active interactions leading to negotiated, contextually based results and in-depth interviews allow for the participant’s perspective on the phenomenon of interest that unfolds as the participant views it (the emic perspective) (Fontana & Frey,

2008; Marshal & Rossman, 2006). In terms of coming up with a number of participants to interview, Kvale and Brinkman (2009) advise that the researcher “Interview as many subjects as necessary to find out what you need to know” (p. 113). Moreover, researchers gauge when they have completed data collection by what is termed “...data saturation, the point of data collection where the information you get becomes redundant” (Bogdan & Biklen, 2007, p. 69).

The researcher used an informal conversational interview where “...questions emerge from the immediate context and are asked in the natural course of things...” (W. K. Kellogg Foundation, 2007, p. 76). Although one of the strengths of interviewing is that it yields a quantity of data quickly, interviews also require the researcher to be “skillful at personal interaction, question framing, and gentle probing for elaboration” (Marshall & Rossman, 2006, p. 102). Moreover, it is important for the researcher to gain trust and establish a rapport as the interviewees may have good reason not to be truthful or are uncomfortable in sharing information (Fontana & Frey, 2008; Marshal & Rossman, 2006). Fowler (1993) emphasizes that an advantage of personal interviewing is that it is probably one of the most effective ways of enlisting cooperation and building rapport, trust, and confidence. Because thoughts, feelings, beliefs, values, and assumptive words are involved, the researcher needs to understand the deeper perspectives that can be captured through face to face interaction (Marshall & Rossman, 2006).

Specific strengths of informal conversational interviews include the increase “...in the salience and relevance of questions” and “...the interview can be matched to individuals and circumstances” (W. K. Kellogg Foundation, 2007, p. 76). Thus, face-to-face interviews with participants were used with follow-up emails and phone calls to

some individuals when necessary. Since there were multiple individuals from each district, the interview protocol (see Appendix D) varied somewhat from respondent to respondent in order to create a better fit with the individual and the circumstances. In other words, the protocol questions were not presented in a rigid manner to all respondents.

For the case study, the researcher started the interview process with those in key positions in the district who were likely to be most knowledgeable about the cyber charter schools. These individuals included the superintendent, technology director, business manager, building principals, and curriculum director. As the leader of the district, interviewing the superintendent made sense as this individual had a firm grasp on the needs of the district. It was the superintendent who provided the vision and direction of the district. Likewise, the technology, building principals and curriculum directors provided both the direction and vision to each of their respective areas, lending even more clarity to in their areas of expertise. The business manager provided specific direction in terms of school finances, and the impact of cyber charter education on the district. It was hoped that these key respondents offered leads as to others in the district who were knowledgeable about these issues. Although the interviews began with this group of individuals, there were also follow-up interviews of key respondents as new information was gained in order to clarify or expand upon earlier information gathered. At the end of each interview, the researcher requested that the participant suggest other individuals who might be knowledgeable about this issue or who were actively involved in the decision process. This expanded the interview pool beyond the pre-identified individuals mentioned above.

The researcher made individual arrangements to meet with each interviewee at his or her convenience. During the interview, with each individual's permission, the researcher taped the session and took notes when applicable. Afterward, the researcher transcribed the audio recording onto a Word document, keeping the recording as backup. The materials were all stored in a locked, fireproof filing cabinet.

The documents that the researcher collected from Reynoldsville included a technology plan, enrollment figures, and the Cyber Academy book. The technology plan was a document for Reynoldsville that was part of the strategic plan for the district and included goals and strategies for incorporating technology within the district. The Cyber Academy book was a document that outlined Reynoldsville's Cyber Academy and included a description of the academy. Springfield also supplied enrollment numbers, a Cyber Academy booklet, and a *Terms of Agreement*. Like Reynoldsville, the Cyber Academy booklet for Springfield included a description of the Springfield Cyber Academy. The *Terms of Agreement* for the Springfield Cyber Academy shared the expectations and other specifics in regard to the agreement between the district and the parent(s) of a Cyber Academy student. These documents helped to provide the groundwork for additional interview questions. For example, the Cyber Academy book specified equipment that was provided for students as well as what was expected of students enrolled by the district in respect to each district's Cyber Academy. For example, a question the researcher asked because of the Cyber Academy book dealt with the provider of the curriculum and the teacher of it. Likewise, these documents helped to provide guidance on the perceptions of the participants in the school districts about the

current role of cyber charter schools and the possible consequences of the rapid growth of this new form of schooling for their district.

Data Analysis

The researcher analyzed data from the interviews and documents. Marshall and Rossman (2006) emphasize that data analysis "...should provide the reader with a sense that the data will be recorded efficiently and managed in ways that allow for easy retrieval" (p. 151). Bogdan and Biklen (2007) note that although the data can be discovered inductively and presented deductively, the researcher "...must make a real effort to make sure he or she did not collect data to prove a point of view already held" (p. 210). Therefore, there are no pre-determined categories. The categories evolve or emerge as the data analysis proceeds.

Case Study Data

It is important to keep in mind that according to Babbie (2007) the act of analyzing qualitative data was as much an art as a science. Rist (1982) echoes this by stating that there "...are a variety of ways in which the analysis can be conducted and the frameworks within which the data can be organized" (p. 445). Rist also suggests "...that one ought to use the mode most appropriate to both the issue and the intended audience..." when determining how to best present the findings of qualitative research (p. 447). Kvale (1996) stresses the importance that "...before the first interviews in a study are undertaken, thought should have been given to how the interviews will be analyzed and how the findings will be verified and reported" (p. 126).

Data analysis proceeded in tandem with data collection. As interviews were completed and transcribed, analysis began. Coding was the first step in this data analysis. “The key process in the analysis of qualitative social research is coding—classifying or categorizing individual pieces of data—coupled with some type of retrieval system” (Babbie, 2007, p. 384). Merriam (1998) goes on to describe coding as creating designations that can be “...single words, letters, numbers, phrases, or combinations of these...” that identify information about the data (p. 164). As qualitative research is emergent, the data themes and categories “...become baskets or buckets into which segments of text are placed” (Marshall & Rossman, 2006, p. 159). From the interviews, the researcher will create categories that “...should reflect the purpose of the research, are exhaustive, mutually exclusive, sensitizing, and conceptually congruent” (Merriam, 1998, p. 184). Bogdan and Biklen (2007) share several types of coding categories that include: setting/context, defining situations, perspectives by subjects, subjects’ ways of thinking about people and objects, process, activity, event, strategy, relationship and social structure, narrative, and methods. Additionally, Creswell (2008) provides a model of the coding process from when the data were read, divided into segments, labeled by codes, and “...collapsed into themes” (p. 251).

For this study, the researcher established the themes and categories after analyzing the qualitative data from interviews and documents and attempted to code the information in a logical manner from each of the district results. The researcher coded the data from each district separately, essentially completing two single case studies. The researcher reviewed the transcribed interviews several times and coded results from each respondent. From this analysis, specific themes emerged from the data. After analyzing

each district separately by looking for emergent themes, the researcher then moved to a cross-case analysis of both case study districts. In the cross case analysis between both districts, the researcher again looked for both similarities and differences in the themes. Differences as well as similarities became evident. Documents were analyzed as a means of confirming or supporting what individuals stated in interviews. Document analysis also provided new data for analysis. Qualitative data that included interview responses and document analysis from this research were categorized and re-categorized based upon themes that will help "...to provide a report that yields a rich sense of understanding events and of having insight as to their meaning, or, more likely meanings" (Owens, 1982, p. 17).

Reliability and Validity

For case studies, the terms credibility and trustworthiness replace reliability and validity. McMillan (2008) defines credibility "...as the extent to which the data, data analysis and conclusions are believable and trustworthy" (p. 296). The goal of credibility is "...to demonstrate that the inquiry was conducted in such a manner as to ensure that the subject was appropriately identified and described" (Marshall & Rossman, 2006, p. 201). This case study ensured the perceptions of the cyber charter school were identified and described by interviewing multiple individuals at different levels within each of the districts.

Owens (1982) noted that a distinctive characteristic of qualitative research is that it aims to be trustworthy. Trustworthiness or reliability, as defined by McMillan (2008),

“...is the extent to which what is recorded as data is what actually occurred in the setting that was studied, as well as whether interpretations and conclusions are accurate” (p. 297). Lincoln and Guba (1985) add to this definition, emphasizing that “...an inquirer can persuade his or her audiences (including self) that the findings of an inquiry are worth paying attention to...by posing questions to the study regarding the truth value, applicability, consistency, and neutrality of the study” (p. 290). McMillan (2008) suggests use of member checking (where the participant verifies the researcher’s notes). In-depth analysis of data and abundant use of detail also help to enhance reliability. These were both used in this case study.

Creswell (2003) and Merriam (1998) recommend the use of data triangulation as it provides different data sources for information to help to show the accuracy of the findings. Marshall and Rossman (2006) define triangulation as the “...act of bringing more than once source of data to bear on a single point” (p. 202). With triangulation, this study will provide for a richer understanding by including data from a variety of sources, including the participant interviews and whatever documents are gathered. Triangulation can help to double or triple check results, thus providing greater strength in the findings. Thus, to ensure reliability, this case study involves “...triangulation of qualitative [data] (that) allows for multiple perspectives” by various individuals who work in school districts (Marshall & Rossman, 2006, p. 54). Stake (2005) adds to this noting that “...triangulation helps to identify different realities” (p. 454). The research questions in this study will require multiple perspectives. Moreover, Denzin and Lincoln (2008) suggest that triangulation provides for “...an attempt to secure an in-depth understanding of the phenomena in question (p. 7). “Triangulation has been generally considered a

process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation” (Stake, 2005, p. 454).

For this study, the researcher interviewed multiple respondents from both districts and utilized multiple document sources (Terms of Agreement from the Cyber Academy and Technology Plan, for example) from each district so as to provide multiple perspectives. Follow-up questions were employed not just during the interviews but also afterwards if new lines of inquiry emerged. Data were triangulated through multiple interviews at each site. Multiple perspectives provided by district leaders in two case study districts made for more reliable and verifiable results. In other words, each individual provided another perspective to help provide a better understanding of the research questions and, thus, more reliable data. Additionally, multiple document sources helped clarify respondents’ remarks and enhanced the researcher’s understanding. Hence, this provided a richer understanding in terms of district leaders’ current involvement as well as perceptions of cyber charters. This also provided for a better understanding of each district’s response to the cyber charter school challenge.

Limitations

Marshall and Rossman (2006) state that “limitations derive from the conceptual framework and the study’s design” (p. 42). Thus, this case only addressed the perceptions of district leaders in regard to the current role of cyber charter schools and the possible consequences of the rapid growth of this new form of schooling for their district. The fact that it is bounded in this specific context can create limitations in terms

of generalizability. As Stake (2006) emphasizes, case studies "...are usually studies of particularization more than generalization" (p. 8). Marshall and Rossman (2006) add that generalizing qualitative findings to other populations is seen as a limitation. This is because qualitative research findings cannot be generalized to a larger population. This study focused on two school districts and the results are not generalizable to other districts in Pennsylvania.

Another limitation in this study is one that Yin (1981) notes in terms of what is needed to improve the case study as a research strategy in general which is that data collection must cope with "...tension between the need for comparable procedures and the need to allow discretion to the investigator" (p. 110). This means that, although the researcher must adhere to the procedures and guidelines as set forth in this study in terms of interview questions, there may be conflict with additional information gained as the interview continues with the respondent. In other words, there may be a very interesting follow-up question that the researcher may ask that does not follow the interview schedule. In this case, the researcher should use discretion to decide whatever follow-up questions are necessary. Thus, the investigative process may lend itself to paths that veer away from original procedures. This may create tension between procedures and discretion of the investigator.

Summary

In sum, this was a qualitative study on a relatively new topic (cyber charter) that is continuing to evolve. Studies of cyber charter schools or on-line learning have only

emerged within the past decade. Although the concept of cyber charter schools is relatively new in comparison to that of traditional brick-and-mortar schools, there are other studies, for example, by Gray (2005) and Erb (2004) that have begun to address this new form of education. This study will add to this field of research as it proposes to compare the outcomes regarding the perceptions of district leaders (including superintendents, technology leaders, building principals, and curriculum directors, among others) about the current role of cyber charter schools and the possible consequences of the rapid growth of this new form of schooling for their district.

CHAPTER 4

FINDINGS

Introduction

The purpose of this study was to examine the perceptions of district leaders (i.e. superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives) in two Intermediate Unit 8 school districts about the role of cyber charter schools in their district.

The specific questions examined included:

- 1) What is the district's current involvement with cyber charter schools?
- 2) What perceptions do district leaders hold toward cyber charter schools that are favorable? What perceptions do district leaders hold toward cyber charter schools that are unfavorable?
- 3) How did each of the respondents characterize the response of the district to the cyber charter school challenge?

It is important to note that all district interviews took place after the Pennsylvania state budget for the 2011-2012 school year was proposed. The budget included devastating cuts to K-12 public education. On March 9, 2011, Governor Tom Corbett called for a \$1 billion cut in state spending for public schools, taking funding back to 2008-09 levels (Education Law Center, n.d.). This included the possible elimination of charter school reimbursement that districts receive when a student attends a cyber charter school. These proposed cuts in basic education subsidy were important because the return

to earlier state funding levels would most likely mean budget cuts of some sort for local school districts as well as possible tax increases. One of the purposes of basic education funding from the state is to help poorer school districts that do not have the local real estate value and earned income that wealthier school districts may have. Districts with higher aid ratios, as determined by real estate and earned income, receive a higher basic education subsidy (Pennsylvania School Code, 1979). Thus, rolling back the basic education subsidy in addition to eliminating cyber charter reimbursement might have skewed the participants' perception of cyber charter schools, at least in terms of financial impact. The budget was a topic discussed by respondents during the interviews and more than likely influenced participants' responses.

Next, it is important to note the growth in students attending cyber charter schools in Pennsylvania as well as those districts in the survey and the actual case study districts. Cyber charter school enrollment has increased substantially over the last few years (see Table 4.1). During the 2005-2006 school year, there were 12,604 cyber charter school students, five years later that number rose to 27,779 students. During the same time period, the population of K-12 students in Pennsylvania decreased by 2.7%.

Table 4.1. Cyber Charter School Enrollment in Pennsylvania

	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	% change 2005- 2011
Total students enrolled in Cyber Charter Schools	12,604	15,865	19,715	22,262	24,603	27,779	120.4%
Total Students	1,830,684	1,821,383	1,801,760	1,787,351	1,780,413	1,781,206	-2.7%
% of Students Enrolled in Cyber Charter Schools	0.65%	0.80%	0.93%	0.89%	1.07%	1.08%	65.83%

(PDE, 2012)

While the percentage of Pennsylvania students who are enrolled in cyber charter schools has increased dramatically over the last five years, the percentage of students in survey responding schools (1.64%) attending cyber charter schools is much higher than the proportion of cyber charter students in the state (1.08%) as described in Table 4.2.

Within the survey schools, those schools that were willing to participate in the case study had an even higher proportion of cyber charter students than those schools unwilling to participate in the case study and state overall.

Table 4.2. Student Involvement in Cyber Charter Schools in 2010-2011 Across the State, Surveyed Districts and Case Study Districts.

	Number of Total Students	Number of Students Enrolled in Cyber Charter	% of Students Enrolled in Cyber Charter Schools
Pennsylvania	1,781,206	27,779	1.08%
All Survey Respondents	38,811	635	1.64%
Survey Respondents Not Willing to Participate in Case Study	7,903	99	1.25%
Survey Respondents Willing to Participate in Case Study	30,908	536	1.73%
Case Study Schools	3,764	85	2.26%
			(PDE, 2012)

A single case study of each of the districts is first presented. The researcher used a pseudonym for the two case study districts. Additionally, the researcher used no identifiable individual names for district leaders or for interview responses or shared documents. Each case study opens with a brief description of the school district. Data were then analyzed using the research questions. Again, the first of these concerns is the district's involvement with cyber charter schools. The second focuses on the factors that participants perceived as influencing their perceptions (either favorably or unfavorably) toward cyber charter schools. Finally, the participants from each district share what they believe should be the district's response to the cyber charter school challenge.

After presenting the two individual case studies, a final cross-case analysis was completed looking across both districts for similarities and differences.

Description of Reynoldsville School District

Reynoldsville is a small rural school district located in south central Pennsylvania, part of the Intermediate Appalachia Unit 8. Its four schools serve two boroughs and three townships. There are two elementary schools (grades K-5) with one located in the town and one in the country. There is also one middle school (grades 6-8) and one high school (grades 9-12), both of which are also located in the town. Reynoldsville School District has an enrollment of 1,871 students and a total teaching staff of 125. The student population has decreased somewhat in the past five years, falling two percent since 2006. Currently, Reynoldsville has a market value/personal income (MV/PI) aid ratio of 0.60. To put this aid ratio into perspective, a very wealthy school district might have an aid ratio of 0.15 while a very poor school district could have an aid ratio as high as 0.70. Thus, the Reynoldsville aid ratio of 0.60 indicates a relatively poor school district.

As a rural district, Reynoldsville is comprised of mostly farming and a few small businesses as the main industries, which was described by the superintendent as “agribusiness, small manufacturing, and stuff.” In terms of demographics, there is a strong conservative base in the Reynoldsville district. This is especially prevalent in the agricultural area served by the country elementary school. This area is home to an old order Mennonite population in addition to a generally religiously conservative population, many of whom attend the same church. Possibly because of this, Reynoldsville has a number of students involved in home education (two percent) as well as a growing cyber charter population (currently two percent). With regard to ethnicity,

the district is homogenous with less than two percent of the population classified as other than “White (non-Hispanic).”

The Reynoldsville district currently operates with a budget of just over 20 million dollars and has one of the higher tax rates for the area. (It is important to keep in mind that the interviews for this study took place shortly after the new governor released his proposed budget in 2011.) The proposed state budget included drastic cuts to basic education and tension was in the air. For instance, prior to beginning the interviews, the superintendent was curious as to the possible teacher furloughs that the researcher’s own district might be contemplating, given the impact of the cuts to the basic education subsidy. Additionally, the superintendent implied that there was a strong possibility of a reduction in force at Reynoldsville.

The Reynoldsville district leaders interviewed for this study included: the superintendent, business manager, high school principal, middle school principal, two elementary principals, technology coordinator, teacher union representative, and a substitute teacher who was the Cyber Academy Advisor in the school district. Most of these respondents had spent the majority of their career, if not all of it, in the Reynoldsville District. For instance, the technology coordinator had returned to Reynoldsville from another school district where he had been a math teacher. Now in Reynoldsville, he was in charge of the district’s Cyber Academy. The business manager was in this sixth year as business manager after having been in another district and he was also responsible for transportation at Reynoldsville. Aside from a few years spent working for another district, the superintendent had spent his entire career at Reynoldsville, first in the capacity of a building principal and as the technology

coordinator prior to assuming his current position. The union president had been in the district for ten years as a science teacher and he was rumored to be working on his principal certification. The elementary principal for the school located in the country had served that school for six years and prior to that was a teacher at the elementary school in the town. The town elementary principal had previously been a teacher and was also responsible for running federal programs for the district. The middle school and high school principals were seasoned veterans with over a decade each in their respective positions. The Cyber Academy Advisor in the district also worked part-time as a substitute for the district.

Reynoldsville School District's Current Involvement with Cyber Charter Schools

In regard to current involvement with cyber charter schools, all respondents were aware that there was a concern with Reynoldsville students leaving for cyber charter schools. Additionally, all had been kept informed by the superintendent that this was a growing problem. According to the survey results, the number of students in the Reynoldsville School District leaving for a cyber charter school has shown a large increase across the past five years. Table 4.3 shows the year and number of students enrolled for that respective year.

Table 4.3. Reynoldsville's Previous Enrollment in Cyber Charter Schools

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
Number of Students Enrolled in Cyber	10	20	20	27	43
Total Students	1901	1814	1865	1844	1817
% of Students Enrolled in Cyber	0.53%	1.10%	1.07%	1.46%	2.37%

The 2010-2011 school year evidenced another increase in cyber charter enrollments with 43 students. This number nearly equaled the 46 students enrolled in home education¹.

Table 4.4 more specifically depicts the current involvement of the individual schools in the Reynoldsville District with cyber charter schools for the 2010-2011 school year. This was broken down by grade level, showing cyber charter enrollment in the elementary, middle and high schools. There appeared to be a fairly even spread of students attending cyber charter schools in grades 1-5, 6-8, and 9-12 and that these students were scattered across six of the eleven cyber charter offerings in Pennsylvania.

¹ It is important to note that home education does not involve a direct cost to the district while the cyber charter school enrollment does.

Table 4.4 Cyber Charter Involvement for Reynoldsville School District in the 2010-2011 School Year

	Cyber Charter School Enrollment						Total
	Agora	PA Leadership	CPDLF*	PA Cyber	Commonwealth Connections	PA Virtual	
Kindergarten			1	3		1	5
Grades 1-5	1		3	3	2	4	13
Grades 6-8		1	2	6	1	2	12
Grades 9-12		1	5	4	1	2	13
Total	1	2	11	16	4	9	43

*Central Pennsylvania Digital Learning Foundation

All the respondents interviewed indicated that they were well aware that Reynoldsville students were leaving for cyber charter schools, and that this migration was a growing concern for the district. Respondents identified both the business manager and superintendent as having the best grasp on the specifics of the cyber charter school situation, including both the numbers of students attending cyber charters as well as the impact on the Reynoldsville District. As the business manager noted,

Last year we were at \$202,440.00 (for cyber charters). That's been growing and the fact (is) that it's significantly more money next year because I know we will have more kids going to cyber charters schools and if that trend continues, I must have more money set aside for that next year.

The superintendent explained that the increase in students attending cyber charter schools has been a growing problem in Reynoldsville for years and that he had been involved in “the initial efforts of distance learning and blended schools” in the district. The concept of blended learning was mentioned by many of the district leaders and appeared to involve a combination of traditional teacher lead classrooms incorporated with some

online course offerings in the form of single cyber courses. Even the elementary principal of the school located in the town, who said that cyber charters did not directly impact her as she had no students enrolled, was aware that cyber charter enrollment was a growing problem. The technology coordinator who ran the district's Cyber Academy commented that "we've seen more and more students enrolling in the outside cyber schools. I think even with the budget cuts, if we can get just a handful of those students (at cyber charter schools) back in our cyber school (academy) . . . I realize what the district is losing with every student who enrolls (in an outside cyber charter)." All the district leaders interviewed were aware of Reynoldsville's precarious position in relation to the cyber charter schools.

The Critical Factors that Influenced the Perceptions of the Cyber Charter Schools

Although respondents held both positive and negative perceptions of cyber charter schools, the negative views far outweighed the positive views. For instance, the strongest negative perception of cyber charters dealt with the financial impact of cyber charter schools as students left Reynoldsville and took their tuition with them. Additionally, cyber charters were perceived as academically weak in terms of credit requirements, skill deficiencies and PSSA scores. Also, cyber charter laws and regulations were often deemed as inequitable as respondents called for a level playing field. These negatives greatly outweighed the positives.

There were some positive perceptions of cyber charter schools. One positive perception of cyber charter schools was that they included accommodations for student

and parent beliefs. Some respondents saw cyber charter schools as an option for parents and students who had different beliefs (religious or importance of education) than many who attended the traditional brick-and-mortar school. Other respondents saw cyber charter schools as providing a more expansive curriculum for high school students, for example, in terms of course offerings. The perceptions, both negative and positive, are discussed in detail below.

Negative Perceptions of Cyber Charter Schools

Financial impact. Nearly all of the respondents commented on the financial impact of cyber charter schools as the most significant factor of why they viewed cyber charter schools unfavorably. This perception concerning financial impact was seen as twofold: first, in regard to the tuition paid by Reynoldsville to send students to cyber charter schools; and second, with regard to the maintenance costs of buildings that Reynoldsville had in comparison to cyber charter schools. Specifically, the business manager noted the cost to the district of increased student participation in the cyber charters.

...From my business chair, because of the financial impact, I know at least one family who moved (their) four children (to a cyber charter) and I think one of them was special needs. So when you're clicking it off at like \$7,700 a student or for special needs students about \$15,000 that could add up very quickly, so you really better budget for this coming year.

He also explained how, if the district does not voluntarily pay for tuition to the cyber charter school, the amount is simply taken out of the basic education subsidy that

Reynoldsville receives each year from the state. The business manager also noted the difficulties in budgeting for each year as the expenses budgeted for cyber charters can be far off the mark as traditional students may unexpectedly opt for a cyber charter school.

The superintendent also noted the financial impact, commenting

No one would have ever predicted the funding. They (cyber charters) are really able to pocket profits where it does not cost them anywhere near that amount to provide such educational services. We (traditional brick-and-mortar schools) are not paying what I would call a realistic cost (to cyber charter schools) and the reimbursement from the state is relatively small.

The superintendent also noted that with the new proposed budget, the relatively small reimbursement from the state would vanish completely. Cyber charter schools receive the tuition allotment based on average daily membership (ADM) for each student of that school district. Thus, if a student left Reynoldsville for a cyber charter school, the ADM amount went with the student. In the past, the district was reimbursed partially by the state for a percentage of cyber charter expenditures. However, the concern was now that the new governor's budget would eliminate this reimbursement completely. In fact, the Reynoldsville superintendent believed this was a given—"Before (the release of the governor's proposed budget) we got 25% charter school reimbursement, now, I am getting nothing in return for a child going to a cyber charter school." He added that "they (the state) really need to throttle back how much tuition payment is going (to cyber charters) because you can't have a Midland PA Cyber Charter building a twenty-million dollar Arts Center that is fully funded by (traditional) public school funding tuition."

In addition, respondents noted that since courses are delivered virtually, cyber charters do not have all of the building costs in terms of heating, maintenance, and infrastructure that brick-and-mortar schools do. As the Cyber Academy part-time advisor commented, cyber charters do not have to deal “with the upkeep of buildings in oil and utilities and finances.” Thus, the financial impact of the cyber charters was seen as impacting districts on two fronts.

Academically weak. Another negative view held by many of the respondents concerned their perception that cyber charter schools are academically weak. This perception surfaced in comments relating to a number of topics including the form of credit requirements, skill deficiencies of students, and low PSSA scores. Several respondents noted that they based their perceptions on students who returned to the Reynoldsville School District after spending some time in a cyber charter. Among the participants there was general agreement that returning high school students were often deficient in the number of credits needed to graduate. In addition, some students attended cyber charter schools that had lower credit requirements for graduation, while others were allowed to skip entire grades. The technology coordinator emphatically stated that,

We found with a couple of different outside cyber charter schools that their programs vary greatly. We know they required fewer graduation requirements...as students would leave our school and may be able to graduate a year early because they (the cyber charter) would require 21 credits as opposed to our 27.

He also went on to say that “we’ve had some students who struggled with the curriculum (at Reynoldsville), gone to other cyber charters where they have graduated with honors.”

He related this with a mix of astonishment and indignation. Not only were there well-known instances of credit discrepancies, but respondents also noted that there were clear learning deficiencies as well. Respondents cited examples of how students left the public school for a cyber charter and then returned to the public school with a learning deficit – lacking certain skills and proficiencies. The superintendent noted specifically that elementary students often returned to the district from cyber charter schools lacking certain skills and students from the secondary school returned without having earned credits, putting them even further behind. As he noted,

Students lost that time (spent in a cyber charter). They have not achieved; they've lost that time. They have not earned credits in most cases if they are a secondary student. If it is an elementary student, there is no doubt that they are lacking in skill development, depending how long they have been in that situation (cyber charter). If they have a very poor cyber charter experience, the greater the deficits are when they come back. The greater the gap is when they return. People go to cyber, thinking, 'Hey, my kid (is attending a cyber charter school), it's just automatic. I can just (go to) work, let them (the student) do their thing (at a cyber charter), come back and see how they do.' You know its benign neglect in a lot of cases.

Many respondents believed the PSSA results of cyber charter schools were proof of the weak academic orientation. Although the district had not done an in-depth study of PSSA data to compare the district results to the cyber charter schools' results, the Reynoldsville superintendent argued that most students did worse on the PSSA after or while attending a cyber charter school.

We have six cyber charters (that our students attend), four of those six are either in corrective action (with regard to PSSA scores) or in school improvement. People are making some bad choices as far as I am concerned (in attending these cyber charter schools). They are going to schools that are not very well represented in the AYP contest and maybe their particular student may be doing better. I don't know that because I don't get progress reports on it. I just know the cyber charter school they are in is not doing well. I think that's a major issue...the accountability (in terms of the PSSA) that's being demanded of public education, that same accountability is not being met by the cyber charters and yet (legislators) continue to say, 'Well, gee whiz, if we just give them more money, they (cyber charters) will do better'. Well, you know, that's a criticism we (traditional brick-and-mortar schools) get. 'We give you more money but you are not doing better'. So, if it's a valid criticism for us, why isn't it a valid criticism of the cyber charter? It seems to me that there is a double standard being applied here.

Finally, regarding state testing requirements and specifically the PSSA, the union representative of Reynoldsville went on to assert (incorrectly) that, "I don't believe that they (cyber charters) do PSSA testing either so they are not held to the same guidelines that public education is." In spite of this misinformation, the general perception of the respondents was that cyber charters were ill-prepared to offer students an academically rigorous education.

Inequitable laws and regulations governing cyber charter regulation.

Respondents also noted that the laws and regulations governing cyber charter schools

were quite different from those applicable to traditional public schools. The superintendent referred to the inception of the charter school law in Pennsylvania and said, “I know firsthand how the original charter school laws in Pennsylvania never anticipated the technology evolving and cyber charter schools being able to have the breadth and the reach across the entire state like it (cyber charter) does right now.” The superintendent went on to cite the “paltry attendance” laws where the district of residence, in this case Reynoldsville, was required to enforce strict truancy laws for the cyber charter. Thus, if a student were deemed truant by a cyber charter school, it was Reynoldsville that had to follow the truancy law guidelines and prosecute the student.

There were also concerns regarding regulations about cyber charter schools and students with special needs. The union representative believed (again, incorrectly) that cyber charters did not have to deal with students with special needs; in other words, cyber charters could pick and choose what students they accepted. This participant’s perception regarding regulations and cyber charter schools, although incorrect, provided an additional rationale for viewing cyber charters unfavorably.

Other state regulations also affected participants’ perception of cyber charters. For example, there is a regulation stating that students who attended a cyber charter school in the district of residence may still participate in any extracurricular activity that the district of residence has, as long as the cyber charter school did not provide that also. Thus, a cyber charter school student who wished to participate on the Reynoldsville football team could, even though his tuition went elsewhere.² This inequity irritated some of the participants, especially the high school principal who noted that a student who

² Reynoldsville could charge the cyber charter school for participating, however.

attended a cyber charter wanted to attend the Reynoldsville senior prom, even though the student was not a student enrolled at Reynoldsville High. As he noted, every year “I get kids who want to go to the prom and I don’t like the idea that I have nothing to hold over them (in terms of discipline) if they misbehave.” The superintendent noted that brick-and-mortar schools could at least charge the cyber charter for student participation in the extra-curricular. The superintendent summarized all the participants’ perceptions best when he said that if there were “a classic level playing field with leveled regulations and the same financial incentive” for both cyber charters and traditional brick-and-mortar schools, district leaders would likely be more favorably disposed toward cyber charters.

Positive Perceptions of Cyber Charter Schools

Accommodating student/parent beliefs at the elementary level. A common factor that some district leaders of the Reynoldsville School District shared in regard to a favorable perception of cyber charters was the fact that they did provide a viable educational option for students. The participants were sometimes more specific, stating that some students might also use cyber charter schools as an option for religious reasons. This was mentioned most frequently by the elementary principal from the country school where there was a conservative, religious population base. This principal did have several students attending cyber charters and many families in the attendance areas of this school were religiously conservative. Some were Mennonites or belonged to churches that either supported home education or some alternative to a traditional brick-and-mortar public school, including cyber charter schools. The principal noted that this “significant ‘old order’ Mennonite population...have their own schools and some students are home

schooled. Some have switched to cyber.” Additionally she explained that beyond the Mennonites, there were a large number of students in the country school who attended a particular church and that many of these students were home-educated or attended cyber schools. She noted that

I don’t attend (the church) so I don’t know their doctrines or anything like that.

There seems to be a feeling among the parents (of these students) that they don’t want their students exposed to...I don’t want to say ‘evils’. I think there is more of a farming community mentality (in the country school) just that many more miles up the road (from the town school), which has more of an industrial mentality. I think that’s the difference. I taught (in the town school) and came here (the country school) and was struck (by the difference).

It is significant to note that all of Reynoldsville’s elementary cyber school students were from this country school. The town elementary school had none. Beyond the two elementary principals, other respondents also noted that cyber charter schools served as a religious option for students, even though they could not cite specific numbers as to how many students this might entail. However, it is also important to note that some district leaders thought that some of these individuals might be using religious reasons as an excuse for attending a cyber charter school. For example, the principal of the country school said that, “I haven’t had a real positive experience (with cyber charter schools). It’s very easy to say, ‘I am doing this for religious reasons’ to cover up maybe some other needs.”

Providing a more expansive curriculum for high school students. Another positive factor mentioned was the ability of a cyber charter to provide a more expansive

curriculum. A more expansive curriculum would help to meet the needs of students in the traditional public school. For instance, the business manager mentioned particular course offerings that the public schools might not be able to afford to offer, such as chemistry, but that were available online. He and the superintendent also noted that the district offered an online French course, saving the district extra expense in terms of hiring a full-time teacher, which would include wages and benefits. Reynoldsville's enrollment in French class did not warrant a full-time position so the superintendent found a cyber French course. Thus, the district could still provide a world language course as well as save money through a cyber course offering. Reynoldsville was doing this not only with French, but also with online driver's education course that all students could take as the district had eliminated on-site driver's education. At a cost of only forty-seven dollars per pupil, the superintendent was currently monitoring the progress of this new course in its first year. The high school principal cited the possibility of even adding Chinese as an online offering. The technology coordinator mentioned the possibility of providing Advanced Placement courses to students as a cyber offering in the future. Although the elementary principal from the country school was mostly negative in regard to cyber charter schools, even she acknowledged that "there may be some positives for students who have special needs that public schools cannot offer in curriculum, especially at the high school level." The high school principal added, "we [traditional brick-and-mortar] have to continue to do a good job and be creative and find out ways...what's the old educational saying--about making sure we have that in our tool box?"

Reynoldsville School District Response to the Cyber Charter School Challenge

District leaders in Reynoldsville School District emphasized the need to evolve, and become flexible in terms of technology offerings in the public school. As part of this, they also frequently mentioned the creation of their own internal cyber school as at least a partial response to the cyber charter challenge. In terms of flexibility and creating their own cyber school, respondents noted that Reynoldsville would need to learn from cyber charters and adopt the positive traits, making them part of their own district. Overall, they expressed a desire to take the best of what a cyber charter school offered and infuse this into Reynoldsville. The superintendent noted his long term goal was that eventually every student at Reynoldsville would graduate having taken at least one online class at the district. This was echoed in the Reynoldsville Educational Technology Plan, part of the district's strategic plan. The Reynoldsville Technology Plan stated the district's desire to improve technology through staff development that will "provide diverse and innovative incentives and mechanisms for teachers and staff to become skilled in technology." More specifically,

All teachers K-12 will continue to develop lessons that integrate technology concepts to enhance instruction and student learning to develop and implement technology competencies based on the state standards and the 21st Century Technology & Information Literate Student Model.

The superintendent welcomed the concept of cyber charters but stressed the need for flexibility as parents become "cyber commuters". He shared an experience when he was in a previous district noting that,

I took a break from the district (Reynoldsville) and in that (other) district it was even more prevalent. Bedford County has a very strong connection to what I call the Baltimore Washington corridor and you are seeing a lot of out migration. They love coming up here, this is a great place to live—the lifestyle, the recreational facilities, the real estate is affordable. My board president commuted to a Washington, DC physical location once a week and worked out of his home the remainder of the time. I think you will see a lot more of this work force development. With this there will be a greater demand for more flexible schooling options and that's what cyber charter offers.

Regarding flexibility, the superintendent explained that “our (Reynoldsville's) response is we need to develop our own capacity in the area (of online classes) and we need to expand on it.” The Reynoldsville School District was making every effort to evolve and, thus, be flexible and adapt to the changing technologies in education, including the challenges presented by cyber charter schools.

All interviewees believed that they were responding to the cyber charter school challenge by creating a district Cyber Academy that students could attend in lieu of enrolling in a cyber charter school. This was the fourth year of operation of the Reynoldsville Cyber Academy and included students K-12. Thus, there was an option for students at every grade level in Reynoldsville to attend the Cyber Academy full-time, part-time, or for single course enrollment. In other words, the entire Reynoldsville curriculum could be taken through the Cyber Academy. The enrollment figures are reflected in Table 4.3.

The technology coordinator who ran the Cyber Academy in the district also described how the district has been both proactive and reactive, saying that initially we were a little reactive because we did not do a lot of the work to start our own cyber school and the numbers of students enrolled in outside cyber charter schools grew very quickly and I think we went from having maybe a dozen [students] attending cyber charters and it jumped to almost 30 or more. He explained that the Cyber Academy had a substitute teacher whose role was to serve as the academic advisor for these students. The role of academic advisor of the Cyber Academy was to help and monitor the progress of students and be available to go to the home if necessary to work with the students.

The Cyber Academy supplied the computer, printer and scanner and reimbursement for Internet access. The curriculum was purchased from two providers, Blended School and Aventa. The most prevalent was Blended Schools which not only provided courses but also access to Blackboard, an online course management system that students were able to utilize both in the Cyber Academy and also in the traditional classroom. Course offerings (see Appendix E and Appendix F) included the core subject areas for each grade level K-12, including math, science, social studies, and Language Arts/Reading. Additionally, electives included art, business education, family consumer sciences, music, physical education as well as world language at the secondary level as well as health at the elementary. All courses met Pennsylvania assessment anchors and academic standards.

The Cyber Academy advisor worked with the guidance counselor to schedule students for requested courses in the Academy. Additionally, the Cyber Academy

advisor worked closely with the Blended Schools teacher (who was a certified teacher in Pennsylvania) in helping the student to succeed. The teacher of record was employed by Blended Schools. The teacher would be different for each course depending of level (elementary or secondary) and content area of certification. The other online provider that included a certified teacher was Aventa, which concentrated on middle and high school offerings in the core areas of social studies, math, science and Language Arts. Both the Blended Schools teacher and the Aventa teacher were hired by private, for-profit online entities and were only available to those students enrolled in their curriculum. The Cyber Academy advisor was paid hourly for her work out of a separate account that the technology coordinator controlled.

The technology coordinator shared some of the enrollment figures (found in Table 4.5) relating to the Reynoldsville Cyber Academy since its inception. To be classified as a full-time student at the Cyber Academy, students did not attend the brick-and-mortar school in Reynoldsville at all. A part-time enrollee was a student who attended Reynoldsville for any part of the school day and then took courses at home on-line for the remainder of the day. Students were able to take one online class or more for the part-time enrollment. The single course enrollment was for students attending Reynoldsville brick-and-mortar while taking one online course. Single course enrollment included courses not currently taught by a traditional teacher or available to a student at Reynoldsville. Thus, with help from the guidance counselor, a student could choose among the entire course listing. The student could choose a course that was not currently available on the Reynoldsville class schedule. For example, during 2010-2011, some of the single course enrollments included French, AP European History, Latin II, AP

Spanish, AP Biology, and Spanish III. The summer school enrollment was for credit recovery or for students who wanted to take a course but were not able to do so during the regular school year.

Over the last four years, the Cyber Academy showed slow growth in terms of part-time and single course enrollment, although full-time enrollment in the Academy declined. However, given the small numbers involved, this decline could be attributable to variable local circumstances. The technology coordinator stated that he knew they would most likely never get all students to return from cyber charters, but they wanted to be able to simply slow the flow from Reynoldsville.

Table 4.5. Enrollment in Reynoldsville Cyber Academy

	2008-2009	Summer 2009	2009-2010	Summer 2010	2010-2011
Full-time Students	11		4		3
Part-time Students	2		1		7
Single Course Enrollment	6	11	18	17	20

The superintendent credited his experience as elementary principal and technology coordinator in assisting him to develop the foundation for the Cyber Academy.

My perspective has always been that we need to utilize and integrate technology and use it in as many blended learning experiences as possible, not just in cyber charters, but also offer the same resources to our own brick-and-mortar students.

Respondents agreed that it was too early to accurately assess the success of the Cyber Academy. The superintendent summarized the collective thoughts of other district leaders when he noted that the district was:

initially reactive as they started to see their enrollment decline and as much as we are trying to control the enrollment in cyber charters, they (the numbers) are increasing. I'd like to sit here and say that we started our own cyber school and we attacked and we were able to cut down (numbers going to cyber charters). What we have been able to do is maybe keep the increase down from maybe more than what it has been.

He went on to say that the Cyber Academy has been the district's most meaningful response to the cyber school challenge. He noted that today students, and parents for that matter, are no longer adverse to sharing with others that they attend a cyber charter school. Cyber charter schools have been accepted as an alternative means of education. As the superintendent explained,

it's easier to choose (cyber charters today) as there is no stigma attached to saying, 'My kid doesn't go to the school'. At one time it was almost like a secret. You reach a critical mass like home schooling...it has become mainstream and is no longer a big deal. It's an easy transition (to cyber charter school).

Many Reynoldsville district leaders were proud of the Cyber Academy and defined its creation in proactive terms. They also credited the superintendent's vision and leadership in establishing the Cyber Academy. Like many of the other district leaders, the high school principal believed that cyber charters would continue to grow and believed the district's reaction was proactive because

establishing what the superintendent has done as an opportunity for some students to combine the two of them (on-line and traditional) has been a real positive thing. You know again we still have people who go about it for the wrong reasons but they are not in too deep, they can still recover if it doesn't work out. Cyber schools are not for everybody.

Finally, although the interviewees overall were not favorable toward the cyber charter schools, all agreed that they were here to stay and would likely continue to grow, thus leaving a smaller role for the traditional brick-and-mortar public school. Perhaps the superintendent of the Reynoldsville School District put it best when he explained why districts need to have internal cyber schools like the Cyber Academy they had established. He compared cyber charter schools to Amazon.com, the on-line retail giant best known for selling books. He felt that as the workforce continues to become more digital, there will come a greater demand for more flexible schooling, and that is what cyber charters offer.

When Amazon began to take off and people were concerned that Wal-Mart – believe it or not they were saying—was going to have to start closing their doors, they are not going to be able to compete...with an online retailer that has become a juggernaut like Amazon and the truth is for what I call in that market, for general retail, people still want a certain bricks-and-mortar presence in their community. It's like groceries. You can buy groceries from Amazon but you still want to go to a grocery store. And I think we are going to be a little more like that. We (traditional public schools) are going to be the bricks-and-mortar presence. I am not sure that our footprint will be as large as it is now, but it will

still be here. But I think if we can't develop our own cyber charter options, our (traditional public schools) physical footprint will be smaller because we will lose students at a greater rate (to cyber charter schools).

Respondents agreed that the brick-and-mortar public schools need to become more flexible and/or create a cyber school internally as cyber charter schools will continue to grow and leave their mark in the future of education. According to the district leaders of Reynoldsville School District, without becoming more flexible and creating internal cyber schools within the traditional brick-and-mortars, public schooling, at least as we know it today, may not survive and cyber charters will only grow.

Description of Springfield School District

The Springfield School District is considered a rural district and is comprised mostly of a few businesses as well as some farms. In the words of the Springfield superintendent, the businesses of Springfield included "a few manufacturing firms and a high tech firm." While many people were employed locally, there were some who worked outside of Springfield and for them it is a bedroom community. Nestled in the rolling hills of the Intermediate Unit 8, Springfield School District is home to almost 1900 students. Springfield School District has an elementary school (grades K-5), a middle school (grades 6-8) and a high school (grades 9-12). All three buildings are in walking distance from one another, creating a small campus-like atmosphere. Additionally, the entire campus is located just a few minutes from the town.

With an aid ratio of .66, Springfield is considered a very poor school district. Regardless of aid ratio, Springfield had one of the lower tax rates in the IU8 area as well as the county. Although the student population had remained steady over the past several years, the superintendent shared that there did appear to be a promise of growth in the southern end of the district in terms of real estate as some newer, more expensive homes were slowly being constructed. There was hope that this development would eventually aid Springfield in terms of tax revenue.

During almost all interviews, respondents were concerned with the impact of the new governor's proposed 2011 budget on the school district. Governor Corbett's proposed budget included significant cuts to the basic education subsidy. In addition to these cuts, the budget also proposed the elimination of cyber charter reimbursement. Thus, some respondents were frustrated, unhappy, and even confused as to what the Springfield district would look like in the near future. The union representative, like many of the respondents, ran through all these emotions, and basically said that not much will be left of public education after the budget takes effect. As he noted, "I think that (the dismantling of public schools) will have the full blessing of your republican governor and legislature." There was a genuine concern about what would become of the students at Springfield as a result of the newly proposed budget. In short, there was a feeling of gloom and doom that respondents reflected throughout the interviews.

The individual district leaders interviewed for this study from Springfield included: superintendent, business manager, high school principal, middle school principal, elementary school principal, teacher union representative, network systems analyst, curriculum director, and the Springfield Cyber Academy Coordinator. The

Cyber Academy Coordinator had been with Springfield several years prior to serving in this capacity as he had been and continued to be a guidance counselor for the high school. The superintendent has spent his entire career in Springfield, first as a teacher and then moving into administration. The elementary principal and curriculum director had also spent their entire careers at Springfield, previously serving as a reading specialist and social studies teacher respectively. Both the middle and high school principal had spent time in other school districts. The high school principal was in his fourth year in the Springfield district while the middle school principal had come to Springfield nearly twenty years ago. The network systems analyst was in his sixth year while the union representative had been in the district for over two decades.

Springfield School District's Current Involvement with Cyber Charter Schools

All respondents had opinions regarding the district's involvement with cyber charter schools. Several of the respondents recognized that cyber charters were a growing issue for the district and believed they were at the forefront of addressing it. In the initial survey, Springfield indicated that the number of students attending cyber charter schools had "increased drastically" in the past five years. Table 4.6 specifically shows how the number of students attending cyber charter schools had grown in the past six years. There was a 30% increase in students leaving Springfield to attend cyber charters between the 2005-2006 school year and the 2009-2010 school year.

Table 4.6, Springfield's Previous Enrollment in Cyber Charter Schools

	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011
Number of Students Enrolled in Cyber	33	38	43	41	43	42
Total Students	1898	1860	1819	1804	1820	1804
% of Students Enrolled in Cyber	1.74%	2.04%	2.36%	2.26%	2.36%	2.33%

The data in Table 4.6 reflects Springfield's current involvement with cyber charter schools. As the table shows, forty-two students attended a cyber charter for the 2010-11 school year. Additionally, as shown in Table 4.7, the Springfield School District had students attending nine of the eleven cyber charter schools in the state, including 21st Century, Achievement House, Agora, PA Leadership, PA Learners On-line, Central Pennsylvania Digital Learning Foundation PA Cyber, Commonwealth Connections, and PA Virtual.

Table 4.7. Cyber Charter Involvement for Springfield School District in the 2010-2011 School Year

Cyber Charter	Kindergarten	Grades 1-5	Grades 6-8	Grades 9-12	Total Enrolled
21 st Century			1		1
Achievement House				2	2
Agora		3	2		5
PA Leadership	1	2		1	4
PA Learners On-line				1	1
CPDLF				1	1
PA Cyber	2	7	2		11
Commonwealth Connections		4	7	5	16
PA Virtual		1			1
Total	3	17	12	10	42

Some of the district leaders of Springfield, particularly those involved with the elementary school, commented on their current involvement with cyber charter schools with frustration as nearly half of the total students enrolled in cyber charter schools were from grades K- 5 (see Table 4.7). In several cases, the respondents noted that they never even had the opportunity to meet the students, as they were enrolled in a cyber charter school before they ever walked in the door at Springfield. The elementary principal shared how she phoned parents of those students enrolled in cyber charter schools to try to get them to return. She was especially concerned that she never had the chance to meet with these students and present an argument for remaining in the Springfield schools.

Several respondents noted that they believed that the decision for cyber charter school attendance rested with the parent(s) at the elementary level and with the student at the secondary. The curriculum director echoed this, as well as the business manager, who said that the large number of students attending cyber charters at the elementary were “parent driven. They don’t want to come here and I think we have a very high quality program. We have contacted these parents and tried to discuss it with them and we have tried to get information out so they can decide.” All district leaders were well aware of the growing concern about losing students to cyber charter schools. Individuals at Springfield’s middle and high school already had an “unofficial” process of trying to prevent students from leaving the district for cyber charter schools. For example, the Cyber Academy coordinator, who was also the guidance counselor at the high school noted,

As soon as someone (an employee) at the Springfield middle or high school gets wind of a kid who wants to leave to attend a cyber or a parent calls or if we see a

withdrawal form—as soon as that happens I sit with the other counselor and we talk to the parents, the kids and we ask ‘why’. Help us understand why, what’s the reason? Some kids we are able to discourage (from leaving for a cyber charter) by giving them a big picture of what it (cyber charter) is, what it entails. We also paint a picture for parents that is very real, very accurate -- that they are assuming a whole lot of responsibility. They are now acting as the teacher, the disciplinarian, and the motivator and the tutor and the problem solver. And (we) discourage them from taking this on.

Springfield’s current involvement with cyber charter schools are reflected in a myriad of responses, ranging from trying to get elementary students to return to the district to a process to thwart secondary students from leaving.

The Critical Factors that Influenced the Perceptions of District Leaders at Springfield

Respondents at Springfield School District shared many perceptions of cyber charter schools. Although most district leaders began with a negative perception of the financial cost to the district, they also cited other unfavorable perceptions of cyber charter schools. One of these perceptions included the sense of community. Several respondents did not perceive cyber charters schools as fostering a sense of community in students, something they deemed as important. Additionally, respondents noted that cyber charter schools had a less rigorous curriculum than Springfield. Several respondents also questioned the credibility of cyber charter schools in terms of student performance outcomes, supervision, as well as how outside institutions recognized them. However,

many respondents also noted that cyber charter schools appeared to provide a positive alternative environment that enabled some students to succeed.

Financial cost. Most of the respondents began by commenting on the financial cost to the district. The governor's 2011 proposed budget, released just before these interviews, included major cuts to basic education, and likely influenced these responses. For example, the superintendent, business manager and union representative all cited cost as a leading factor as to why they perceived cyber charter schools unfavorably. Every time a student left from Springfield to a cyber charter school, the tuition dollars, calculated by using the average daily membership (ADM), followed the student. This could happen at any time during the entire year. The superintendent noted that Springfield loses "\$8,000 for regular education and \$15,000 for special education," a fact also echoed by the business manager, who added,

I know how much money is going out to the cyber schools and how much we are spending for that. We don't have any control over the program or anything like that so I guess I get a negative perception from that. We have no choice as parents can pull a kid out for any reason at all without any rationale or providing us with any reason and then I have to go ahead spend the money. I have to pay no matter what!

Alluding to the Governor's proposed elimination of cyber charter reimbursement, the superintendent stated, "We were getting maybe \$0.27 for every dollar in reimbursement from the state for cyber charter schools." That was now probably gone. The teacher union representative also cited cost as a factor and reiterated the perceptions of most of the other district leaders, noting, "When we started getting into deep six figures when we

realized what we were losing...close to a half million. It's just the tipping point. How much bleeding can you have until you gotta go to the emergency room?" The teacher union representative continued, "I think we are in the hole about \$450,000 a year for students going to cyber charter schools." He went on, stating that he does not envy the superintendent's position because he has "to deal with the finances of all of the arms and legs that have to be cut off (traditional brick-and-mortar school)" to absorb the impact of cyber charters for funding. The superintendent, business manager and union representative, as well as most others, were very concerned about the financial cost to the district of students leaving for cyber charter schools. While cost was perceived as a negative factor, the respondents moved on to cite other negative and positive perceptions of cyber charter schools.

Sense of community. Many of the respondents at Springfield School District felt great pride in their school community. They saw the Springfield School District as being more than just academics and emphasized the importance of community in Springfield. An important facet of this sense of community resided in the interaction between adults and students within Springfield—something that cyber charters did not and could not offer. For example, the curriculum director noted,

when a student attends a cyber charter, they are removed from the brick-and-mortar altogether. They still remain in the community at large but they are removed from the school setting and that's not always a good thing for kids.

Some of the things kids learn about life and the future working world is in the brick-and-mortar...being responsible to peers and adults in a face-to-face manner

and some of those social interactions with other students...that kind of thing is intangible that the kids learn in small community settings.

This theme was taken up by the Cyber Academy coordinator, who passionately addressed this. He stressed the need for “face-to-face academic emotional support” and he questioned how cyber charters can deal with the,

challenging kids and I do not believe that the outside cyber (charters) can deal with that. We know the problems and issues the students have had. We know their life in the middle school and high school. We are able to get a feel for those kids...outside (cyber) charters don't. I don't think they really understand the kids for the last five or six years or even their families. There's no way that the receiving cyber school would have that information. I don't believe that outside cyber charter schools provided emotional support that was required in student's IEP's. The kids in other cyber charters did not like that they did not know who to talk to ...who was going to be their 'go to' person? With my background as a counselor, I see the importance of a 'connection' and they (cyber charters) don't provide that.

The need for community interaction was a genuine concern to many of the respondents and one that was perceived as lacking in cyber charters.

Curriculum lacking in rigor. Several respondents also perceived that cyber charters lacked a rigorous curriculum. They felt that students were not being appropriately challenged or were even bored with a cyber curriculum that was rarely interactive and not engaging by any means. They believed that the curriculum offered by

cyber charters did not address higher order thinking skills for students, or challenge them adequately. The union representative described the cyber charter curriculum as

an electronic page turner, which is what I have witnessed. A student becomes bored with it. You can predict the work. I don't feel strongly about the curriculum that they have set up because it is so lock-step, but it will probably appeal to the student and the parents of the student. Not appeal to them in a sense of taste or interest but it will appeal to them in that it is so regimented with true/false questions and fill in the blank questions, but it's not really getting them to think.

Although not a trained educator, the network system's analyst, who maintains and monitors the technical aspect of the Cyber Academy in addition to overseeing the technology of the district, reflected much of what other respondents voiced—that cyber charters are

not doing an adequate job. Children are spinning their wheels (with) low quality curriculum. The curriculum is mind-numbing after going through some of the demonstrations (from cyber charter schools). It is not high quality interactive material. It is just little more than PowerPoint slides.

Credibility of cyber charter schools. Closely linked to the perception of a lack of curricular rigor, several of the respondents also noted that they believed that the cyber charters were not credible institutions for learning. Credibility in this case was defined in terms of student performance on the PSSA as well as student acceptance in the United States Military. Several of the respondents noted that cyber charter schools were failing to meet the same performance standards (AYP) to which brick-and-mortar schools were

held. As the superintendent commented, “many (of the cyber charters) are not meeting AYP. A majority of our students that are attending cyber charters did not meet AYP.” He reiterated this point several times during the interview. There appeared to be a general unanimity among the respondents regarding this issue. The teacher union representative was the only respondent to acknowledge any cyber charter accomplishments in terms of PSSA, specifically citing one of the cyber charter schools.

I am trying to be objective in looking at the data too...to see if I can say anything positive about them in terms of achievement and I don't know what PA Cyber has going on but it is making AYP. Its proficiency rates are above the others. All the others are looking pretty dismal though, but I think it would bear studying what is going on with PA Cyber.

He also made reference to and suggested checking the AYP status of cyber charter schools available on the website at <http://paayp.emetric.net/>. Table 4.8 shows the results of the 2010 AYP proficiency levels.

Table 4.8. Cyber Charter Performance on the Pennsylvania State System of Assessment for 2010

Cyber Charter School	AYP Overall Proficiency Level 2010
21 st Century	Warning
Achievement House	Corrective Action I
Agora	Corrective Action II
PA Cyber	Made AYP
PA Distance Learning	Corrective Action II
PA Learners On-line	Corrective Action II (3 rd Year)
PA Virtual	Making Progress – Corrective Action I
Commonwealth Connections Academy	Corrective Action I
Susq-Cyber	Corrective Action II (2 nd Year)
Pennsylvania Leadership Charter School	Making Progress – Corrective Action I
Central Pennsylvania Digital Learning Foundation	Made AYP

Documents gathered from the district showed that it was noted in a presentation to the Springfield Board of Education in 2009, that “None of the (6) cyber charter schools being attended by students living in the Springfield School District achieved AYP targets in Reading and Math in 2008. Additionally, all six are in some form of school improvement.”

Also, in terms of the credibility of cyber charter schools, the superintendent noted how the United States Military did not recognize cyber charter schools as a valid institution from which to accept students. In fact, the United States Military would accept only a certain percentage of cyber school students. He went on to suggest that the United States Military has questioned the validity of cyber charters, saying,

they (the U.S. Military) accept about 10% of the recruits graduating from cyber charter schools and part of the reason is as we understand it public schools have structure and routine procedures that are followed in the military and the military is very much that way and they are queasy in terms of accepting too many [students] from cyber charter schools.

Finally, some respondents questioned the credibility of cyber charters in terms of who was truly monitoring the assignments being completed on the computer. In other words, how credible could cyber charters be if you really didn't know who was on the computer working? Echoing the sentiments of several respondents, the superintendent stated: "We question often times whether the student is on the computer. How do you know who is really doing the work on the other end of the computer?" There was no way to verify, other than a parent's word, who was actually doing the work or if there was any true learning occurring. This lack of monitoring and supervision was a serious concern and, in the respondents' views, challenged the credibility of cyber charter schools.

Alternative Environment. A perceived positive characteristic of cyber charter schools was that they provided an alternative environment for students to be successful. Although many respondents perceived cyber charters in a negative view as being a financial drain on the district, lacking in a sense of community, offering a questionable curriculum and lacking in credibility, several admitted that some students excelled in this different environment. Cyber charters represented an alternative placement for students (or parents) not happy attending Springfield. For instance, the union representative, also a track and field coach, noted this, when he shared how some students seem to flourish in the cyber charters. He shared an example of a student who had attended a cyber charter:

I got a phone message from a mother in the district of a student named Mike C. She wanted to know about how she could get papers for him to go out for track and field. He seemed like an articulate young man. The electronic page turner part of (the cyber charter school) appealed to him because he has the assignments right there in front of him. Mike feels like that's almost an umbilical cord that is something he needs. He doesn't want to cut himself loose from.

At least in this particular instance, the cyber charter seemed to provide an alternative environment for Mike that Springfield was not able to provide. Although the student participated on Springfield's track team, he attended a cyber charter school. Other respondents, such as the superintendent, noted cyber charters could serve as a viable environment for students who might not "fit" into the traditional brick-and-mortar model. He stated that some parents believed that the "environment (of public schools) isn't that appropriate or attractive because of the nature or personality of students." Respondents at Springfield did see a positive when it came to cyber charter schools in terms of providing a viable alternative environment for students.

Springfield School District Response to the Cyber Charter School Challenge

There were two responses commonly mentioned by respondents at Springfield with regard to the district's response to the cyber charter school challenge. The first concerned the creation of the Cyber Academy. The second focused on the integration of 21st Century teaching methods in hopes of directly competing with cyber charter schools. The greatest number of responses centered on the Cyber Academy that incorporates the

form of marketing and future integration of cyber-like-teaching methods within the traditional brick-and-mortar schools.

Springfield Cyber Academy

All respondents mentioned the creation of the Springfield Cyber Academy as the key response to the cyber charter schools in the district. Although only in its second year of operation, the Springfield Cyber Academy offers students either full-time enrollment where students took classes completely outside the brick-and-mortar, or part-time enrollment, where students partially enrolled in the brick-and-mortar and took Cyber Academy courses. The whole concept of the Cyber Academy at Springfield was fluid as it continued to evolve and was in its second year of existence. The part-time students of the Cyber Academy were either enrolled in the alternative education program for disruptive youth or a vocational school. The alternative education students took science and math through the Cyber Academy but in the building and received their other courses in a traditional format within the Springfield alternative education program. The vocational students attended the vocational school and received the core cyber courses at home. The part-time students shown in Table 4.4 for the 2009-2010 school year included two alternative education students (Springfield experimented with this for the first year) and part-time students shown for 2010-2011 school year included twelve students in alternative education with one student at vocational school. All students who took cyber courses outside the school were closely monitored and required to check in with the brick-and-mortar school on a weekly basis. The Cyber Academy Coordinator, noted that

We've had students try outside cyber programs (cyber charters) and they have come back to us and do our inside program and they meet with more success. We set up the weekly meetings with our kids and parents are certainly welcome to come and sit with us. We also try to talk about progress—what was working, what was not working. We make a big point for our cyber that (we) make a connection with students. I email kids daily, we talk on the phone, they come in (to school).

The district provided all equipment for the enrollee, reimbursed for Internet access and, according to the *Terms of Agreement* form the parent signed a statement stating that “I am accountable for my child’s attendance and I will check progress in each course through progress reports and regular meeting with the Cyber Academy Coordinator.”

The Cyber Academy Coordinator oversaw the entire academy and reported directly to the curriculum director. The Cyber Academy includes grades 9-12 with 15 students enrolled full-time in the 2009-2010 school year and 16 students enrolled full-time in the 2010-2011 school year. There were 2 students enrolled for the 2009-2010 school year and 13 students enrolled in the 2010-2011 school year. Thus, the numbers continued to grow for both full-time and part-time students in the Cyber Academy. The network systems analyst, who was also part of the team to assemble the Cyber Academy, said that they looked at the cyber charter failings and “looked at some of the gaps and said this is what we really need to do to address those factors and I think we put a pretty good program together internally...and benchmarking other cyber charters and trying to pick the best components of each.”

The business manager noted that there was an upfront cost of \$30,000 spent on the PLATO programs, which serve as the curriculum for the Cyber Academy. The Cyber Academy Coordinator assigned the student courses from the PLATO curriculum menu (see Appendix G). PLATO, a for profit entity, was chosen by the team of educators, which included the curriculum director, four core subject area teachers, the Cyber Academy Coordinator, the high school principal, and the network systems analyst. Springfield provides a certified teacher of record for each course. These teachers were paid a stipend of approximately \$250.00 per student per year that was prorated for the number of days the student was enrolled. Both the curriculum director and elementary principal highlighted the need for the Cyber Academy to expand to the elementary grades as the number of students lost to cyber charters in this area was noticeably large. Plans to expand the Cyber Academy to include the elementary grades were in progress.

Direct competition. Many of the interviewees noted the response to the cyber charter schools was not only the creation of an internal cyber school but also to engage in direct competition with cyber charters. The direct competition was to be in the form of public education marketing itself and integrating the teaching methods of cyber charters within Springfield School District. A commonly held perception among the respondents, and especially the superintendant, was that public education as a business was no longer going to be a monopoly as the push for cyber charter schools by the legislature coupled with the growing anti-public education mantra state-wide was becoming greater and greater. The respondents believed that public schools needed to adopt a business model, wherein public schools competed with cyber charters by emulating and integrating their teaching methods and by offering online courses. This was beyond the current

capabilities of the Cyber Academy at Springfield. This ambitious plan called for public schools to demonstrate that they, too, could provide a cyber education. Specifically, the superintendent said,

Politically, if you look at where the governor is now in the emphasis and redirection of money to them (cyber charters), I see them (cyber charters) becoming more competitive with the public schools and that puts us (public schools) in a position where we have to offer them alternative programs...and actually offer more online courses to the students rather than the teaching methods of the past.

Respondents also defined competition in terms of marketing. For example, the union representative noted that Springfield needed to market itself like cyber charters do - “We need to play this game a lot more shrewdly (by using) free advertising out front of the school (where people drive by), on billboards, on the scrollbar of the morning news.” He added, “We are all bleeding and it’s just a Band-Aid (Cyber Academy) on a large wound and we (Springfield) definitely have to market ourselves.” At least some of the respondents saw the need for direct competition in terms of both integrating teaching methods that reflected those of cyber charters and marketing the positives of Springfield School District to the community.

In a final reflection of what would remain of the public schools if we did not respond to cyber charter school challenge by competing or otherwise, the teacher union representative stated that,

There will be a public school in the county, like there is a county jail and a county hospital, both with substandard staffing, substandard services, whatever you can

provide at the county level. What will remain in our schools are kids who nobody else wants. Those who have no options. Those who have learning disabilities. Those who are misfits, recalcitrant, hoodlums, or just plain hopeless and poor. We will tend to those as is our duty and, those who can afford to will go elsewhere will do so and I think that will have the full blessing of your republican governor and legislature. We (public schools) will exist, we will exist in that capacity though with second rate services, minimal resources, and those who are better blessed will be at private schools and PA Cyber...and that will be public schooling. All the rest will be privatized by then. It's a bleak future.

This pessimistic assessment nonetheless was echoed by many of the respondents. If Springfield fails to make the appropriate adjustments, the future of the district may well be characterized by the union representative's gloomy prediction.

Springfield and Reynoldsville: A Cross-case Analysis

Several similarities in responses surfaced in a cross-case analysis between Springfield School District and Reynoldsville School District. Additionally, there are also some noticeable differences between the two districts. These are illustrated in Table 4.9. The similarities identified clustered around factors such as the demographics of the case study districts and information regarding cyber charter schools, financial impact, PSSA scores, and cyber academies. The differences appeared in responses relating to the cyber charter school challenge, sense of community, curriculum, skills and credit deficiencies. Additional differences between the two case study districts came to light as

Reynoldsville respondents cited laws and regulations as factors regarding their unfavorable perception of cyber charters. Although Springfield did not note laws and regulations, Springfield did mention marketing and teaching methods as a response to the cyber charter school challenge. Reynoldsville never mentioned this as a response.

Table 4.9. Cross Case Study Analysis

Reynoldsville	Springfield
Negative Perceptions of Cybers	Negative Perceptions of Cybers
- financial impact on district - curriculum – skill and credit deficiencies - Inequitable laws and regulations concerning truancy and extracurricular activities	- financial costs and concerns - curriculum lack rigor - students lose sense of community found in tradition schools - poor creditability – PSSA performance and military accepts very few cyber students
Positive Perceptions of Cybers	Positive Perceptions of Cybers
- accommodates student/parents beliefs at the elementary level - expansive curriculum for high school students	-provides alternative environment to those students whose nature and/or personality is not best suited to traditional public school environment
Responses to Cyber Challenge	Responses to Cyber Challenge
- Reynoldsville Cyber Academy	- informal process for keeping students - integrating teaching methods - market district to community - Springfield Cyber Academy

Similarities between Springfield and Reynoldsville

Not surprisingly, several similarities exist between the Springfield and Reynoldsville School Districts. These similarities began with shared general demographic characteristics in terms of poverty level and district size and extended to their cyber charter experiences in terms of increasing numbers of students being lost to cyber charters and perceptions of cyber charters. Both districts had leaders who were well aware of the growing cyber charter school challenge for their district. The superintendent and business manager of both districts were seen by the other respondents as having the best understanding of this cyber charter challenge. For these two individuals in their respective districts the challenges posed by cyber charters were immediate and very apparent in terms of declining enrollments and increased financial strain.

Respondents in the two districts also held a generally unfavorable view overall of cyber charters. Although the reasons varied somewhat, respondents in both districts had more negative than positive perceptions when it came to their view of cyber charter schools with the financial impact topping the list. Most likely, the issue of financial impact was given even more weight by respondents due to the release of the governor's proposed budget for 2011-2012. Reynoldsville and Springfield respondents recognized that for every student who left the district, the cyber charter schools received the allotment of tuition based upon the average daily membership (ADM). The union representative from Springfield put it well, noting, "It's just the tipping point. How much bleeding can you have until you gotta go to the emergency room?"

Although slightly different themes arose in each district, the overall intent seemed to be the same. For example, while Reynoldsville respondents noted that cyber charter schools were academically weak, Springfield questioned the credibility of cyber charter schools. The slight difference between the two themes rests with the fact that the credibility of cyber charter schools is a bit broader term as opposed to being academically weak. The comments from the respondents were likewise consistent concerning perceptions of cyber charters' dismal showing of PSSA scores and the general lack of academic rigor.

Finally, both districts responded to the cyber charter challenge by creating their own cyber schools or academies. The intent in both districts was to encourage students who had moved or were thinking of moving to a cyber charter to return to or remain in the district. While the two districts' cyber academies differed on some particulars, they were essentially the same with both offering an online curriculum that was indistinguishable from that offered in the brick-and-mortar schools.

Differences between Springfield and Reynoldsville

In spite of the overwhelming similarities between the two districts, there were some discernible differences. Perhaps the most obvious difference rested in the two districts overall approach to students leaving for cyber charter schools. Springfield had developed an informal but relatively aggressive game plan for persuading students to remain in their schools and not enroll in cyber charter schools at the onset. As soon as the Springfield Cyber Academy Coordinator heard that a student might be leaving Springfield, he and another counselor would sit down with the student and family to

counsel them about leaving the district. Meeting together with the parents and student, the Cyber Academy Coordinator would attempt to find out why the student wanted to leave Springfield. “Help us understand why, what’s the reason?” he would ask the student who wanted to leave. Additionally, at the elementary levels, Springfield tried to contact families with students already enrolled in a cyber charter and persuade them to return to the district. On the other hand, although Reynoldsville respondents, in spite of being very much aware of student exodus to cyber charters, were not nearly as assertive in trying to retain or to lure students back to the district. Reynoldsville had no organized tactical plan in place to do so.

This more aggressive stance of the Springfield district was reflected in more than their active involvement in student retention efforts. It was also reflected in their larger view of the role of schools and the schooling experience in building and contributing to a sense of community. Springfield respondents tended to stress that one of the deficits of cyber charters was a lack of community and that students who attended cyber charters would miss out on this important part of their education. The Springfield curriculum director noted the importance of community, highlighting what other respondents in the district also noted when she commented on the importance of students “being responsible to peers and adults in a face-to-face manner and some of those social interactions with other students...that kind of thing is intangible that the kids learn in a small community setting.”

Springfield respondents noted that the curriculum of cyber charters was lacking in rigor, subjecting students to a watered-down, PowerPoint-like, electronic page-turner curriculum. On the other hand, Reynoldsville respondents reflected not so much on the

curriculum itself but rather the skill deficiencies and credit requirements of cyber charters which, from their perspective, fell under the theme of cyber charters being academically weak.

Overall, the Reynoldsville respondents tended to focus on grievances they held with regard to cyber charters, noting few if any positive features. Several of the Reynoldsville respondents noted inequitable laws and regulations they believed favored cyber charter schools in comparison to the traditional brick-and-mortar schools. These inequitable laws and ineffective regulations were identified specifically in the areas of student attendance and truancy for cyber charters in comparison to public schools as well as in various extracurricular regulations public schools were held to that cyber charter schools were not. Springfield respondents, on the other hand, did not mention any of these perceived inequities.

A final area of difference concerned the districts' responses to the cyber charter school challenge. While both Springfield and Reynoldsville created in-house cyber options for students, Springfield again took a more aggressive stance in initiating a form of direct competition with cyber charters. Respondents at Springfield took a noticeably proactive stance and emphasized the need for the district to reach out to community, aggressively market itself, as well as integrate teaching methods of cyber charter schools within the Springfield School District. The Springfield superintendent noted that traditional schooling practices needed to be drastically changed and the driver of those changes should be the district and involved more than simply imitating cyber charters and duplicating their curriculum. As he noted, public schools are "in a position where we

have to offer them (students) alternative programs...and actually offer more online courses to the students rather than the teaching methods of the past.”

Each of the districts’ current involvement with cyber charter schools can be illustrated by their student enrollment in cyber charter schools as well as their strategies to keep students from leaving for cyber charters. Additionally, both Reynoldsville and Springfield respondents shared positive as well as negative perceptions regarding cyber charter schools. For instance, Reynoldsville noted negative perceptions of cyber charters, including financial impact, academic weakness, and inequitable laws and regulations. Reynoldsville also touched on positives such as accommodating student/parent beliefs at the elementary while providing a more expansive curriculum for high school students.

Some perceptions Springfield cited as negative included financial cost, no sense of community, a curriculum lacking in rigor, and lack of credibility in cyber charter schools. A positive noted by Springfield was the fact that cyber charters offered an alternative environment. Finally, the respondents from each district shared what they believed should be the district’s response to the cyber charter school challenge. Both Reynoldsville and Springfield had created their own internal cyber academy while Springfield also had realized the necessity to begin to market itself in addition to trying to keep students from leaving for cyber charters.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to examine the perceptions of district leaders (including superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives) in two Intermediate Unit 8 school districts about the role of cyber charter schools in their district.

The specific questions examined included:

- 1) What is the district's current involvement with cyber charter schools?
- 2) What perceptions do district leaders hold toward cyber charter schools that are favorable? What perceptions do district leaders hold toward cyber charter schools that are unfavorable?
- 3) How did each of the respondents characterize the response of the district to the cyber charter school challenge?

Two case study districts were selected after sending the survey to all thirty-five school districts located in the Intermediate Unit 8. The goal of using more than one district as a case study site was to gain wider perspectives on the topic at hand rather than that which would be provided by just one district. After analyzing the results from the survey, the researcher separated the surveys into two categories—one with districts agreeing to participate in the case study and the other with those districts not agreeing to participate. Then, the researcher chose districts that reported having the most students attending cyber charter schools from the district. Thus, from the returned surveys, the

researcher selected school districts based on depth of experience with cyber charter schools and the accessibility of the site. Reynoldsville and Springfield (both pseudonyms) were chosen as the case study districts. The researcher visited each site for interviews and collection of documents as well as continuing correspondence with follow up emails and telephone calls. Data analysis was done and completed first as single case studies, then a cross case analysis was performed.

Summary of Findings

In analyzing data from Springfield and Reynoldsville, respondents from each district provided a variety of perspectives regarding their perceptions of cyber charter schools.

Reynoldsville School District

In the Reynoldsville School District cyber charter school enrollment grew to 43 students for the 2010-2011 school year. All of the respondents were well aware of the growing concern over the number of students departing for cyber charter schools. Both the superintendent and business manager kept all the other district leaders abreast of current happenings regarding the cyber charter issue, even the elementary principal who had no students attending a cyber charter school.

There were several critical factors that influenced the perceptions of the respondents regarding cyber charter schools. One of these key factors related to the multiple financial impacts of cyber charters. Reynoldsville, like all other districts, not

only lost tuition money for each student who left for a cyber charter but also received no cyber charter reimbursement from the state. In addition, cyber charters did not have the costs associated with building maintenance, heating, and infrastructure repairs. The respondents also noted that cyber charters were academically weak in terms of PSSA results, credit requirements for graduation, and in teaching basic skills to students. In addition, respondents felt the current laws governing cyber charter schools were inequitable as compared to the rules and regulations governing traditional public schools. These inequities included concerns about truancy laws, rules regarding extra-curricular activities, and, although inaccurate, denial of admission to students with special needs to cyber charter schools. On a more positive note, the respondents did note that cyber charters did a good job of accommodating student and parent beliefs and preferences at the elementary level. This was evident as many religiously conservative families from the country elementary school utilized the cyber charter schools. As well, respondents noted that cyber charters could provide a more expansive curriculum for high school students, offering courses that traditional high schools may not be able to provide.

In terms of the response to the cyber charter school challenge, Reynoldsville respondents noted the creation of the Reynoldsville Cyber Academy. Offering both full-time and part-time enrollment, the Reynoldsville Cyber Academy represented a direct response to the massive exodus of students opting for cyber charter schools.

Springfield School District

Much like Reynoldsville, Springfield's current involvement with cyber charters is reflected in the number of students leaving the district for cyber charters. Over a five

year period, there has been a continuous exodus of students culminating in a total of 42 former Springfield students now being enrolled in a cyber charter for the 2010-2011 school year. Springfield has a significant population of elementary students attending cyber charters, many of whom never walked the halls of a traditional elementary school building.

Not surprisingly, the perceptions of district leaders from Springfield were mostly negative concerning cyber charters. Like the respondents from Reynoldsville, they noted the tuition lost in terms of financial cost with students leaving for cyber charters. In addition to this cost, respondents also noted concern over the elimination of cyber charter school reimbursement fees. There was a general feeling that cyber charters did not offer students a sense of being part of a community, an important fact cited by many of the district leaders. In addition, there was the general perception that the curriculum at cyber charter schools lacked rigor and was not engaging or interactive. Respondents did note that cyber charters offered an alternative environment for students who did not “fit” into the mold of the traditional public school.

In terms of Springfield’s response to the cyber charter school challenge, respondents noted the creation of the Springfield Cyber Academy. Additionally, Springfield respondents commented on the importance of directly competing with cyber charters through marketing and integrating the teaching methods of cyber charters within the District.

Conclusions

When analyzing these findings from Reynoldsville and Springfield, several conclusions can be drawn. First, the cyber revolution has brought significant challenges and lasting changes to traditional conceptions of schooling. Second, public schools appear to be generally ill-prepared to meet these new cyber charter challenges, relying more on reactive, imitative responses rather than proactive, innovative changes. Third, school leaders, on the whole, do not appear to perceive the cyber challenge as a major threat and are preoccupied with other issues they perceive as more immediate and pressing, e.g., state funding cuts.

Public Schools Are No Longer the Only Game in Town

The cyber revolution has brought significant challenges and lasting changes to traditional conceptions of schooling. Boyd (2003) asked “How did we get to the point that the once unthinkable—voucher plans, privatization, takeovers, and reconstitution – is not only thinkable but actually happening?” (p. 2). The unthinkable is happening in Pennsylvania in the form of cyber charter schools. It is worth noting Pennsylvania’s journey to this point. To begin, the cyber revolution in schooling can be defined in broad general terms with the growth of the Internet coupled with Pennsylvania charter law that helped to create cyber charter schools as a viable option for the traditional brick-and-mortar student. These changes wrought by the cyber revolution first stemmed from the world-wide growth in technology and the Internet. The introduction and rapid establishment of the World Wide Web changed the educational landscape exponentially,

as Hassard and Dias (2009) stated, "...making learning of all kinds at any level a practical reality for all people, not only in the U.S., but also all around the world" (p. 485). Many of the district leaders from both Reynoldsville and Springfield realized this after increasing numbers of students left their district for cyber charter schools. It was as if the cyber revolution transformed the world while the traditional method of schooling remained in one place. Thus, the cyber revolution on a global scale brought significant challenges and lasting changes to local schools by introducing a new, market-based orientation to public education.

As the World Wide Web became commonplace and readily accepted, it forced a shift wherein education began a move from a focus on preparing students for the basics of participation in an industrialized society to a far less well-defined role and participation in a global, technologically driven 21st century. Thus, students were in need of skills necessary to survive in a global economy and traditional schools needed to prepare students for the 21st century. As globalization continued to take hold, Boyd (2000) noted that "...many of the traditional boundaries between the world of public organizations and the world market and non-public organizations were breaking down" (p. 243). Technology has forever changed the traditional classroom as many of the district leaders from Reynoldsville and Springfield readily admit. In fact the superintendents from both districts alluded to this. Computers are now considered a necessity as educators grapple with ways to address the demands of 21st century learning and to prepare students for a global economy. The U.S. Department of Education Office of Innovation and Improvement (2007) noted that "today's global economy has created a high demand for intellectually strong workers, capable of solving complex problems and

developing innovative services and products” (p. 2). Additionally, Boyd (2000) stated that “public schools are being challenged to educate the masses, not just the elite, to much higher skill levels than in the past” (p. 229).

In Pennsylvania, the cyber revolution presents a paradigm shift from the traditional conception of schooling, thus creating both a change and a challenge for traditional public schools in terms of school choice, as students now can simply decide to pick up and leave the traditional public school and attend any of the eleven cyber charter school offerings throughout the state. Christensen, Horn and Johnson’s *Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns* (2008) addresses how this disruptive innovation has “...reached into the mainstream in the form of virtual chartered schools, perhaps most notably in Colorado and Pennsylvania” (p. 104). The introduction of these “disruptive innovations” is illustrated in both the Reynoldsville and Springfield districts. Thus, the introduction of cyber charters represents a real change for traditional public schooling. Traditional public schools no longer hold a monopoly on public education options. Students and parents may choose to go elsewhere and receive a curriculum delivered in an entirely different venue that is not restricted by bell schedules, course availability, or who is qualified locally to teach a course.

The most visible evidence of the cyber charter school challenge is found in the enrollment statistics of both districts that show a steady progression of students leaving for cyber charter schools. This supports Huerta and Gonzalez’s (2006) assertion that cyber charter schools “...are quietly gaining momentum across the country and have begun to challenge traditional definitions of public schooling by delivering instruction

from beyond the classroom walls of traditional ‘brick-and-mortar’ school houses” (p. 104). No longer is there a need for a teacher in front of the room leading students through a lesson. Nor is there a need to follow routine schedules. Instead, teachers can be in another state, time zone, or country and interact in real or delayed time. Additionally, there no longer is a one-size-fits-all curriculum, but rather a plethora of curricula from which students may choose. The appeal of this kind of freedom from the normal constrictions and requirements of a brick-and-mortar education shows up in the out-migration of students from districts like Reynoldsville and Springfield.

As noted above, students in cyber schools have the flexibility to complete school work on their own time and not worry about bell schedules or other routines and are able to access course curriculums (like Mandarin Chinese or advanced placement courses) that were once considered out of reach, especially in small rural schools. With the advent of cyber charter schools and as traditional schools no longer enjoy monopoly status, competition and market-driven forces now need to be accounted for. Students and parents alike now have the flexibility to choose while schools need to anticipate the market and provide what the public wants. Boyd (2003) noted this when he stated that “with the increasing importance of education for the future success of their children, their (parents) expectation for quality and choice in services and goods within our market-driven society has created a basis for a ‘politics of excellence and choice in education’” (p. 7). The whole concept of taking courses from a cyber charter school can easily fall “...under the motto, any time, any place, any path, any pace” (Christensen et al, 2008, p. 96). Thanks to the revolution in technology and the introduction of cyber schools, large

buildings with classrooms no longer need to be heated, nor does transportation or breakfast and lunch need to be provided.

Overall, cyber charter schools and technology in general represent alternatives for filling curriculum gaps, flexibility in scheduling, credit recovery, convenience, and opportunities for individualized learning (Collins & Halverson, 2009; Rice, 2006; Tucker, 2007). Perhaps the cost for educating students is much less expensive in cyber charter schools, making this new form of education a more “...capital-intensive industry, one where technological innovation progresses as rapidly as other sectors of the economy...”, needing fewer teachers and employees and thus transforming education (Peterson, 2010, p. 232).

Meeting the Cyber Challenge?

Both of the school districts in this study appeared to be generally ill-prepared to meet these new challenges, relying more on reactive, imitative responses rather than proactive, innovative changes. As technology has taken hold and as attending cyber charter schools has become more accepted, the number of students attending cyber charters has grown. The responses of the two districts in this study were remarkably similar to these circumstances—both scrambled to create their own internal cyber academy that were largely mirror images of the cyber charters with whom they were competing for students.

In essence, the cyber academies were little more than another choice on the menu of cyber school options available for students with little to distinguish them from any of the other cyber charter options. Both districts relied on commercially prepared

curriculums readily available for purchase. There was little if any evidence of serious consideration of alternatives or of any attempts to identify and build upon unique programmatic strengths or “market” a distinctive alternative. Quite simply, there was no attempt at the kind of “reinventing,” as Boyd (2000) called it, from which new models of schooling might emerge. Instead, it appears that it is the cyber charters themselves that are leading the way and rethinking and creating new models of schools and systems. It can be argued that the reactive forces that drove both Reynoldsville and Springfield to create internal cyber academies were a result of cyber charters forcing changes to the traditional model of schooling. Although this was not genuinely innovative but rather responsive, the cyber charters did arguably act as a catalyst for at least some limited change in the otherwise traditional districts. Unfortunately, change is not necessarily improvement or reform. As can be seen in these two districts, the change initiated has largely been imitative and limited. Worse, such internal cyber academies developed within traditional districts place themselves at a distinct disadvantage by attempting to compete with the much nimbler cyber charters. The internal cyber academies are still bound by issues such as district requirements for credits needed for graduation attendance, etc. Thus, the academies appear to be a means to compete against cyber charters but largely on the cyber charter terms by using a commercially available cyber curriculum yet bound by traditional district requirements.

As Larry Rosen (2010) noted, there is a need for more traditional schools to become more technologically savvy. As he writes, the “...bottom line is that the educational system must develop new, technologically based models to replace the old textbook-based classroom” (p. 200). The initiatives to create imitative internal cyber

charters may be a first step in this direction but this is not likely to hold the answer for traditional brick-and-mortar public schools.

Preoccupied by Other Issues

Data from this study appeared to show that school leaders, on the whole, did not really perceive the cyber challenge as a major threat and were preoccupied with other issues they perceived as more immediate and pressing, e.g., state funding issues. During the interviews, respondents noted the impact of the proposed state budget in regard to basic education subsidy for both Reynoldsville and Springfield. The significant cuts proposed by Pennsylvania Governor Tom Corbett had district leaders scrambling to assess the potential impact on their school budgets. In fact, nearly all respondents from both Reynoldsville and Springfield commented on and alluded to the governor's new budget and linked this to the financial impact of sending students to cyber charter schools. Some of the respondent's comments were similar to those of Attorney General Jack Wagner of Pennsylvania who issued a report concluding that the current methods for funding cyber charter schools " ...are inequitable, inefficient, and bear no relationship to the actual cost of educating the students attending these schools" (Bureau of School Audits, 2010, p. 2).

Thus, the timing of this study may have influenced the data collected. Interviews with respondents came shortly after Governor Corbett released his proposed budget for the following school year. Under the proposed budget, the basic education subsidy for school districts that is provided by the state was to be drastically cut, leaving many cash-strapped school districts such as Springfield and Reynoldsville clamoring to find ways to

make up for already dwindling resources. The union representative from Reynoldsville reflected the feelings of many other respondents from both districts when he asked, “How much bleeding can you have until you gotta go to the emergency room?” He said this in recognition of the governor’s newly proposed budget and its impact on school funding in general. Because the newly proposed budget weighed heavily on so many respondents’ minds, they often first mentioned the financial impact of cyber charter schools before moving onto other perceptions of cyber charters.

Recommendations for Further Study

Several recommendations can be made after analyzing the findings from this study. These recommendations include the need for further research on the cyber challenge, including studies focused on identifying students most likely to opt for a cyber charter school, the need for districts to become better at self-promotion and marketing practices, further study of the financial impact of cyber charters on public school districts, and the need to create innovative responses that incorporate 21st century learning skills to better compete with cyber charter schools.

First of all, it is important to keep in mind that the findings reported here are based upon case studies from two school districts and, thus, are not generalizable beyond the two districts. Since both Springfield and Reynoldsville are considered to be relatively poor school districts, it may be very informative to study wealthier and larger school districts in regard to the impact of cyber charter schools. This could provide a wider perspective on the impact of cyber charters on districts. Along with this, it might be

worthwhile to seek out districts noted for their innovative approaches and practices and examine their approach to the cyber challenge.

The Springfield School District appeared to be engaged in an informal and limited tracking of those students displaying an interest in a cyber charter alternative. As noted in the case study, the Cyber Academy coordinator would receive word if a student wanted to leave for a cyber charter and would meet with the student and parent(s) to determine “why” and if the needs and concerns could first be met in the traditional school environment. If so, the student could be accepted into the Cyber Academy. Thus, investigating the underlying reasons why students want to leave for cyber charters and examining these data could help districts like Springfield and Reynoldsville in their efforts to retain students. However, more needs to be known as to the most effective means for accomplishing this.

Hargreaves (2003) noted that as the dissatisfaction with public education spreads, there will be an increase in market and choice-based solutions and schools. Therefore, districts need to become more savvy in terms of self-promotion and marketing practices. Districts will be facing increased competition from cyber charters and need to anticipate such situations and become well-versed in proactive marketing techniques in order to retain students. This could possibly be done relatively inexpensively through parent teacher organizations, school websites, and advertising during school functions and sporting events. For instance, if a district has strong test scores or offers co-curricular activities, schools should find various venues in which to share this information throughout the community. Furthermore, schools should seek to develop new innovative teaching methods to keep students engaged and interested in attending the traditional

brick-and-mortar schools. Utilizing technology and finding ways to creatively capture, engage, and maintain student interest in education is paramount.

On the policy front, lobbying efforts by representatives of public school groups and interests need to keep the issue of the financial impact of cyber charters on public school districts in front of the state legislature. Policy makers should consider reinstating reimbursement to districts for cyber charter schools. Prior to the recently proposed budget, the state government reimbursed brick-and-mortar schools for approximately twenty-five percent of each student's tuition. Reflecting a more realistic student cost per cyber charter school student, this helped to ease the impact of full tuition leaving the traditional brick-and-mortar school with each student who left for a cyber charter school. Thus, beyond the policy recommendation of reinstating reimbursement to districts for students attending cyber charter schools, policy makers should address the real cost of educating a cyber school student when calculating tuition for students attending cyber charters.

In addition, districts should seek proactive, innovative responses that incorporate 21st century learning skills so they can more readily compete with cyber charter schools. Currently, there are many allegations that "students are being poorly prepared for the needs of a knowledge-based 'information society'" (Boyd, 2003, p. 3). Districts need to offer a variety of curricula and provide a more blended approach to learning. Twenty-first century learning embraces technology as a significant tool in education while emphasizing the individual needs for each student. The world today is interconnected, thanks in large part to technology that knows no borders. Moreover, in today's society, traditional school districts must change in order to survive. Twenty-first century schools

need to adapt to “this constantly changing, self-creating informational society, (where) knowledge is a flexible, fluid, ever-expanding, and ever shifting resource” (Hargreaves, 2003, p.16).

Traditional school districts could benefit from following these recommendations as they may place them in a better position to survive the cyber charter school challenge. If these two case study districts are any indication of the larger response to cyber charters, then it appears that public school districts are generally ill-prepared to meet the new cyber charter challenges, relying on more reactive, imitative responses rather than proactive, innovative initiatives.

Cyber charters are the game changer in Pennsylvania. The fourth wave of Boyd’s (2000) reform where school choice gives “parents the ability to choose the school they felt best fitted their needs” has arrived. In Pennsylvania alone, the 120% increase in cyber charter students over the last five years stands in testament to cyber charter revolution. Pennsylvania students in big cities, rural areas and everywhere in between may choose to opt out of the traditional public school and enroll in any of the cyber charter schools, taking their tuition for that particular public school with them and, it would appear, more and more are opting to do just that. Like it or not, school choice in the form of the cyber charter school is now part of the educational landscape in the 21st century. Foresight, the ability to adapt and integrate technology is critical to the future and continued success of Pennsylvania’s traditional brick-and-mortar public schools—1,800,000 students are depending on it.

REFERENCES

- Ahn, J. (2011). Policy, technology, and practice in cyber charter schools: Framing the issues. *Teachers College Record*, 113(1), 1-15.
- Ahn, J. (2010, June 16). What's the controversy around cyber charter schools? *Teachers College Record*. Retrieved August 24, 2010 from <http://www.tcrecord.org/PrintContent.asp?ContentID=16018>.
- Archambault, L., Diamond, D., Coffey, M., Foures-Aalbu, D., Richardson, J., Zygouris-Coe, V., Brown, R., & Cavanaugh, C. (2010). *Research committee issues brief: An exploration of at-risk learners and online education*. iNACOL.
- Ash, K. (2009). Social skills of mainstream students in full-time, online public schools. *Education Week*, 28(33), 5.
- Babbie, E. (1990). *Survey research methods* (2nd ed.). Belmont, CA: Wadsworth.
- Babbie, E. (1998). *The practice of social research* (8th ed.). Belmont, CA: Wadsworth.
- Babbie, E. (2007). *The practice of social research* (11th ed.). Belmont, CA: Wadsworth.
- Berge, Z. L., & Clark, T. (2005). *Virtual schools: Planning for success*. NY: Teachers College, Columbia University.
- Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods* (5th ed.). New York: Pearson.
- Boyd, W. L. (2003). Public education's crisis of performance and legitimacy. In W. Boyd & D. Miretzky (Eds.), *American educational governance on trial: Change and challenges*. 102nd yearbook of the National Society for the Study of Education part 1 (pp. 1-19). Chicago: National Society for the Study of Education.

- Boyd, W. L. (2000). The r's of school reform and the politics of reforming or replacing public. *Journal of Educational Change*, 1(1), 225-252.
- Bureau of School Audits, Auditor General Jack Wagner. (2010, September). *Special report: The Commonwealth should revise its charter and cyber charter school funding mechanisms*, 1-19.
- Center for Education Reform. (2012, March 25). Retrieved March 25, 2012, from <http://www.edreform.com/issues/choice-charter-schools/facts/>
- Charter School Law, P.S. 24, PA Act 22, Senate Bill 123, (1997).
- CEDO National Charter School Study. (2011, April). *Charter School Performance in Pennsylvania*. Retrieved March 22, 2012, from http://credo.stanford.edu/reports/PA%20State%20Report_20110404_FINAL.pdf
- Cyber Charter School Law, PA Act 88, House Bill 4, (2002).
- Christensen, C. M., Horn, M. B., & Johnson, C. W. (2008). *Disrupting class: How disruptive innovation will change the way the world learns*. New York: McGraw Hill.
- Clark, T. (2001). *Virtual schools: Trends and issues*. Retrieved October 4, 2008, from http://www.wested.org/online_pubs/virtualschools.pdf
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Columbus, OH: Pearson.
- Cyber Charter Law, PA Act 88, House Bill 4, (2002).

- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2008). *Collecting and interpreting qualitative materials*. Thousand Oaks, CA: Sage Publishers.
- Dillman, D. A. (2007). *Mail and internet surveys: The tailored design method* (2nd ed.). Hoboken, NJ: John Wiley & Sons.
- Donmoyer, R., & Galloway, F. (2010). Reconsidering the utility of case study designs for researching school reform in a neo-scientific era: Insights from a multiyear, mixed-methods study. *Educational Administration*, 46 (1), 1-30.
- Donovan, W. (2012, March). *Regulating virtual schools: A new policy challenge*, No.83. Retrieved March 26, 2012, from http://pioneerinstitute.org/pdf/120301_RegulatingVirtualSchools.pdf
- Education Law Center. (n.d.) *Key facts about governor Corbett's education budget for 2011-2012*. Retrieved March 24, 2012, from http://www.elc-pa.org/pubs/downloads%202011/KeyFacts_CorbettEdBudget.pdf
- Ellis, K. (2008). Cyber charter school: Evolution, issues, and opportunities in funding and localized oversight. *Educational Horizons*, 86(3), 142-152.
- Erb, R. E. (2004). *From traditional public school to cyber charter: How parents decide*. Unpublished doctoral dissertation, The Pennsylvania State University.
- Estrin, J. (2009). *Closing the innovation gap: Reigniting the spark of creativity in a global economy*. New York: McGraw Hill.
- Fontana, A., & Frey, J. H. (2008). The interview: From neutral stance to political involvement. In N. K. Denzin & Y. S. Lincoln (Eds.), *Collecting and interpreting qualitative materials* (pp. 115-159). Thousand Oaks, CA: Sage Publications.
- Fowler, F., Jr. (1993). *Survey research methods*. Newbury Park, CA: Sage Publications.

- Gray, D. L. (2005). *Virtual high schools: A case study to explore why students, parents, and teachers choose this type of alternative education*. Unpublished doctoral dissertation, University of Denver.
- Hadderman, M. (2002). *School choice: Trends and issues*. College of Education: University of Michigan. (Eric Clearinghouse on Educational Management Service No. 472995)
- Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York: Teachers College Press.
- Hassard, J., & Dias, M. (2009). *The art of teaching science* (2nd ed.). New York: Routledge.
- Hoover Institution: Policy Review. (1998). *A nation still at risk*. Retrieved November 1, 2008, from <http://www.hoover.org/publications/policyreview/3563967.html>
- Huerta, L. A., d'Entremont, C., & Gonzalez, M. (2006, September). Cyber charter schools: Can accountability keep pace with innovation? *Phi Delta Kappan*, 88(1), 23-30.
- Johnson, B., & Turner, L. A. (2003). Data collection strategies in mixed methods research. In A. Tashakkor & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 297-319). Thousand Oaks, CA: Sage Publications.
- Klein, C. (2006). *Virtual charter schools and home schooling*. Youngstown, NY: Columbia Press.

- Klopfer, E., Osterweil, S., Grof, J., & Haas, J. (2009). *The education arcade: Using the technology of today, in the classroom today*. Retrieved March 26, 2012, from http://education.mit.edu/papers/GamesSimsSocNets_EdArcade.pdf
- Kowch, E. (2009, July/August). New capabilities for cyber charter school leadership: An emerging imperative for integrating educational technology and educational leadership knowledge. *TechTrends*, 53(4), 41-48.
- Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage Publications.
- Kvale, S., & Brinkman, S. (2009). *Interviews: Learning the craft of qualitative research interviewing*. Los Angeles: Sage Publications.
- Latchem C., & Insung, J. (2010). *Distance and blended learning in Asia*. New York: Routledge: Taylor and Francis Group.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newburg Park, CA: Sage Publications.
- Livoti, N. (2010, November). Beyond brick and mortar. *Central PA Magazine*, 24-27. Retrieved October 30, 2010 from <http://www.edreform.com/index.cfm?fuseAction=document&documentID=1001>
- Marshall, C., & Rossman, G. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage Publications.
- McMillan, J. H. (2008). *Educational research: Fundamentals for the consumer* (5th ed.). Boston, MA: Pearson Education.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education* (2nd ed.). San Francisco: Jossey-Bass.

- Merriam, S. B. (2002). *Qualitative research in practice: Examples for discussion and analysis* (1st ed.). San Francisco: Jossey-Bass.
- National Center for Education Statistics. (2007). *Charter school enrollment and closings by state: 2006-2007*. Retrieved October 23, 2008 from <http://nces.ed.gov/programs/statereform/ssscotab5.asp>
- National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform*. Washington, DC: U.S. Department of Education.
- National Forum on Education Statistics. (2006). *Forum guide to elementary/secondary virtual education* (NFES 2006-803). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- New Students are Logging in to Virtual Schools. (2006, December). *T H E Journal*, Retrieved October 13, 2008 from <http://thejournal.com/Articles/2006/12/01/Technology—Online—industry—Partnerships.aspx?Page=2>.
- Owens, R. G. (1982). Methodological rigor in naturalistic inquiry: Some issues and answers. *Educational Administration Quarterly*, 18(1), 1-21.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage Publications.
- Pennsylvania Coalition of Public Charter Schools. (2012). *What's a charter school?* Retrieved March 25, 2012, from <http://pacharters.org/why-charters/>

- Pennsylvania Department of Education. (2001). *Cyber Charter Schools Review*.
Retrieved October 23, 2008, from http://www.pde.state.pa.us/charter_schools/lib/charterschools/cybercsrevfinal.pdf
- Pennsylvania Department of Education. (2008). *Home education in Pennsylvania 2006-2007*. (2008). Retrieved November 1, 2008, from <http://www.pde.state.pa.us/k12statistics/lib/k12statistics/0607HEdEntr.pdf>
- Pennsylvania Department of Education. (2012). *Enrollment data and statistics*.
Retrieved March 21, 2012, from <http://www.education.state.pa.us/portal/server.pt/community/enrollment/7407>
- Pennsylvania Home School Law, P.L. 132, 169 (1988).
- Pennsylvania General Assembly. (2010). *House Resolution 592*. Retrieved September 26, 2010, from <http://www.legis.state.pa.us/CFDOCS/Legis/PN/Public/btCheck>.
- Pennsylvania School Code. (1979). *Computations 329.3*. Retrieved March 23, 2012, from <http://www.pacode.com/secure/data/022/chapter329/s329.3.html>.
- Peterson, P. E. (2010). *Saving schools: From Horace Mann to virtual learning*.
Cambridge, MA: Harvard University Press.
- Ray, B. (2008). *Research facts on homeschooling*. Retrieved November 1, 2008, from <http://www.nheri.org/content/view/199/>
- Reich, R. B. (1991). *The work of nations: Preparing ourselves for 21st century capitalism*. New York: Alfred A. Knopf, Inc.
- Research Advisors. (2006). Sample size table. Retrieved March 21, 2009, from <http://research-advisors.com/tools/SampleSize.htm>

- Rice, K. L. (2006). A comprehensive look at distance education in the k-12 context. *Journal of Research on Technology in Education*, 38(4), 425-448.
- Rist, R. C. (1982). On the application of ethnographic inquiry to education: Procedures and possibilities. *Journal of Research in Science Teaching*, 19(6), 439-450.
- Rosen, L. D., Ph.D. (2010). *Rewired: Understanding the i-generation and the way they learn*. New York, NY: Palgrave Macmillan.
- Salant, P., & Dillman, D. A. (1994). *How to conduct your own survey*. New York: John Wiley & Sons.
- Salsberry, T. (2010). K-12 virtual schools, accreditation, and leadership: What are the issues? *Educational Considerations*, 37(2), 14-17.
- Schomburg, G., & Rippeth, M. (2009, December). Rethinking virtual school. *Principal Leadership*, 32-36.
- Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage book of qualitative research* (pp. 443-466). Thousand Oaks, CA: Sage Publications.
- Stake, R. E. (2006). *Multiple case study analysis*. New York: Guilford Press.
- Trend, D. (2001). *Welcome to cyber school: Education at crossroads in the information age*. New York, NY: Rowman & Littlefield.
- Trotter, A. (2001, May). Cyber school. *Teacher Magazine*, 12(8), 34. Retrieved October 7, 2008, from Professional Development Collection database.
- Tucker, B. (2007). *Laboratories of reform: Virtual high schools and innovation in public education*. Retrieved September 8, 2010 from www.educationsector.org/usr_doc/Virtual_Schools.pdf

- Tyack, D., & Cuban, L. (1995). *Tinkering toward utopia: A century of public school reform*. Cambridge MA: Harvard University Press.
- United States Department of Education. (n.d.). *No child left behind*. Retrieved October 16, 2008 from <http://www.ed.gov/nclb/landing.jhtml>
- United States Department of Education Office of Educational Research and Improvement. (1998). *A Report from the national institute on student achievement, curriculum, and assessment. Charter schools: A state legislative update*, 1-4.
- United States Department of Education Office of Innovation and Improvement. (2007). *No child left behind: Connecting students to advanced courses online – innovations in education*. (WestEd).
- University of Western Michigan. (n.d.). *Chapter 6: Student and family characteristics*, 63-78. Retrieved October 18, 2008, from www.wmich.edu/evalctr/charter/pa_reports/chapter_6_student_family.pdf
- Virtual High School Commission, Act 61, House Bill 1067. (2008).
- Virtual School Forum Report. (2002). *A report on the virtual schools: A policy forum*. Denver, CO. Retrieved October 7, 2010, from http://www.inacol.org/research/docs/DenverVSF_FINAL.pdf
- Virtual School Meanderings. (2010, April 6). *Problem with cyber charter schools*. Retrieved October 30, 2010, from <http://virtualschoolingwordpress.com/2010/04/06/problem-with-cyber-charter-schools-panj-edition/>
- Watson, J. (2005). *Keeping pace with K-12 online learning: A review of state-level policy and practice*. Naperville, IL: Learning Point Associates.

- Watson, J., Gemin, B., Evergreen Education Group, & Coffey, M. (2010). *Promising practices in online learning: A parent's guide to choosing the right online program*. (iNACOL)
- W. K. Kellogg Foundation. (2007). *Evaluation handbook*. Battle Creek, MI.
- Weiss, C. H. (1995). The four "I's" of school reform; How interests, ideology, information, and institution affect teachers and principals. *Harvard Educational Review*, 65, 571-592.
- Wisconsin Legislative Reference Bureau. (1998, June). *Legislative briefs: Charter school expansion*. Retrieved October 29, 2008, from <http://www.legis.state.wi.us/lrb/pubs/Lb/98Lb10.pdf>
- Yin, R. K. (1981). Case study as a serious research strategy. *Knowledge*, 3(1), 97-114.
- Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Zimmer, R., Gill, B., Booker, K., Lavertu, S., Sass, T. R., & Witte, J. (2009). *Charter schools in eight states: Affects on achievement, attainment, integration and competition*. Retrieved March 26, 2012, from http://www.rand.org/content/dam/rand/pubs/monographs/2009/RAND_MG869.pdf
- Zucker, A. (2008). *Transforming schools with technology: How smart use of digital tools helps achieve six key education goals*. Cambridge, MA: Harvard Education Press.
- Zucker, A., & Kozma, R. (2003). *The virtual high school: Teaching generation v*. New York: Teachers College.

APPENDIX A

Letter to Participants/Survey

Norman J. Miller
4 Chester Road
Tyrone, PA

Participant District
District
Street Address
Town, PA

Dear _____,

Thank you in advance for agreeing to complete this brief survey. This survey represents a part of my dissertation research that examines the perceptions of district leaders (including superintendents, technology coordinators, curriculum specialists, etc.) in two Intermediate Unit 8 school districts about the role of cyber charter schools in their district.

The results of this survey will provide me with information as to which districts might be willing to participate as case study sites as well as inform the lines of inquiry that will be followed at these sites.

The survey will take less than 10 minutes to complete.

Again, I want to thank you in advance for your participation.

Sincerely,

Norman J. Miller
Work Telephone Number
Home Telephone Number
Email Address

Survey Questions for School District Individuals

1. What title best describes your position in the school district?
 - a. Superintendent
 - b. Assistant Superintendent
 - c. Business Manager
 - d. Curriculum Director
 - e. Technology Coordinator
 - f. Other (please specify)_____

2. How many years have you worked in your current position at the school district?
 - a. Less than 1 year
 - b. 1-5 years
 - c. 6-10 years
 - d. 11-15 years
 - e. 16-20 years
 - f. More than 20 years

3. The number of teachers in the entire school district is:
 - a. 1-50
 - b. 51-100
 - c. 101-150
 - d. 151-200
 - e. 200+

4. The student enrollment for the entire school district is:
 - a. Less than 500 students
 - b. Between 501 and 1000 students
 - c. Between 1001 and 2000 students
 - d. Between 2001 and 3000 students
 - e. Between 3001 and 4000 students
 - f. More than 4000 students

5. How many students does your district have enrolled in cyber charter schools?
 - a. 0-10 students
 - b. 11-20 students
 - c. 21-30 students
 - d. 31-40 students
 - e. 41+ students

6. In how many different cyber charter schools are students enrolled in your district?
 - a. 0-2
 - b. 3-5
 - c. 6-8
 - d. 9-11
7. How long have cyber charter schools been a presence in the district?
 - a. Not present at this time
 - b. 0-2 years
 - c. 3-5 years
 - d. 6-8 years
 - e. 9-11 years
 - f. 11+ years
8. The number of students leaving the school district to attend cyber charter schools in the past five years has:
 - a. Increased drastically
 - b. Increased moderately
 - c. Remained the same
 - d. Decreased moderately
 - e. Decreased drastically
 - f. None (there are no students attending cyber charter schools)
9. In a comparison between traditional brick-and-mortar and cyber charter schools for the overall quality of education offered, cyber charter education generally offers:
 - a. Better overall quality
 - b. Less overall quality
 - c. Equal overall quality
 - d. Not sure
10. Do you favor or oppose the current cyber charter schools as they exist in Pennsylvania?
 - a. Strongly Oppose
 - b. Oppose
 - c. Favor
 - d. Strongly favor
 - e. No opinion

11. Would you and your district be open to discussing participation as a case study site for this dissertation?

- a. Yes
- b. No

If yes, please sign below. Signing this in no way entails any obligation upon the district or the respondent to participate in further research.

(Signature) (Date)

(District)

Thank you for participating in this survey.

APPENDIX B

Letter to Participants (after contact with the Superintendent)

Norman J. Miller
Street Address
Hometown, PA

Participant District
District
Street Address
Town, PA

Dear _____,

Thank you for agreeing to be interviewed and provide documents on the topic: Perceptions of District Leaders of Cyber Charter Schools in the Commonwealth of Pennsylvania. This is an important topic, since the number of students attending cyber charter schools throughout Pennsylvania continues to grow and impact school districts.

In this study, I plan to interview school district leaders (i.e. superintendents, technology coordinators, curriculum specialists) in two Intermediate Unit 8 school districts about the role of cyber charter schools in their district.

The interview will take approximately thirty minutes. The interview will be Day, Date, and Time.

Attached you will find two copies of the informed consent form. It contains information, including confidentiality assurances. The Pennsylvania State University requires signed copies. Please return one copy on the interview date; the second copy is for your files. If you have any questions, please feel free to contact me.

I want to thank you in advance for your participation.

Sincerely,

Norman J. Miller
Work Telephone Number
Home Telephone Number
Email Address

APPENDIX C



Informed Consent Form for Social Science Research The Pennsylvania State University

Title of Project: District Leaders' Perceptions of Cyber Charter Schools

Principal Investigator: Norman J. Miller
4 Chester Road
Tyrone, PA 16686
Phone: 814-686-0338
Email: njm118@psu.edu

Advisor: Dr. Nona Prestine
Educational Leadership Program
Department of Education Policy Studies
Penn State University
204E Rackley Building
University Park, PA 16802

1. **Purpose of the Study:** The purpose of this study is to examine the perceptions of district leaders (including superintendents, technology coordinators, curriculum specialists, building principals, and teachers' union representatives) in two Intermediate Unit 8 school districts about the role of cyber charter schools in their district.
2. **Procedures to be followed:** If you agree to participate in this research, you will be asked to verbally answer interview questions related to the role of cyber charter schools in your district. Your responses, along with those from individuals from other school districts, will be used to help examine these perceptions regarding cyber charter schools. Written transcription as well as audio tape recording will be used. Additionally, if you agree to participate in this research, you will be asked to supply copies of documents to be analyzed. These documents include policies and various types of data which may include technology plans, policies on cyber charter schools and on-line courses, cyber charter school finances showing student enrollment, as well as board meeting minutes.
3. **Duration/Time:** Your participation in the interview will last approximately thirty minutes.

4. **Statement of Confidentiality:** Your participation in this research is confidential. The data will be stored and secured at 4 Chester Road in Tyrone, PA, in a locked file cabinet and on a computer that is password protected. The tapes and notes will be destroyed once the study has been completed, no later than 2012. In the event of a publication or presentation resulting from the research, no personally identifiable information will be shared. The only individual to have access to the data will be the researcher.
5. **Right to Ask Questions:** Please contact Norman Miller at (814) 686-0338 with questions or concerns about this study. Further questions may be directed to Dr. Nona Prestine at (814) 863-3762.
6. **Voluntary Participation:** Your decision to participate in this research is voluntary. You can stop at any time. You do not have to answer any questions you do not want to answer.

You must be 18 years of age or older to consent to take part in this research study. If you agree to take part in this research study and the information outlined above, please sign your name and indicate the date below.

You will be given a copy of this form for your records.

Participant Signature

Date

Person Obtaining Consent

Date

APPENDIX D

Interview Schedule

Name/Respondent _____

Address _____

Telephone # _____

Email _____

I. Introduction

a. Who am I (interviewer)?

- i. Norm Miller
- ii. Refer to Letter to Participants regarding both place of employment (AASD) and university (PSU)

b. Purpose of the Study

To examine the perceptions of district leaders (including superintendents, technology coordinators, curriculum specialists, etc.) in two Intermediate Unit 8 school districts about the role of cyber charter schools in their district.

c. Authorization

- i. Refer to Letter to Participants and consent forms (that should have previously been sent)
- ii. Refer to the Pennsylvania State University, Dr. Prestine as my advisor, and again the consent forms

d. Use of Information

- i. For what purpose is the information used – to complete the researcher's dissertation and provide greater insight in regard to the perceptions of district leaders in two Intermediate Unit 8 school districts about the role of cyber charter schools in their district.
- ii. Use of respondent's name and/or quotations
 1. The interview is a part of several interviews within this school district. The researcher will take some notes, record with electronic device and transcribe from the device
 2. No one will be identified by name or directly associated with quotations. All names will be coded with pseudonyms and numbers
 3. The study may employ some quotations to illustrate its observations, findings, or conclusions but names or direct association will not be utilized

4. The district's name will also be kept confidential and will only be alluded to through the use of a pseudonym.
 - e. Give reasons why the individual is being interviewed – to provide one of several different perspectives regarding the perceptions of district leaders about the role of cyber charter schools in their school district.
 - i. Key individual involved as a district employee
 - ii. Suggested to be interviewed by the superintendent and/or requested by researcher to provide a different perspective
- (PAUSE -- ANY QUESTIONS?)

II. Biographical and Other

Relevant history and background of the respondent – job title

1. How many years have you worked for the district in this capacity?

III. Central Open-ended Questions of the Study

1. Tell me about your perceptions of the current role or status of cyber charter schools in this district.

Also probe with questions aimed at determining the respondent's perceptions of the positive contributions of cyber charters as well as possible negative consequences.

2. In your opinion, what factors were especially relevant in contributing to this (perceptions of cyber charters)?

May need to probe with questions aimed at identifying both internal factors (within the district) and external factors (outside the district).

3. Would you characterize your district's response to the challenges of cyber charter schools as being proactive or reactive? Why?

4. Looking five years down the road, what do you see as the probable future of cyber charter schools in your district?

*It is important to note that the researcher will probe answers depending on the situation/circumstances, but will not be locked into a rigid protocol. Moreover, any more defined protocol will largely be site dependent.

Key Points to keep in mind

- Allow respondent to establish the agenda – not the interviewer
- Note the language of the system – jargon, key words
- Have the respondent operationalize the responses
 - Definitions (“What do you mean by...?”)
 - Examples (“Could you give me an example what you mean by...?”)
 - Differences (“How does _____ differ from what you experienced in another school or place?”)
 - Changes (Specific dates) (“Is it/was it different before or after a certain event?”)
 - Is...should (“Now, what do you think it should be like?”) Note: “Should” implies a value statement
 - Quotations (as examples of sentiments and values)
 - Places
 - Names (“What do you mean by ‘they’?”)

IV. Referrals

- a. Who are some other knowledgeable and informed persons who would be willing to assist in this study and perhaps be interviewed?
- b. Would you be willing to serve as reference for me to that person by either writing , calling, or allowing me to use your name on introduction?

V. Come-back or telephone contact for additional data needs or for information and clarification

VI. Follow-up letter of thanks

APPENDIX E

Letter of Thanks to Participants

Norman J. Miller
Street Address
Hometown, PA

Participant District
District
Street Address
Town, PA

Dear _____,

Thank you for agreeing to be (interviewed/document) on the topic: Perceptions of District Leaders of Cyber Charter Schools in the Commonwealth of Pennsylvania.

I greatly appreciate the time that you took out of your busy schedule to meet with me to answer questions regarding my research. If you should need to contact me for any reason, please feel free to do so.

Again, I thank you for your participation.

Sincerely,

Norman J. Miller

Work Telephone Number

Home Telephone Number

Email Address

APPENDIX F

Reynoldsville Cyber Academy Course Offerings from Blended Schools

NOTE: The guidance counselor and Cyber Academy Advisor would ultimately decide what course was applicable for each student based upon need as well as the course requested. These are online offerings of content identical to what would be offered in the classroom.

Language Arts/Reading

- KA, 1A, 2, PSSA Reading 3, 3, 4A, 4B, 5A, PSSA Reading 5, 6A, 7A, 7B, Grammar and Composition A, 8A, 8B, PSSA Reading 8, 9A, 9B, 10A, 10B, Communications, 11A, 11B, PSSA Reading 11, Creative Writing, English Language Learners 1, Journalism, 12A, 12B, Poetry, Advanced English Language, AP Literature and Composition A

Math

- KA, 1A, 2A, 2B, 3A, 3B, PSSA Math 3, 4A, 4B, 5A, 5B, PSSA 5 Math, 6A, 6B, Pre-Algebra A, Pre-Calculus B, Algebra 1 A, Algebra 1 B, PSSA Math 8, Consumer Math A, Geometry A, Geometry B, Math Essentials A, Math Essentials B, Algebra 2 A, Algebra 2 B, Functions, Statistics, and Trigonometry Part B, Functions, Stats and Trig A, PSSA 11 Math, AP Calculus AB A, AP Calculus AB B

Science

- KA, 1A, 2, 3A, 4A, 4B, Science 5 B, 5A, 6A, 6B, 7A, 7B, Science 8 A - Physical Science, Science 8 B - Physical Science, Earth and Space Science A, Earth and Space Science B, Environmental Science A, Environmental Science B, Biology 1 A, Biology 1 B, Everyday Chemistry A, Everyday Chemistry B, Anatomy and Physiology A, Anatomy and Physiology B, Biology 2 A, Chemistry A, Chemistry B, Physics A (w/ Trig), Physics B (w/ Trig), AP Biology, AP Chemistry

Social Studies

- KA, 1A, 2A, 2B, 3A, 3B, 4A, 4B, 5A, Social Studies 6 A, 6B, 7A, 7B, 8A, 8B, Macro Economics, Micro Economics, US History A, US History B, World History A, World History B, Psychology A, Sociology A, US History 2 A, US

History 2 B, Civics and Government A, Civics and Government B, AP United States History, AP US Government and Politics A, AP US Government and Politics B, AP World History

Art

- Digital Media A, Digital Media B, Art History, Studio Art

Business Education

- Business Law, Accounting 1, Personal Finance

Career Education

- Blackboard Portfolio, Career Explorations, Freshman Transition, Senior Studies

Computer Courses

- Digital Media A, Digital Media B, Middle School Technology, Blackboard Portfolio, Blackboard Student Orientation, Computer Applications A

Family Consumer Science

- Family Living

Guidance

- Blackboard Portfolio, Blackboard Student Orientation, Career Explorations, Freshman Transition, Senior Studies

Health

- Health Grade 2, Health Grade 3, Health Grade 4, Health Grade 5, Health Grade 6, Health Grade 9

Media

- Digital Media A, Digital Media B, Middle School Technology

Music

- Music Appreciation

Physical Education

- Middle School Physical Education A, Middle School Physical Education B, High School Physical Education

French

- French 1 A, French 1 B, French 2 A

German

- German 1 A, German 1 B

Italian

- Italian 1 A

Spanish

- Spanish 1 A, Spanish 1 B, Spanish 2 A, Spanish 2 B, Spanish 3 A

APPENDIX G

Reynoldsville Cyber Academy Course Offerings from Aventa

NOTE: The guidance counselor and Cyber Academy Advisor would ultimately decide what course was applicable for each student base upon need as well as the course requested. These are online offerings of content identical to what would be offered in the classroom.

<u>Math</u> <u>Algebra I</u> <u>Algebra II</u> <u>AP Calculus AB</u> <u>AP Statistics</u> <u>Calculus</u> <u>Consumer Math</u> <u>Credit Recovery Algebra I (E)</u> <u>Credit Recovery Algebra II</u> <u>Credit Recovery Geometry (E)</u> <u>Foundations Algebra I</u> <u>Foundations Geometry</u> <u>Geometry</u> <u>Integrated Math</u> <u>Pre-Algebra</u> <u>Pre-Calculus</u> <u>Trigonometry</u>	<u>Social Studies</u> <u>American Government</u> <u>American History</u> <u>AP European History</u> <u>AP Macroeconomics</u> <u>AP Microeconomics</u> <u>AP Psychology</u> <u>AP US Government</u> <u>AP US History</u> <u>AP World History</u> <u>Civics</u> <u>Contemporary World Issues</u> <u>Credit Recovery American Government</u> <u>Credit Recovery American History (E)</u> <u>Credit Recovery Economics</u> <u>Credit Recovery Geography (E)</u> <u>Credit Recovery World History (E)</u> <u>Economics</u> <u>Foundations American History</u> <u>Foundations Geography</u> <u>Foundations World History</u> <u>Geography</u> <u>Psychology</u> <u>Sociology</u> <u>World History</u>
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Science <u>AP Biology</u> <u>AP Chemistry</u> <u>AP Environmental Science</u> <u>AP Physics B</u> <u>Biology</u> <u>Chemistry</u> <u>Credit Recovery Biology (E)</u> <u>Credit Recovery Earth Science (E)</u> <u>Credit Recovery Physical Science (E)</u> <u>Earth Science</u> <u>Environmental Science</u> <u>Foundations Biology</u> <u>Foundations Earth Science</u> <u>Foundations Physical Science</u> <u>Physical Science</u> <u>Physics</u>	Language Arts <u>AP English Language</u> <u>AP English Literature</u> Creative Writing <u>Credit Recovery English I (E)</u> <u>Credit Recovery English II (E)</u> <u>Credit Recovery English III (E)</u> <u>Credit Recovery English IV (E)</u> <u>English I</u> <u>English II</u> <u>English III</u> <u>English IV</u> <u>Foundations English I</u> <u>Foundations English II</u> <u>Foundations English III</u> <u>Foundations English IV</u> <u>Grammar & Composition</u> <u>Journalism</u>
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World Language
AP French Language
AP Spanish Language
Credit Recovery Spanish I
French I
French II
French III
French IV
German I
German II
German III
German IV
Japanese I
Japanese II
Latin I
Latin II
Mandarin (Chinese) I
Mandarin (Chinese) II
Spanish I
Spanish II
Spanish III
Spanish IV

Appendix H

Springfield Cyber Academy Course Offerings from PLATO.

NOTE: The Cyber Academy Coordinator would ultimately decide what course was applicable for each student based upon need as well as the course requested. These are online offerings of content identical to what would be offered in the classroom.

Science • <u>Advanced Biology - AP Edition, Semester A/B</u> • <u>Advanced Chemistry - AP Edition, Semester A/B</u> • <u>Biology, Semester A/B</u> • <u>Chemistry, Semester A/B</u> • <u>Earth & Space Science, Semester A/B</u> • <u>Life Science, Semester A/B</u> • <u>Physical Science, Semester A/B</u> • <u>Physics, Semester A</u>	Social Studies • <u>Advanced History - AP Edition, Semester A/B</u> • <u>American History 1, Semester A/B</u> • <u>American History 2, Semester A/B</u> • <u>Civics, Semester A/B</u> • <u>Economics, Semester A/B</u> • <u>Geography, Semester A/B</u> • <u>U.S. Government, Semester A/B</u> • <u>World History, Semester A/B</u>
English • <u>Advanced English - AP Edition, Semester A/B</u> • <u>English 10, Semester A/B</u> • <u>English 11, Semester, A/B</u> • <u>English 12, Semester, A/B</u> • <u>English 9, Semester A/B</u> • <u>Writing Series</u>	Math • <u>Advanced Calculus - AP Edition, Semester A/B</u> • <u>Algebra 1, Semester A/B</u> • <u>Algebra 2, Semester A/B</u> • <u>Consumer Mathematics</u> • <u>Geometry, Semester A/B</u> • <u>Math Skills for Today</u> • <u>Pre-Algebra, Semester A/B</u> • <u>Precalculus, Semester A</u>

VITA
Norman J. Miller

EDUCATION

D.Ed., Educational Leadership, Pennsylvania State University, 2012

M.Ed., Master of Education in Educational Administration, Pennsylvania State University, 1999

Post Graduate work in Secondary English Education, Pennsylvania State University and Juniata College, 1992-1993

B.S., Business Management, Juniata College, 1990

CERTIFICATIONS

Pennsylvania State University, Letter of Eligibility for Superintendent, 2004

Pennsylvania State University, Principal's Certificate in Secondary and Elementary Education, 2000

Pennsylvania State University and Juniata College, post Graduate degree and certification in Secondary English education, 1993

EMPLOYMENT HISTORY

Assistant Superintendent of Secondary Education, Altoona Area School District, 2010-present

Chief Executive Officer, Central Pennsylvania Digital Learning Foundation, 2006-present

Director of Secondary Academics, Altoona Area School District, 2006-2010

Assistant Principal, Hollidaysburg Area High School, 2004-2006

Assistant Principal, Altoona Area High School, 2002-2004

Assistant Principal, Bellefonte Area High School, 2001-2002

Educator, English, Altoona Area High School, 1994-2001

Inventory Control Analyst, Paramount Pictures, Los Angeles, CA, 1990-1991

Adjunct Instructor, St. Francis University, 2008- present

Adjunct Instructor, Pennsylvania State University - Altoona Campus, 2009-present

PUBLICATIONS

Co-author *Curriculum Standards in English and Language Arts* for the Pennsylvania Association for Supervision and Curriculum Development

PROFESSIONAL ORGANIZATIONS

NAESP/PAESSP