

**A DESCRIPTIVE STUDY OF CYBER CHARTER SCHOOLS IN PENNSYLVANIA**

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The purpose of this descriptive, qualitative study was to explore what the cyber directors believed the present state of cyber schools in Pennsylvania to be and what were their views of cyber schools for the future. Through this investigation, the researcher analyzed the impact of the developments that are currently taking place in the cyber schools and across the state of Pennsylvania. The researcher interviewed nine of the eleven cyber charter school C.E.O.'s in regard to their cyber school and what the future holds for all cyber charter schools across the state.

Some of the major findings in the study appeared as three distinct themes. The C.E.O.'s use internal and external sources for professional development on a wide variety of topics, which differed from school to school. That there are statewide changes occurring that could affect cyber charter schools and the money that they receive per student. House Bill 446, if passed, would put a limit on the amount of money cyber charter schools receive for regular and special education students. Lastly, the C.E.O.'s foresee changes in traditional brick and mortar schools so that they can compete with cyber charter schools. Some of these changes could be an increase in the amount of technology used in brick and mortar schools or others such as the offering of online courses.

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## PREFACE

Writing one's dissertation is a life-changing event. This became even more life-changing for me as when I was half finished writing my dissertation, I was diagnosed with breast cancer. Both events have caused me to reevaluate my life. There are so many people to thank who have gotten me through both of these trials.

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the courage to believe in myself. I will deeply miss working with him on this, but hope we can keep in contact and remain friends.

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My parents—Margaret and Daniel Huffman and brother--Jeffrey have been wonderful through all of this. They have helped me to walk this path. Their willingness to provide unconditional understanding and never ending encouragement has allowed me to attain my dreams. We look back and laugh, as I was the girl who was afraid and didn't want to go to college, who is now finishing her doctorate. I am so happy my family is with me to witness this, as I am the first in my extended family to obtain my doctorate. Without my family I would not be the person I am today. There are no words that could begin to express my indebtedness for their love and care.

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For me, this journey really isn't ending. I will continue to battle any signs of cancer with radiation and take anti-cancer medications for years to come. I will now devote my time to researching and to becoming as healthy as I can to avoid a reoccurrence. As a true student and life long learner, I will continue to read and to grow in my personal and professional life. As difficult as these two obstacles have been to overcome, I am grateful for having experienced them both. Both have had their share of trial and tribulation, but I found many blessings along the way and for that I am thankful.

## 1.0 INTRODUCTION

*“We cannot assume that our schools will naturally drift toward using technology effectively. We must commit ourselves to staying the course and making the changes necessary to reach our goals of educating every child. These are ambitious goals, but they are goals worthy of a great nation such as ours. Together, we can use technology to ensure that no child is left behind.”*

*President George W. Bush* (Education 2004)Second paragraph.

## 1.1 INTRODUCTION TO STUDY

The No Child Left Behind Act (NCLB) of 2001 was signed into law by President Bush. This Act represents the President’s education reform plan and contains the most sweeping changes to the Elementary and Secondary Education Act (ESEA) since it was enacted in 1965. NCLB changes the federal government’s role in K-12 education by focusing on school success as measured by student achievement. The Act also contains the President’s four basic education reform principles:

- Stronger accountability for results
- Increased flexibility and local control

- Expanded options for parents
- An emphasis on teaching methods that have been proven to work (Education 2006).

After passing both chambers of Congress by large margins, NCLB survived a grueling conference committee process and became law January 8, 2002 (P.L. 107-110). In the end, the new law required (among many other things):

- All students be taught by “highly qualified” teachers
- All states devise “challenging,” “coherent and rigorous” academic standards
- All students be judged at least proficient on those standards within twelve years (that is, by school year 2013-14)
- This judgment be based on assessing all students annually in reading and math between grades three and eight, and again in high school, the results to be publicized via school “report cards” and vetted, through only informally, by mandatory participation on the National Assessment of Educational Progress (NAEP) in grades four and eight
- That a specified level of adequate yearly progress be achieved, not just overall but disaggregated by race, economic status, English proficiency, and disability
- Schools failing to make such progress be subject to a variety of corrective actions that escalate each year, ranging from technical assistance and the provision of publicly-funded supplemental services to intra-district school choice to the replacement of staff or curriculum to school restructuring.

Thus, while NCLB built on the progress many states had made toward defining and enforcing standards, it had a substantial independent impact. States were given flexibility to determine their standards and requirements for proficiency, subject to Department of Education

review, but nonetheless faced a good deal of work to revise their accountability systems. If nothing else, NCLB added additional tests, and made sure that the results of those assessments were clear, comparable, detailed and public. It increased the mandated proportion of students who must be proficient on those tests to 100%, where many states had aimed at 70 or 80 percent – and shortened the schedule for achieving that end. In Massachusetts, for example, state timetables had called for all students to reach proficiency by 2020; NCLB requires it by 2014. Penalties for failing to meet such benchmarks were more stringent than before, and methods for assisting (and sanctioning) schools more specific. In short, NCLB raised both the stakes for schools aiming to narrow gaps in student achievement, and the profile of the federal government in education policy generally (Rudalevige 2005).

With more accountability and pressure to change, many school reform models have come about in the last few years. Some of the school reform models are: America's Choice ((NCEE) 2005), High Schools that Work ((SREB) 2007), Success For All (Slavin 2005) and Center for Comprehensive School Reform Initiative (CSRI) (Associates 2005) just to name a few. However, one of the most significant changes occurred with technology. This technology gave rise to cyber schools. Currently, there are eleven cyber schools in the state of Pennsylvania alone, and approximately 17,000 students currently attend these schools (2007).Second paragraph.

## **1.2 STATEMENT OF THE PROBLEM**

The author realizes that there are multiple challenges that face cyber charter schools such as teacher evaluation, supervision, student academic performance, marketing and cyber charter

teacher professional development. However, the intent of this study is to analyze the present state of Pennsylvania's cyber schools and their current leader's beliefs about the future of their schools and cyber education in general. Therefore the statement of the problem is: What is the present state of cyber schools in Pennsylvania, and what are the leader's views of cyber schools in the future? This study seeks to answer the following questions:

1. What does the literature say about cyber education and the current state of cyber schools?
2. What do the leaders consider the present state of their cyber schools to be?
3. What developments are currently taking place in their schools and in the state of Pennsylvania?
4. What do the leaders foresee for the future of cyber education?

## **2.0 REVIEW OF LITERATURE**

Cyber education has been around since 1997 and the field is still relatively new. My interest in this subject has stemmed due to the fact that I am a cyber administrator, and therefore my study will look to answer the following questions:

1. What does the literature say about cyber education and the current state of cyber schools?
2. What do the leaders consider the present state of their cyber schools to be?
3. What developments are currently taking place in their schools and in the state of Pennsylvania?
4. What do the leaders foresee for the future of cyber education?

I will review the history of cyber education, what cyber charter schools are cyber educational models, the characteristics of cyber students, successful online students and the strengths and weaknesses of online learning to answer the above questions.

## 2.1 HISTORY OF CYBER EDUCATION

“...You cannot stop an idea whose time has come.” This quote by Victor Hugo exemplified the cyber school movement. Since the inception of public education, its format had changed little. Students would attend their local school building Monday through Friday for approximately six hours per day. The charter and cyber school educators caused a movement, which led educators to think differently to try to compete with this new non-traditional structure. The difference between charter schools and cyber charter schools is quite clear: charter schools are public schools in which the instruction takes place in a more traditional brick and mortar setting, while cyber charter schools are also public charter schools but the instruction takes place in a cyber (or computer-based) setting.

In 1991, programmers at the University of Minnesota created a cutting-edge tool called “Gopher” for obtaining information from the “Internet,” an obscure network of computers accessible only to academics, large corporations, and government agencies. Gopher changed forever how knowledge would be stored and shared. That same year, Minnesota passed the nation’s first charter school law, permitting the creation of institutions freed from the rules and regulations that were stifling innovation and hobbling education in traditional schools. A year later City Academy, the nation’s first charter school, opened in St. Paul, MN. That charter schools and the Internet would eventually merge was, it seemed inevitable (McClusky 2002).

The combination of the charter school combined with the Internet emerged in the state of Florida. Florida Virtual School (FLVS) was founded in 1997 and was the country’s first state-wide Internet-based public high school to offer this type of instructional delivery (School 2006). Florida Virtual School’s first year had 77 students enrolled in their middle and high



school courses, and in January of 2006, those numbers had risen to 50,000 students (Stern 2006). Since then, cyber charter schools have sprung up in many states such as Ohio, Colorado, Minnesota and New Jersey ; and across the world in such places Australia, Canada, China, Japan, and Mexico.

The Commonwealth of Pennsylvania was not far behind the state of Florida in creating cyber and cyber charter schools, as the Pennsylvania Legislature passed Act 22 in 1997 (Education). This bill outlined the process for establishing and maintaining charter schools, 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.” The bill went on to state: “Nothing in this clause shall preclude the use of computer and satellite linkages for delivering instruction to students.” The door was officially opened for the development of cyber charter schools. During the law’s first year of operation only six charters were granted, but expansion was rapid. By the 2003-04 school year, the number of charter schools had increased sixteen fold (Education 2004).

SusQ-Cyber Charter School was the first cyber charter to open in Pennsylvania. It served students located within one specific region served by the Central Susquehanna Intermediate Unit (Clark 2001). The intent was to serve, “highly motivated, independent learners” by using technology to deliver personal educational programs for students (General 2001). The Western Pennsylvania Cyber Charter School (WPCCS) was the first virtual school to enroll students from across the state in 1998 (Pickels 2004). Their success was immediate as students from all over Pennsylvania enrolled. Within two months of operation, the school increased its enrollment from 250 to over 500 students, surpassing the total student population of the Midland Borough District, where the school operated (Consulting 2001). Since then several

other cyber charter schools have opened, each established with approval of a local school board. Approximately 11% of all charter schools in Pennsylvania are cyber schools, the largest proportion in the nation (Education 2006). There are currently 113 Pennsylvania charter schools which serve more than 50,000 students (2001). In 2007, cyber enrollment alone topped over 20,000 students and has been growing 3,000 students per year for the last several years (2008).

## **2.2 WHAT ARE CYBER CHARTER SCHOOLS?**

In many ways, cyber charter schools are the same as more traditional brick and mortar schools. They are independent public schools sponsored by local or state educational organizations. The charter issuing authority monitors their quality and integrity, but they are otherwise free of traditional bureaucratic and regulatory control. A cyber charter school's success - and existence - is dependent on its meeting student achievement goals specified in its charter, and on effectively managing its financial and operational responsibilities.

Of all the traits shared by cyber and physical charter schools, however, the most important is that they are first and foremost accountable to parents and students, the consumers of their products. If they fail to meet their needs, they will cease to exist as their numbers would decline and cause the school to eventually close.

Of course, the differences between the charters are not inconsequential. While traditional charter schools are constrained by geography and can only serve limited areas, most cyber charters can be accessed at any time, from anywhere in the world. It is this freedom that is the source of cyber charters' greatest strength -- and greatest problems.

Another key to understanding cyber charter schools is to recognize that there is a difference between the schools and the curricula they offer. Cyber charter schools can offer multiple curricula or programs from which families can choose, whereas a site-based charter has only one. The Western Pennsylvania Cyber Charter School (WPCCS), for instance, offers not just one curricular choice, but four.

Also, though "cyber" is an integral part of their name, cyber charters often offer programs beyond just computer-based lessons. These can include physical education classes coordinated with organizations such as the YMCA; regular educational trips with teachers and other cyber charter students; and various extra-curricular activities (McCluskey 2002).

Finally, cyber charter schools differ from brick and mortar schools in their delivery of instruction. Online schooling can be either synchronous (with interactions happening live or in "real time") or asynchronous, as is more commonly the case, especially with courses offered across time zones. They can be scheduled to be completed during a common timeframe (e.g., a standard school semester) or be self-paced, with students completing a course when content mastery has been achieved (Fulton 2002). In the U.S., most virtual schools have courses begin and end within a common time frame. It has been estimated that 30,000 U.S. students have taken an online course (Ball 2001). More telling is that in the 2002 school year, 40,000 to 50,000 students were enrolled in online courses (Clark 2001). This has led some to estimate that in the year 2006, a majority of American high school students will have participated in online courses before graduating (Rose 2001).

### **Models of Cyber Education**

E-learning began at just about the same time that a computer was developed that was practical for personal use. In fact, the concept and practice of distance learning predates the computer era by almost 100 years. In England, in 1840, shorthand classes were being offered by correspondence courses through the mail. The improvements to the postal service made this method of distance learning popular in the early part of the last century. This led to a large number of “through the mail” type of educational programs (Aranda 2007).

The development of the E-learning revolution arose from a number of other “educational revolutions”. Four such revolutions cited by Billings and Moursund (1988) are:

the invention of reading and writing

the emergence of the profession of teacher/scholar

the development of moveable type (print technology)

the development of electronic technology

When discussing the “beginnings” of E-learning it is important to note that valid tools of E-learning include now somewhat overlooked technologies such as calculators, VCRs, radio and bulletin board systems (or BBS). Television, video recorders, and even radio have all made a contribution to distance learning. All of these developments have contributed to ideas concerning the uses of the E-learning systems. The computer only made distance learning easy and better (Chappelow 2005).

The history of e-learning stretches back into the mid 1980's where a few progressive institutions managed to adeptly incorporate the method into their curriculum. Over the years as technology progressed and the dependence on computers grew, newer and more efficient features turned E-Learning into a mainstream aspect of educational curriculums (Online 2007).

Windows 3.1, Macintosh, CD-ROMs and PowerPoint marked the technological advancement of the Multimedia Era. In an attempt to make training more transportable and visually engaging, courses were delivered via CD-ROM. The anytime, anywhere availability of CD-ROM also provided time and cost savings. Despite the benefits the CD-ROM courses lacked instructor interaction and dynamic presentation making the experience somewhat less than satisfying, slower and less engaging for students.

As the Web evolved, training providers began exploring how this new technology could improve training. The advent of email, Web browsers, HTML, media players, low fidelity streamed audio/video and simple Java began to change the face of multimedia training. Basic mentoring via email, intranet Computer Based Training (CBT ) with text and simple graphics, and Web-based training with low quality intermittent delivery Web costs emerged.

Technological advance including Java/IP network applications, rich streaming media, high-bandwidth access, and advance Web site design are revolutionizing the training industry. Today, live instructor led training (ILT) via the Web can be combined with real-time mentoring, improved learner services, and up-to-date, engaging "born on the web" content to create a highly-effective, multi-dimensional learning environment. Today, organizations must empower the worker with just-in-time learning thus the power of mobile solutions with PDA's and cell phones are a solution whose time has come. It has been estimated that there will be more mobile devices in the year 2005 than there will be integrated desktops. These sophisticated

training solutions provide even greater cost savings, higher quality learning experiences and are setting the standards for the educational standards of the future (Kiffmeyer 2004).

There are two main models of cyber education that arose from e-learning and technology.

They are:

- Blended or Hybrid Model – a course that blends online and face-to-face delivery. Substantial proportion of the content is delivered online, typically uses online discussions, and typically has some face-to-face meetings.
- Online – a course where most or all of the content is delivered online. Typically have no face-to-face meetings. Often times uses web-based technology to facilitate what is essentially a face-to-face course. Uses a course management system (CMS, an example would be Blackboard) or web pages to post the syllabus and assignments, for example.

Currently there are very few blended models as the current trend seems to be toward totally online models (Allen 2007).

### **2.3 TYPES OF STUDENTS THAT ATTEND CYBER SCHOOLS**

Students and parents are attracted to virtual schools because of academic, social and personal reasons. Successful cyber school students are independent, self-directed learners with good home support. Online learning meets the needs of:

- Students who seek a wider, more varied curriculum, or who are in need of curriculum supplements
- Special needs students, especially those for whom inclusion has not been successful
- Students who do not thrive in the traditional structured model
- Pregnant teens and young mothers who need to balance school, motherhood and employment
- Gifted students who are better served by advanced courses
- Expelled or suspended students who are at-risk of dropping out
- Students who feel unsafe or bullied in school
- Home-bound and home-schooled children
- Incarcerated students
- Students in alternative education programs
- Students in need of credit recovery
- Elementary school students whose parents desire more traditional instruction
- Students who want a career-specific curriculum to supplement the core requirements

Despite this wide variation, successful cyber school students are self-motivated learners who have full parental support and oversight (2001). What is most interesting is that approximately 60% of all Pennsylvania cyber charter students were formerly home schooled (Consulting 2001). When we consider that about 1.1 million students are home schooled each year (Princiotta 2005), it is clear that enrollment in cyber charter schools has the potential to increase dramatically.

CEO Nick Trombetta of the Western Pennsylvania Cyber Charter School said cyber charter schools are a haven for a variety of students who have trouble at regular high schools—those who are perhaps, “too gifted, too hurt, too scared” to fit in (Hardy 2001).

On the other hand, Cyber School is not for everyone. “Students sometimes find that this is more difficult than they anticipated,” said Dr. David Martin, the C.E.O. of Pennsylvania Learners Online. “They not only have to show up, they have to produce results...A lot step up and begin (producing). Some say it is not what they expected and they return to their traditional school” (Pickels 2004). An example of the breakdown of where students came from before attending one of the nine cyber charter schools is listed below.



	<b>SENDING SCHOOL</b>	
N/A	3	0.49%
Public	535	86.85%
Home School	5	0.81%
Private	7	1.14%
Parochial	2	0.32%
Charter	6	0.97%
Cyber	58	9.42%
<b>TOTALS =</b>	<b>616</b>	<b>100%</b>

## **2.4 CHARACTERISTIC OF *SUCCESSFUL* ONLINE STUDENTS**

The characteristics listed are purported traits of successful online students. Some of these traits are not only characteristics of successful online students; some are characteristics of successful students in general—from a K-12 standpoint as well as college level students.

In general, the online student should possess the following qualities:

1. *Be open minded about sharing life, work, and educational experiences as part of the learning process.* Introverts as well as extroverts find that the online process requires them to utilize their experiences. This forum for communication eliminates the visual barriers that hinder some individuals in expressing themselves. In addition, the student is

given time to reflect on the information before responding. The online environment should be open and friendly.

2. *Be able to communicate through writing.* In the Virtual Classroom, nearly all communication is written, so it is critical that students feel comfortable in expressing themselves in writing. Many students have limited writing abilities, which should be addressed before or as part of the online experience. This may require remedial efforts on the part of the student. Successful cyber-students are also highly interactive with their instructors and other cyber-students (Newlin 2002).
3. *Be Self-motivated and self-disciplined.* With the freedom and flexibility of the online environment comes responsibility. The online process takes real commitment and discipline to keep up with the flow of the process. Also, successful cyber-students possess high levels of “mastery motivation.” In other words, they have a need to overcome any obstacles to success (Spence 1983).
4. *Be willing to “speak up” if problems arise.* Many of the non-verbal communication mechanisms that instructors use in determining whether students are having problems (confusion, frustration, boredom, absence, etc.) are not possible in the online paradigm. If a student is experiencing difficulty on any level (either with the technology or with the course content), he or she must communicate this immediately. Otherwise the instructors will never know what is wrong. One of the primary characteristics that set successful distance learners apart from their classroom-based counterparts is their autonomy and greater student responsibility (Wedemeyer 1981).
5. *Be willing and able to commit to 4 to 15 hours per week per course.* Online is not easier than the traditional educational process. In fact, many students will say it requires much

more time and commitment. Successful cyber-students also have an “internal locus of control.” Characteristics of an internal locus of control include: conscientiousness, responsible decision making and good planning skills (Rotter 1966).

6. *Be able to meet the minimum requirements for the program.* The requirements for online are no less than that of any other quality educational program. The successful student will view online as a convenient way to receive their education—not an easier way.
7. *Accept critical thinking and decision making as part of the learning process.* The learning process requires the student to make decisions based on facts as well as experience. Assimilating information and executing the right decisions requires critical thought; case analysis does that very effectively. Also, successful cyber-students have a high “need for cognition.” That is, they are inquisitive and like to examine issues from several perspectives (Newlin 2002).
8. *Have access to a computer and a modem.* The communication medium is a computer, phone line, and modem; the student must have access to the necessary equipment. Also, successful cyber-students display a high level of on-line course activity (Petty 1982).
9. *Be able to think ideas through before responding.* Meaningful and quality input into the virtual classroom is an essential part of the learning process. Time is given in the process to allow for the careful consideration of responses. The testing and challenging of ideas is encouraged; you will not always be right, just be prepared to accept a challenge.
10. *Feel that high quality learning can take place without going to a traditional classroom.*  
If the student feels that a traditional classroom is a prerequisite to learning, they must be more comfortable in the traditional classroom. Online is not for everybody. A student that wants to be on a traditional campus attending a traditional classroom is probably not

going to be happy online. While the level of social interaction can be very high in the virtual classroom given that many barriers come down in the online format, it is not the same as being in a regular classroom. This should be made known. An online student is expected to:

- Participate in the virtual classroom 5-7 days a week
- Be able to work with others in completing projects
- Be able to use the technology properly
- Be able to meet the minimum standards as set forth by the institution
- Be able to complete assignments on time
- Enjoy communicating in writing

The online learning process is normally accelerated and requires commitment on the student's part. Staying up with the class and completing all work on time is vital. Once a student gets behind, it is almost impossible to catch up. Basically, the student needs to want to be there, and needs to want the experience. The instructor may have to contact students personally to offer assistance and remind the student of the need to keep up (Illinois).

## **2.5 PURPORTED STRENGTHS OF ONLINE LEARNING**

There are many valid reasons why online programs are rapidly becoming a popular form of distance learning in education today. The online environment offers unprecedented opportunities for people who would otherwise have limited access to education, as well as a new paradigm for educators in which dynamic courses of the highest quality can be

developed. Bolton (Bolton 2002) noted that web-based technology offers a vast array of opportunities to help expand the conceptual and experiential background of the student. The following are some other major benefits of online programs:

- **Anywhere**—the primary advantage of asynchronous online learning is that it allows students to participate in high quality learning situations when issues of distance and scheduling make on-ground learning unrealistic. Students can participate in classes from anywhere in the world provided they have a computer and Internet connection. Also, the online format allows physically challenged students more flexibility to fully participate in class since the Virtual Classroom is delivered to their home through their computers instead of the students having to physically move the class.
- **Anytime, any Pace**—the Virtual Classroom is open 24 hours a day, seven days a week. Time efficiency is another strength brought by the online learning format. Asynchronous communication through online conferencing programs allows busy students who are juggling work, family, and study schedules to fully participate in class discussions at the time, which is most convenient to them. Students can log on to their course at any time of day or night, and have continuous access to lectures, course materials, and class discussions. This is particularly convenient for those who may need to reread a lecture or take more time to reflect on some material before moving on. Also, online communities can provide a supportive context that makes new kinds of learning experiences possible (Bruckman 1998).
- **Synergy**—the online format allows for a high level of dynamic interaction between the instructor and students and among the students themselves. Resources and ideas are shared, and continuous synergy will be generated through the learning process as each

individual contributes to the course discussions and comments on the work of others. The synergy that exists in the student-centered Virtual Classroom is one of the most unique and vital traits that the online learning process poses. The constant and sometimes immediate feedback from teachers in an online environment often encourages students to appreciate or value the learning task, which in turn, has been found to enhance cognitive learning (Rodriguez 1996).

- **High Quality Dialog**—within an online asynchronous discussion structure, the learner is able to carefully reflect on each comment from others before responding or moving onto the next item. The structure allows students time to articulate responses with much more depth and forethought than in a traditional face-to-face discussion situation where the participant must analyze the comment of another on the spot and formulate a response or otherwise lose the chance to contribute to the discussion.
- **Student Centered**—within an online discussion, the individual student responds to the course material (lectures and course books, for example) and to comments from other students. Students usually respond to those topics within the broader conversation that most clearly speak to their individual concerns and situations resulting in several smaller conversations taking place simultaneously within the group. While students are expected to read all of their classmates' contributions, they will become actively engaged only in those parts of the dialog most relevant to their needs. In this way, students take control of their own learning experience and tailor the class discussions to meet their own specific needs. Ideally, students make their own individual contributions to the course while at the same time take away a unique mix of information directly relevant to their needs. As

Marc Prensky calls the learners of today, “digital natives”(Prensky 2001), we should teach these students in the language they understand – through technology.

- **Level Playing Field**—in the online environment learners retain a considerable level of anonymity. Discriminating factors such as age, dress, physical appearance, disabilities, race and gender are largely absent. Instead, the focus of attention is clearly on the content of the discussion and the individual’s ability to respond and contribute thoughtfully and intelligently to the material at hand.
- **Access to Resources**—it is easy to include distinguished guest experts or students from other institutions in an online class as well as allow students to access resources and information anywhere in the world. An instructor can compile a resource section online with links to scholarly articles, institutions, and other materials relevant to the course topic for students to access for research, extension, or in depth analysis of course content material.
- **Creative Teaching**—the literature of education supports the use of interactive learning environments as contributing to self-direction and critical thinking. Some educators have made great strides in applying these concepts to their on ground teaching. However, many classes still exist which are based on boring lectures and rote memorization material. The nature of the semi-autonomous and self-directed world of the Virtual Classroom makes innovative and creative approaches to instruction even more important. In the online environment, the facilitator and student collaborate to create a dynamic learning experience. The occasion of a shift in technology creates the hope that those who move into the new technology will also leave behind bad habits as they adopt this new paradigm of teaching. As educators redesign their course materials to fit the online

format, they must reflect on their course objectives and teaching style and find that many of the qualities that make a successful online facilitator are also tremendously effective in the traditional classroom as well (Illinois).

However, in a 2001 report by the National Association of State Boards of Education (NASBE) titled *Any Time, Any Place, Any Path, Any Pace: Taking the Lead on e-Learning Policy*, the benefits of virtual schooling are made clear. The “most valuable benefit of e-learning” writes NASBE, “is its potential ability to deliver quality instructional services to all learners regardless of location, family or cultural background, or disability” (Gulliver 2001).

Lastly, (Chaika 1999) says that cyber education has many other advantages:

- ✓ It permits students in small, rural, or low-wealth school districts to take specialized courses that would ordinarily not be available to them.
- ✓ It provides home schooled students with instruction in subjects their parents might not be able to teach, such as foreign languages or computer skills.
- ✓ It meets the needs of school phobics, those in hospitals or recovering at home, dropouts who would like to get back in, expelled students, single parents, and students in other states or even other countries looking for nontraditional educational solutions.
- ✓ In an age when many of our schools are overcrowded or crumbling, cyber learning makes financial sense, too, because schools using distance learning do not need to modernize or build new buildings in order to provide quality cyber instruction.



## 2.6 PURPORTED WEAKNESSES OF ONLINE LEARNING

While online programs have significant strengths and offer unprecedented accessibility to quality education, there are weaknesses inherent in the use of this medium that can pose potential threats to the success of any online program. These problems fall into six main categories:

1. *The Technology.* Before any online program can hope to succeed, it must have students who are able to access the online learning environment. Lack of access whether it be for economical or logistics reasons will exclude otherwise eligible students from the course. This is a significant issue in rural and lower socioeconomic neighborhoods. Furthermore speaking from an administrative point of view, if students cannot afford the technology the institution employs, they are lost as customers. As far as Internet accessibility is concerned, it is not universal, and in some areas in the United States and other countries, Internet access poses a significant cost to the user. Some users pay a fixed monthly rate for their Internet connection, while others are charged for the time they spend online. If the participants' time online is limited by the amount of Internet access they can afford, then instruction and participation in the online program will not be equitable for all students in the course. This is a limitation of online programs that rely on Internet access.

Both students and facilitators must possess a minimum level of computer knowledge in order to function successfully in an online environment. For example, they must be able to use a variety of search engines and be comfortable navigating on the World Wide Web, as well as be familiar with Newsgroups, FTP procedures and

email. If they do not possess these technology tools, they will not succeed in an online program; a student or faculty member who cannot function on the system will drag the entire program down.

User friendly and reliable technology is critical to a successful online program. However, even the most sophisticated technology is not 100% reliable. Unfortunately, it is not a question of if the equipment used in an online program will fail, but when. When everything is running smoothly, technology is intended to be low profile and is used as a tool in the learning process. However, breakdowns can occur at any point along the system, for example, the server which hosts the program could crash and cut all participants off from the class; a participant may access the class through a networked computer which could go down; individual PCs can have numerous problems which could limit students' access; finally, the Internet connection could fail, or the institution hosting the connection could become bogged down with users and either slow down, or fail all together. In situations like these, the technology is neither seamless nor reliable and it can detract from the learning experience.

2. *The Students.* While an online method of education can be a highly effective alternative medium of education for the mature, self-disciplined student, it is an inappropriate learning environment for more dependent learners. Online asynchronous education gives students control over their learning experience, and allows for flexibility of study schedules for non traditional students; however, this places a greater responsibility on the student. In order to successfully participate in an online program, student must be well organized, self-motivated, and possess a high

degree of time management skills in order to keep up with the pace of the course. For these reasons, online education is not appropriate for immature and other students who are dependent learners and have difficulty assuming responsibilities required by the online program. And lastly, some students feel a sense of learner isolation by not being face to face with a teacher (Brown 1996).

3. *The Facilitator.* Successful on-ground instruction does not always translate to successful online instruction. If facilitators are not properly trained in online delivery and methodologies, the success of the online program will be compromised. The instructor must be able to communicate well in writing and in the language in which the course is offered. An online program will be weakened if its facilitators are not adequately prepared to function in the Virtual Classroom.

An online instructor must be able to compensate for lack of physical presence by creating a supportive environment in the Virtual Classroom where all students feel comfortable participating and especially where students know that their instructor is accessible. Failure to do this can alienate the class both from each other and from the instructor. However, even if a virtual professor is competent enough to create a comfortable virtual environment in which the class can operate, still the lack of physical presence at an institution can be limited for an online program. For the faculty as well as the participants, such things as being left out of meetings and other events that require on-site interaction could present a limiting factor in an online program.

4. *The Administration and Faculty.* Some environments are disruptive to the successful implementation of an online program. Administrators and faculty members who are

uncomfortable with change and working with technology or feel that online programs cannot offer quality education often inhibit the process of implementation. These people represent a considerable weakness in an online program because they can inhibit its success.

Sometimes administration cannot see beyond the bottom line and look at online programs only as ways to increase revenues and are thus not committed to seeing online programs as a means of providing quality education to people who would otherwise not be able to access it. In such a case, an institution that is not aware of the importance of proper facilitator training, essential facilitator characteristics, and limitations of class size would not understand the impact that these elements can have on the success of an online program.

5. *The Online Environment.* Online learning has its most promising potential in the high synergy represented by active dialog among the participants, one of the most important sources in a Virtual Classroom. However, in larger classes (or more students), the synergy level starts to shift on the learning continuum until it eventually becomes independent study to accommodate the large class. At this point, dialog is limited as well as interaction among participants and the facilitator. The medium is not being used to its greatest potential.

In the excitement and enthusiasm for online programs that has been generated recently, it is important to recognize that some students should not be taught online because the electronic medium in its current state of development does not permit the best method on instruction. Examples are hands-on subjects such as public speaking and sports where physical movement and practice contribute to the achievement of

the learning objectives. These subjects are probably best taught in a face-to-face traditional learning environment. Hybrid courses may represent a temporary solution to this problem thus making that portion of the course more accessible to a greater number of people who would otherwise have difficulty getting to campus. However, solutions of that sort still underline the fact that online teaching cannot satisfy all educational needs and goals. Just because it may be technologically possible to simulate a physical learning experience that does not necessarily mean that it is the best way to teach it. Also, learners in one study commented that e-learning eliminates classroom interaction time, where a significant amount of “real learning” takes place as users assimilate information, utilize software, apply knowledge to problem solving, and interact with the instructor and other learners (Laine 2003).

6. *The Curriculum.* The curriculum of any program must be carefully considered and developed in order to be successful. Many times, in an institution’s haste to develop distance education programs, the importance of curriculum and the need for qualified professionals to develop it is overlooked. Curriculum and teaching methodology that are successful in on-ground instruction will not always translate to a successful online program where learning and instructional paradigms are quite different. Online curriculum must reflect the use of dialog among students (in the form of written communication), and group interaction and participation. Traditional classroom lectures have no place in a successful online program. Education of the highest quality can and will occur in an online program provided that the curriculum has been developed or converted to meet the needs of the online medium.

Today is a very exciting time for technology and education. Online programs offer technology-based instruction in environments that expand learning opportunities and can provide top quality education through a variety of formats and modalities. With the special needs of learners who need or want to continue their education, online programs offer a convenient solution to conflicts with work, family and study schedules. Educational institutions have found that online programs are essential in providing access to education for the populations they wish to serve. In order for an online program to be successful, the curriculum, the facilitator, technology and the students must be carefully considered and balanced in order to take full advantage of the strengths of this format and at the same time, avoid pitfalls that could result from its weakness (Illinois).

## **2.7 CYBER CHARTER SCHOOL PERFORMANCE**

In Pennsylvania, the eleven public cyber charter schools met 42 of 45 Annual Yearly Progress (AYP) academic performance targets in the 2005-2006 school year on the Pennsylvania System of School Assessment (PSSA). The three schools that did not meet academic AYP missed it by only one target. The AYP targets are: 1. Performance on the PSSA, 2. Participation on the PSSA and 3. Other academic indicators that include the previous year's attendance rate and graduation rate. Also, the other cyber charter schools fell short of the overall AYP mark because of non-academic targets, such as test participation. Please see the chart below for the complete results:

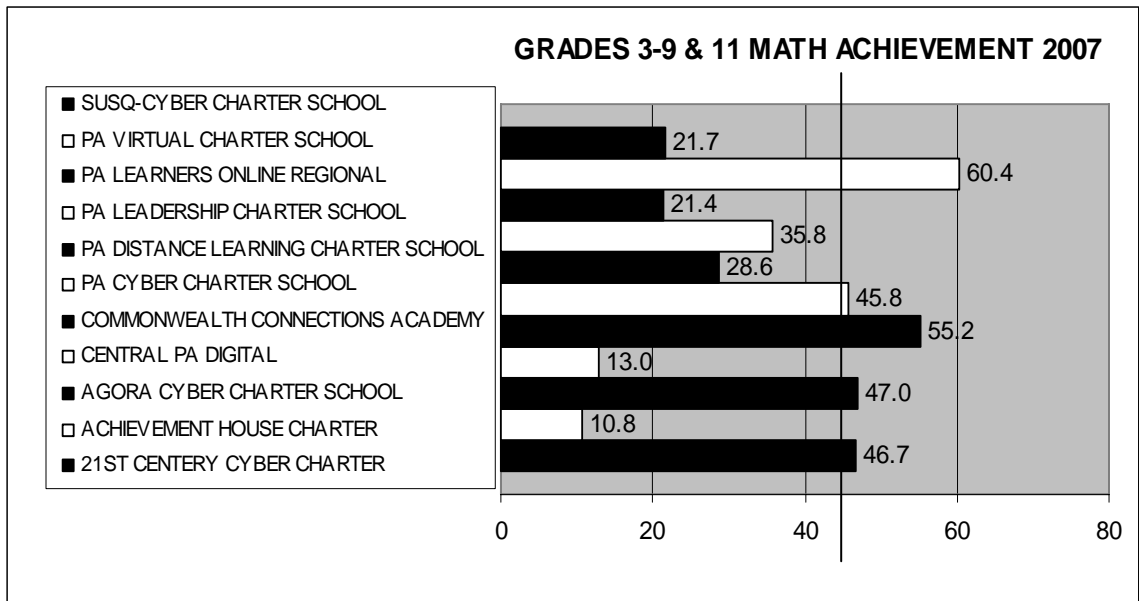
**Table 1. Pennsylvania Cyber Charter Schools Adequate Yearly Progress 2005-2006**

Cyber Charter School		AYP Academic Performance
21st Century Cyber Charter School	>	Met 4 of 4 targets
Achievement House Charter School	>	Met 2 of 2 targets
Agora Cyber Charter School	>	Not enough students for AYP sample
Central PA Digital Learning Charter School	>	Met 2 of 2 targets
Commonwealth Connections Academy Charter School	>	Met 7 of 8 targets
PA Cyber Charter School	>	Met 7 of 8 targets
PA Distance Learning Charter School	>	Met 3 of 4 targets
Pennsylvania Leadership Charter School	>	Met 4 of 4 targets
PA Learners Online Charter School	>	Met 4 of 4 targets
PA Virtual Charter School	>	Met 10 of 10 targets
SUSQ-Cyber Charter School	>	Met 2 of 2 targets

Pennsylvania’s cyber charter schools have dedicated teachers, staff and school communities that are committed to student achievement as these findings indicate (Williams 2007).

On the other hand, when looking at academic performance of cyber charter schools, a different picture emerges. The following information was obtained from *School Matters*; a division of Standards and Poor's which compose an official report card of each school in the commonwealth each school year. This information has been placed into charts for easier readability.

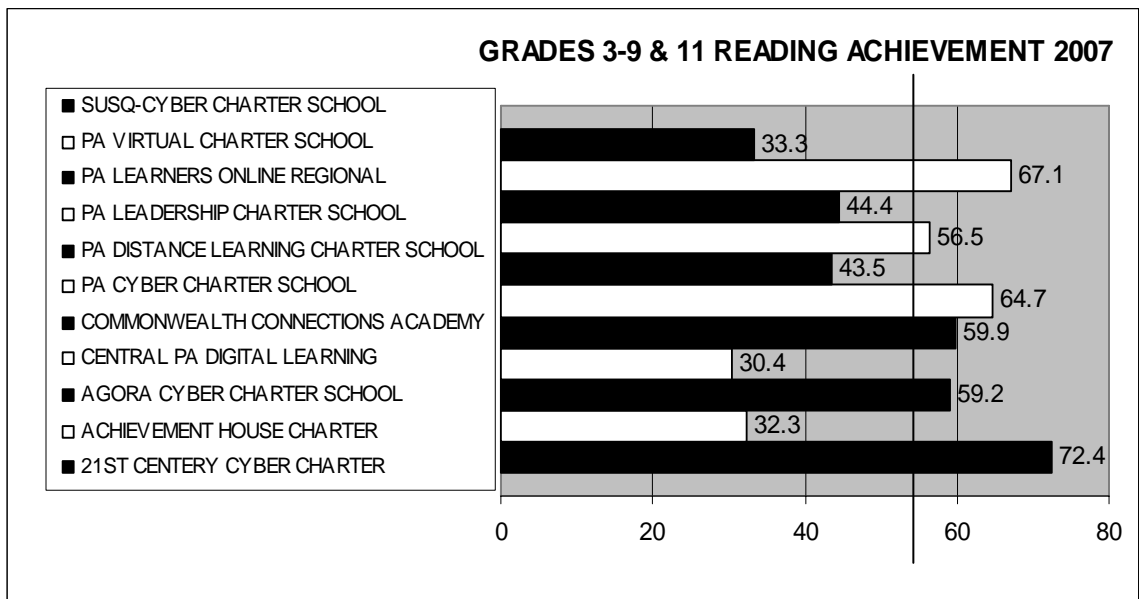
**Table 2. Grades 3-9 & 11 Math Achievement 2007**



As the above chart indicates, in mathematics, only five of the eleven cyber charter schools achieved the state cut score of 45% of students who reached proficient or advanced scores on the Pennsylvania System of School Assessment (PSSA) test.



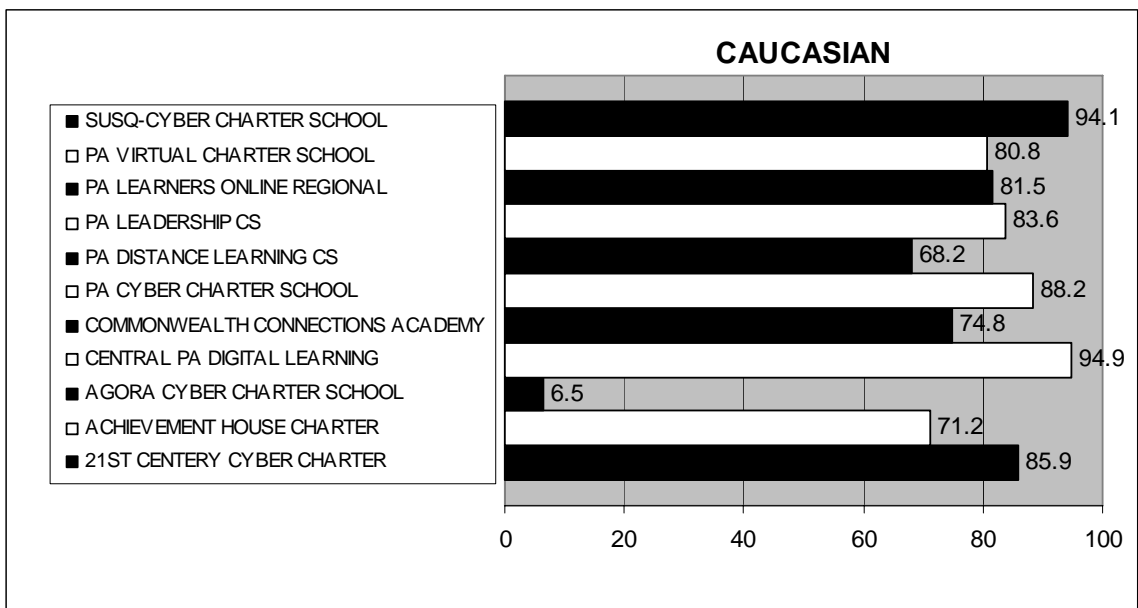
**Table 3. Grades 3-9 & 11 Reading Achievement 2007**



As the above chart indicates, in reading, the cyber charter schools fared a little better as six of the eleven cyber charter schools achieved the state cut score of 54% of students who reached proficient or advanced scores on the Pennsylvania System of School Assessment (PSSA) test.

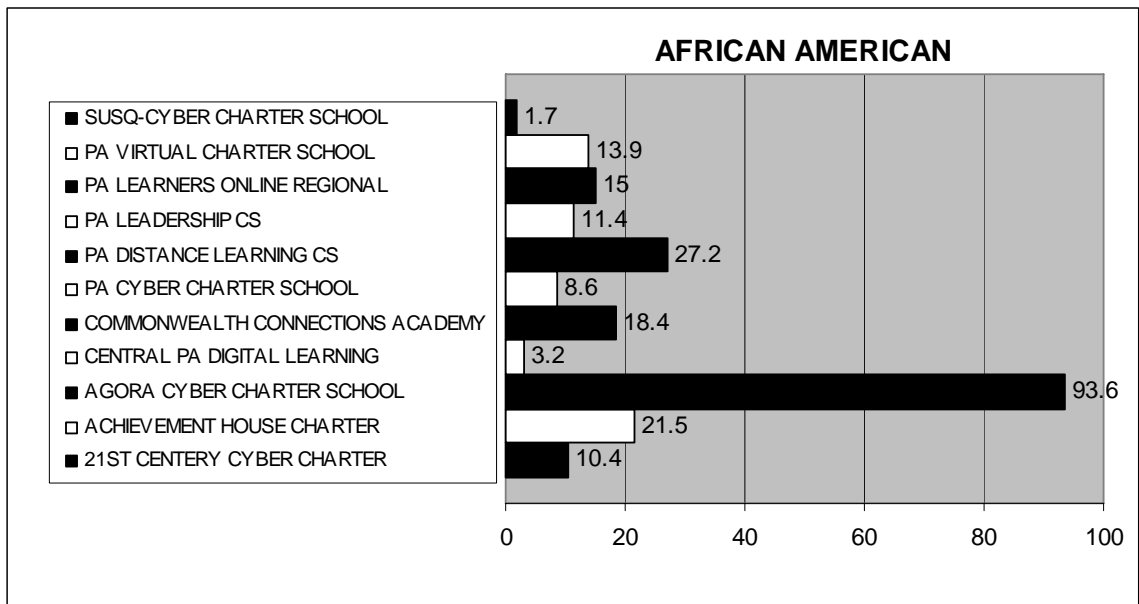
The following charts break down the ethnic distribution of the students in the eleven cyber charter schools.

**Table 4. Caucasian**



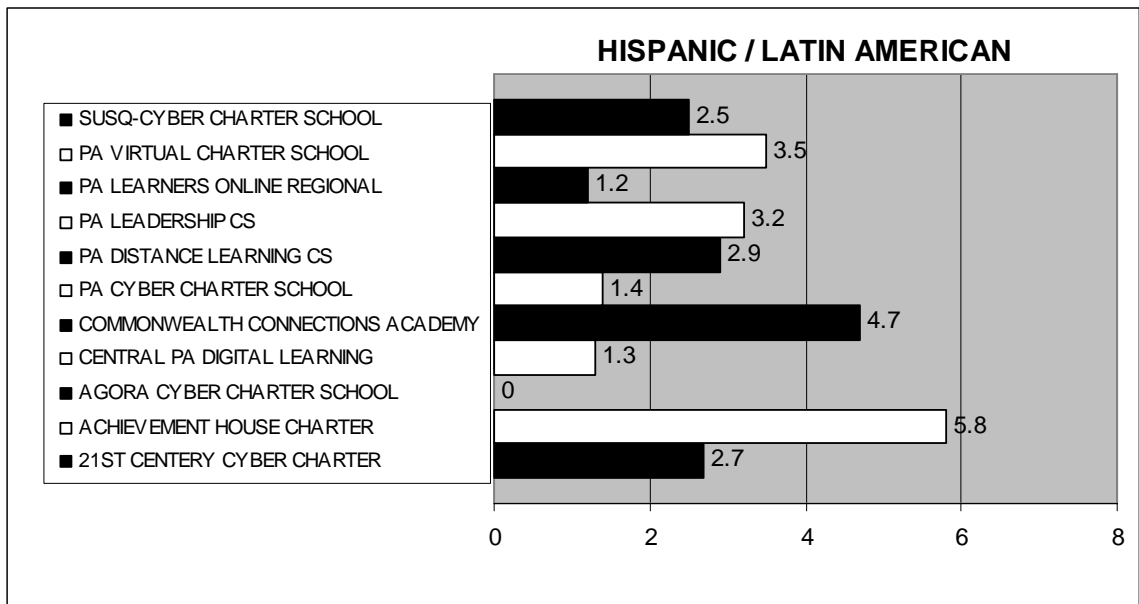
As the above chart indicates, the Pennsylvania cyber charter school population is largely Caucasian, except for Agora cyber charter school. In the 2007 *School Matters*; a division of Standards and Poor’s Agora had 31 students listed as enrolled in their school. A portion of a small number such as that can skew the percentages.

**Table 5. African American**



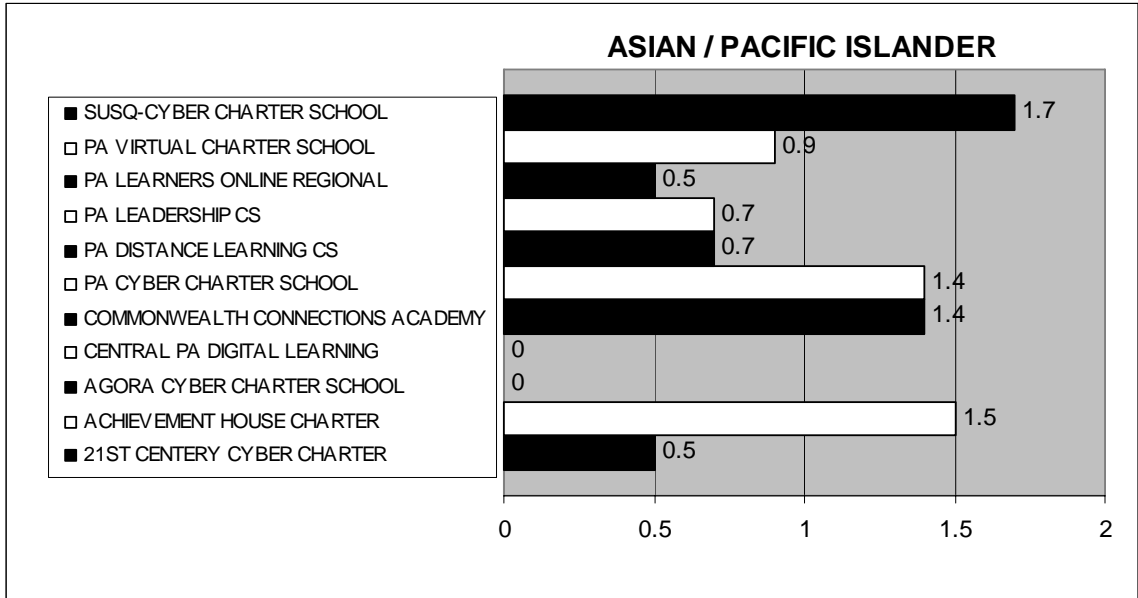
As the above chart indicates, the Pennsylvania cyber charter schools have a smaller population of African American students, except for Agora cyber charter school. As previously mentioned, in the 2007 *School Matters*; a division of Standards and Poor's Agora had 31 students listed as enrolled in their school. A portion of a small number such as that can skew the percentages.

**Table 6. Hispanic/ Latin American**



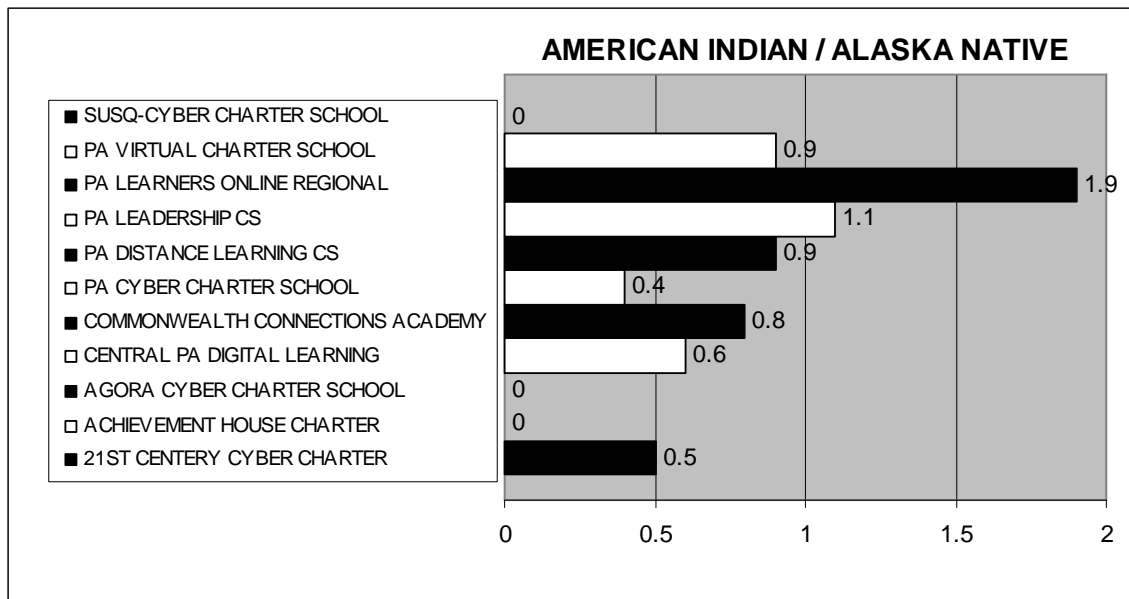
As the above chart indicates, the Pennsylvania cyber charter schools have an even smaller population of Hispanic/Latin American students. The largest population is in the Achievement House Charter School (5.8%) and the smallest being in the Agora Cyber Charter School who had none.

**Table 7. Asian/Pacific Islander**



As the above chart indicates, the Pennsylvania cyber charter schools have an even smaller population of Asian/Pacific Islander students. The largest population is found in SusQ-Cyber Charter School (1.7%) and the smallest being in the Agora and Central Pennsylvania Digital Learning Cyber Charter Schools who had none.

**Table 8. American Indian/Alaska Native**



As the above chart indicates, the Pennsylvania cyber charter schools have an even smaller population of American Indian/Alaska Native students. The largest population is found in Pennsylvania Learners Online Cyber Charter School (1.9%) and the smallest being in the Agora, Achievement House and SusQ-Cyber Charter Schools who had none.

All factors, such as, student achievement as well as achievement in sub-groups, test participation, attendance and graduation rate need to be taken into account when indicating if cyber schools are successful or not. Both the pro and the cons need to be looked at and analyzed to determine success of each of the cyber schools.

Schools that do not make Adequate Yearly Progress (AYP) are labeled by the following categories:

- Made AYP
- Warning
- School/District Improvement I
- School/District Improvement II
- Corrective Action I

- Corrective Action II
- Making Progress

The AYP results for the Pennsylvania cyber charter schools in the year 2006 are noted in the following categories:

- Made AYP – one cyber charter school (9% of the schools)
- Warning – one cyber charter school (9% of the schools)
- School/District Improvement I – three cyber charter schools (27% of the schools)
- School/District Improvement II – two cyber charter schools (18% of the schools)
- Corrective Action I – one cyber charter school (9% of the schools)
- Corrective Action II – one cyber charter school (9% of the schools)
- Making Progress – two cyber charter schools (18% of the schools)

All schools in the commonwealth are viewed as a success or failure based on their PSSA test scores. With 45% of the cyber charter schools reaching the state minimum scores in math and 55% of the cyber charter schools reaching the state minimum in reading, it can easily be said that these schools must do a better job in increasing student achievement. Different trends emerge from the data depending how it is analyzed. One must know what data to analyze depending on the results they are seeking to find.

## **2.8 CONCLUSION**

After reviewing the literature around cyber education, it is a viable educational option for our children. For example, one major study by Cavanaugh, Gillan, Kromey, Hess & Blomeyer

(Cavanaugh 2004) completed a meta-analysis of fourteen studies focusing specifically on student outcomes. Their conclusion was:

Students can experience similar levels of academic success while learning using telecommunications and learning in classroom settings. While distance learning as it is practiced in today's virtual schools uses technology that is less than ten years old and advances rapidly, the literature has shown that a student's education online can be as effective as it is in a classroom...

Barker and Wendel's (Barker 2001) study found that students in virtual schools showed greater improvement than their conventional school counterparts in critical thinking, researching, using computers, learning independently, problem-solving, creative thinking, decision-making, and time management. And, the National Association of State Boards of Education stated, "Evidence to date convincingly demonstrates that, when used appropriately, electronically delivered education – 'e-learning' – can improve how students learn, can improve what students learn, and can deliver high-quality learning opportunities to all children"(Education 2001). Also, Duffy and Jonassen (Duffy 1992) said:

Online learning environments, when designed to fully use the many tools of communication that are available, is often a more active, constructive, and cooperative experience than classroom learning. In addition, technologies that are easily employed in online environments, such as mind mapping tools and simulations, are effective means for helping students make meaning of abstract phenomena and strengthen their meta-cognitive abilities.



McEwan (McEwan 1997) states that:

In addition to potential cost savings, e-learning has pedagogical potential beyond traditional methods related to the principles of learning discussed. For instance, multimedia capabilities can be used with learning exercises that allow learners to apply concepts realistically. Or, animation can help demonstrate concepts and events difficult to portray in traditional classes, which, in turn, can facilitate a more accurate communication of important ideas. E-learning can deliver “new” information not contained in traditional sources, effectively reinforcing other course information through offering examples, explanations, assessments, and exercises. In this way, online instruction can potentially enhance learning compared to what can be accomplished using a classroom-only approach.

Although the future guidelines for cyber schools may evolve in the legislature and through the courts, one certainty exists: cyber schools are an idea whose time has come; there is no turning back. The intent of this study is to analyze the present state of Pennsylvania’s cyber schools and their current leader’s beliefs about the future of their schools and cyber education in general. I plan on interviewing current C.E.O.’s of the Commonwealth’s cyber schools to see if and where they believe cyber education fits in today’s public education system. I am anxious to research and find from them where cyber education has been and where they think it is going.

## **3.0 METHODOLOGY**

### **3.1 INTRODUCTION**

In light of the current era of accountability and pressure to change, many school reform models have come about in the last few years. One of the most significant changes occurred within the area of technology. The advent of email, Web browsers, HTML, media players, low fidelity streamed audio/video and simple Java began to change the face of multimedia and its ability to interface with education. This helped to give rise to cyber schools. Currently, there are eleven cyber schools in the state of Pennsylvania alone, and approximately 17,000 students currently attend these schools (2007).

Today is a very exciting time for technology and education. Online programs offer technology-based instruction in environments that expand learning opportunities and can provide top quality education through a variety of formats and modalities. With the special needs of learners who need or want to continue their education, online programs offer a convenient solution to conflicts with work, family and study schedules. Educational institutions have found that online programs are essential in providing access to education for the populations they wish to serve.

It is necessary to study the present state of these schools and important to find out from the current leader's their beliefs about the future of their schools and cyber education in general. For this study, I plan on interviewing current C.E.O.'s of the Commonwealth's cyber schools to see if and where they believe cyber education fits in today's public education system. Through this research, I am looking to find where the cyber directors think cyber education has been and where they think it is going.

### **3.2 STATEMENT OF THE PROBLEM**

What is the present state of cyber schools in Pennsylvania, and what are the leader's views of cyber schools in the future?

### **3.3 RESEARCH QUESTIONS**

1. What does the literature say about cyber education and the current state of cyber schools?
2. What do the leaders consider the present state of their cyber schools to be?
3. What developments are currently taking place in their schools and in the state of Pennsylvania?
4. What do the leaders foresee for the future of cyber education?

### **3.4 METHODOLOGY AND PROCEDURES**

This descriptive, qualitative study will seek to explore what the cyber directors believe is the present state of cyber schools in Pennsylvania and what are their views of cyber schools in the future. Qualitative research provides “depth” and “detail” because it is concerned with detailed descriptions of conditions, events, people, and interactions from the pragmatic world (Patton 1980). Additionally, Denzin & Lincoln (Denzin 1994) posit that qualitative research provides “rich insight into human behavior.” (p. 106). The researcher will use a semi-structured interview to discover the perceptions of each cyber director’s views of cyber education. Semi-structured interviews will provide the researcher with a guide to encompass a set of thematic areas in a flexible manner (Measer, 1988). The researcher will also pilot test the questions before interviewing the cyber C.E.O.’s in case any questions need to be re-tooled, omitted or added.

Qualitative research allows the researcher to explore and analyze individual and collective beliefs, values and perceptions (McMillan 2006). The cyber director’s responses will be coded and the researcher using content analysis, will analyze the data.

Finally, it must be stated how the researcher fits in to the context of cyber education. The researcher is currently an administrator at one of the eleven cyber schools in the state of Pennsylvania, which are being researched in this dissertation. The researcher has made every attempt to neutrally state both sides of the cyber education debate, but being involved in cyber education for over three years, and feeling that cyber education is a viable option for students; the study most likely casts cyber charter schools in a more positive light. However,

after transcribing each of the interviews, the researcher sent the interviewee a copy of the interview so that they could change, add or delete any of the information for accuracy. The researcher has tried to keep the study as objective as possible and free from bias.

### **3.5 SAMPLE**

The researcher reviewed the Pennsylvania Coalition of Charter Schools (PCCS) website to determine the number of cyber charter schools within the state. As a result, the researcher will attempt to interview all eleven of the cyber school directors. It is important to find out from the directors what they foresee for the future of cyber education. Best and Kahn (Best 2003) describe sampling as, “A small proportion of a population selected for observation and analysis. By observing the characteristics of the sample, one can make certain inferences about the characteristics of the population from which it is drawn” (p. 12).

## **3.6 DATA COLLECTION**

### **3.6.1 Interviews**

The researcher will conduct semi-structured interviews with each of the eleven cyber directors of the cyber charter schools in Pennsylvania. According to Patton (1980), “the purpose of interviewing is to find out what is in and on someone’s mind” (p.196). Descriptive data will be collected by the researcher to ascertain the perceptions and experiences of the cyber directors. According to Bogden & Biklen (Bogdan 1998), descriptive data gathered from the respondent’s own word assists the researcher in developing insights on “how the subjects interpret some piece of the world.” (p. 94).

A list of open-ended questions will be developed to direct the interviewer. The questions were developed by the interviewer in conjunction with the team of Professors during the overview. Patton (1980) explains, “The purpose of gathering responses to open-ended questions is to enable the researcher to understand and capture the points of view of other people without predetermining those points of view through prior selection of questionnaire categories” (p. 28). These questions will be used to assist the researcher in gathering descriptive data from the respondent’s perspective. Furthermore, Patton asserts that qualitative interviewing it uses to depict the respondent’s perceptions and experiences about a phenomenon and to understand how the participants view the program.



### 3.6.2 Interview Questions

1. What are the current strengths of the Cyber School?
2. What are the basic needs of the Cyber School?
3. How are the students in your school performing academically?
4. How are you growing and developing your teachers through professional development?
5. What methods of supervision and evaluation do you utilize in your school?
6. Are there any barriers at this current time that would hamper the growth of the Cyber School?
7. Are there any internal changes going on that could affect your school?
8. Are there any state-wide changes occurring that could affect your school?
9. Are there any national or international changes taking place that could affect your school?
10. How will the future of cyber education impact public education?
11. As a follow up to your answer to my previous question, what do you see for the future of cyber education?
12. Is there anything else we have not covered or touched on that you would like to share with me?

### **3.7 CYBER CHARTER SCHOOL PROFILES**

Cyber charter schools continually enroll students throughout the school year, therefore enrollment figures may vary. The following numbers are current as of January 2, 2008.

The background of the cyber C.E.O. was different from school to school. Some had served as principals or assistant principals, as central office personnel and some came from the business sector, which makes each school unique.

Lastly, two of the schools contacted did not participate in the study. They are noted with an asterisk.

#### **1. Cyber Charter School “A” – Downingtown, Pennsylvania**

*Founded in 2001*

*Grades 6-12*

*Enrollment: 560*

Uses their own curriculum—do not use any third party providers. All Language Arts, Math, Social Studies and Science are aligned to the Pennsylvania state standards and can be adapted as need for students who qualify for Special Education.

## **2. Cyber Charter School “B” – Pittsburgh, Pennsylvania**

*Founded in 2001*

*Grades K-12*

*Enrollment: 592*

Uses a combination of teacher created curriculum that is aligned to the Pennsylvania state standards as well as curriculum from third party providers such as Keystone, ALEKS, Academy of Reading, etc. All teachers are highly qualified as determined by the state. Use a live classroom setting as well as tutoring for students as needed. Students are provided mentors as a safety net to help them succeed.

## **\*3. Cyber Charter School “C” – Norristown, Pennsylvania**

*Founded in 2001*

*Grades K-9*

*Enrollment: 3,784*

Uses a canned curriculum that is the same as another cyber charter school in the state; but also uses Blackboard which makes this school's curriculum a little more hands on and flexible than the other school to which it is similar.

#### **4. Cyber Charter School "D" – Milton, Pennsylvania**

*Founded in 1998*

*Grades 9-12*

*Enrollment: 188*

Located within an Intermediate Unit. Uses a number of canned curriculums such as Odyssey, University of Missouri and Keystone – have not created their own. Have teachers for all core subjects and all students are closely monitored. Have two offices (one in Bloomsburg and one in Lewisburg) throughout the state. Does face to face tutoring with students if you live close by, and also does face to face mid terms and finals.

#### **5. Cyber Charter School "E" – Midland, Pennsylvania**

*Founded in 1998*

***Grades K-12***

***Enrollment: 8,122***

Uses a number of created and canned curriculums. Has a college program. Have Pennsylvania certified teachers who are assigned to each student who closely monitors them and helps as needed. Have several offices throughout the state. Utilizes a virtual classroom and offers many field trips, as well as a family link program to foster student and parent interactions. Requires a face-to-face enrollment session.

**6. Cyber Charter School “F” – Mechanicsburg, Pennsylvania**

***Founded in 2003***

***Grades K-9***

***Enrollment: 1,400***

Uses Calvert for elementary curriculum, Prentice Hall for middle school and the High School has created their own curriculum. They are “working backward” and will eventually have teacher created curriculum at all levels. They are part of a company which has cyber schools in at least twelve states. They plan to open a Pittsburgh office at the end of July, 2007. All teachers are certified by the state and they also offer face-to-face tutoring.

**7. Cyber Charter School “G” – West Chester, Pennsylvania**

*Founded in 2004*

*Grades K-12*

*Enrollment: 2,000*

Use teacher created lessons based on the Pennsylvania anchors and standards. Now using a video studio to stream lessons to students via Adobe classroom. Has clubs, an online newspaper, student government and a radio club that meets online to produce their own show. Offer classroom office hours and chat times.

**8. Cyber Charter School “H” – Harrisburg, Pennsylvania**

*Founded in 2004*

*Grades K-12*

*Enrollment: 562*

Utilizes PLATO and Compass Learning as their curriculum. Teachers teach classes online through I-link—these are required one hour per day. All high school students are given

advisors to help them. Students are required to work 25 hours per week. Monetary incentives are given for school supplies after the first year in the amount of \$100, which goes up to \$250 if student stays four years in the school.

### **9. Cyber Charter School “I” – Bryn Mawr, Pennsylvania**

*Founded in 2004*

*Grades 9-12*

*Enrollment: 394*

Live classrooms are utilized two times per week/per subject. Students are given a mentor who is to help them through the school year. They do not use a canned curriculum—teachers develop and teach based on the Pennsylvania standards and anchors. They also require two years of a foreign language in order to graduate.

### **10. Cyber Charter School “J” – Altoona, Pennsylvania**

*Founded in 2002*

*Grades K-12*

***Enrollment: 156***

Use a combination of canned curriculum (from Florida Virtual as well as others) as well as teacher created curriculum. Students are given mentors to help them throughout the school year. Do not utilize live sessions, but do require two years of a foreign language in order to graduate.

**\*11. Cyber Charter School “K” – Bala Cynwyd, Pennsylvania**

***Founded in 2005***

***Grades K-10***

***Enrollment: 2,900***

Uses canned curriculum (K-12), nothing is teacher created. Only offer the following subjects: Language Arts, Math, Social Studies, Science, Art and Music. Is affiliated with another cyber charter school in Pennsylvania.



## **Data Analysis**

According to Bogdan & Biklen (1998), “analysis involves working with the data, organizing them, breaking them into manageable units, synthesizing them, searching for patterns, discovering what is important and what is to be learned, and deciding what to tell others” (p. 157). For this study, the researcher will use interviews to collect the data from the respondents. The interviews will be tape-recorded or saved virtually and transcribed verbatim. The data will then be coded and content analysis will be used to identify the emerging themes. According to Creswell (Creswall 2002), coding is the process of labeling text and segmenting it to form broad themes. The themes are then “aggregated codes” and are used “to form a major idea in the database” (p. 267).

McMillan & Schumacher (2006) suggest, “qualitative analysis is a relatively systematic process of coding, categorizing and interpreting data to provide explanations of a single phenomenon of interest” (p. 364). For this study, the data will be organized according to the individual responses of the cyber directors in order to identify themes representing what the cyber directors believe is the present state of cyber schools in Pennsylvania and what their views are of cyber schools in the future. The data will then be coded and themes will be identified according to three categories: consensus themes, supported themes and individual themes. According to Lincoln and Guba (Lincoln 1985), consensus themes are when the majority of the respondents state the same theme; supported themes are when approximately half of the respondents state the same theme; and individual themes are when one or two respondents state a theme. In order to report the data, the researcher will identify each theme with the number of

respondents who named the theme. As a result of the data analysis, the researcher will then write a descriptive summary.

In summary, this descriptive, qualitative study will seek to explore what the cyber directors believe is the present state of cyber schools in Pennsylvania and what their views are of cyber schools in the future. The researcher will attempt to interview all of the cyber directors of the eleven Pennsylvania state cyber charter schools. The interviews will be tape-recorded or recorded virtually, the data will be coded, and content analysis will be used to identify emerging themes.

## **4.0 DATA ANALYSIS**

### **4.1 INTRODUCTION**

The purpose of this descriptive, qualitative study was to explore what the cyber directors believed the present state of cyber schools in Pennsylvania to be and what were their views of cyber schools for the future. Through this investigation, the researcher analyzed the impact of the developments that are currently taking place in the cyber schools and across the state of Pennsylvania. The researcher interviewed nine of the eleven cyber charter school C.E.O.'s in regard to their cyber school and what the future holds for all cyber charter schools across the state. This chapter includes a report on the interviews and an analysis of the data collected. A discussion of each research question and a report of the major and minor themes will follow.

### **4.2 STATEMENT OF THE PROBLEM**

What is the present state of cyber schools in Pennsylvania, and what are the leader's views of cyber schools in the future?

#### **4.2.1 Research Questions**

1. What does the literature say about cyber education and the current state of cyber schools?
2. What do the leaders consider the present state of their cyber schools to be?
3. What developments are currently taking place in their schools and in the state of Pennsylvania?
4. What do the leaders foresee for the future of cyber education?

#### **4.2.2 Review of the Interview Process, Data Collection and Analysis**

Qualitative inquiry methods were used in this study. These methods allowed the researcher to capture an understanding of the perspectives of the Cyber School C.E.O.'s regarding cyber schools in Pennsylvania. Semi-structured interviews were used as the descriptive data collection tool regarding how the C.E.O.'s viewed the present state of their schools, any changes that are taking place in the school and statewide and the future of cyber education. The researcher was the primary instrument for data collection and analysis.

The interview consisted of twelve open ended questions that were developed to collect descriptive data in the subjects' own words from the subjects' perspective. This chapter will report the interview results with nine of the eleven Cyber School C.E.O.'s. The C.E.O.'s were chosen as there are eleven cyber charter schools in Pennsylvania and the researcher attempted to interview all eleven of them. The interviews were scheduled over a six week period and were done primarily over the phone. The interview data was transcribed by the researcher.

The transcribed information and data from the interviews was then analyzed using a content analysis method. The researcher coded and identified themes that emerged from the data. Using the analysis process recommended by Lincoln and Guba (1985) summarized two ways that themes could be identified: 1) consensus themes, which are when the majority of the participants stated the theme, 2) supported themes, which are when two or three of the participants stated the theme.

### **4.2.3 Addressing the Research Questions**

The following section outlines each of the research questions identified in this study and identifies the series of interview questions, which were asked to each C.E.O. that relate to the specific research question. The information gathered from each research question was analyzed to identify themes that emerged. Lincoln and Guba (1985) summarized two ways that themes could be identified: 1) consensus themes, which are when the majority of the participants stated the theme, and 2) supported themes, which are when two or three of the participants stated the theme. The themes will be summarized using the above methods.

#### **Research Question #1**

**What does the literature say about cyber education and the current state of cyber schools?**

In many ways, cyber charter schools are the same as more traditional brick and mortar schools. They are independent public schools sponsored by local or state educational organizations. The charter issuing authority monitors their quality and integrity, but they are otherwise free of traditional bureaucratic and regulatory control. A cyber charter school's success

- and existence - is dependent on its meeting student achievement goals specified in its charter, and on effectively managing its financial and operational responsibilities.

Of all the traits shared by cyber and physical charter schools, the most important is that they are first and foremost accountable to parents and students, the consumers of their products. If they fail to meet their needs, they will cease to exist as their numbers would decline and cause the school to eventually close.

Of course, the differences between the charters are not inconsequential. While traditional charter schools are constrained by geography and can only serve limited areas, most cyber charters can be accessed at any time, from anywhere in the world. It is this freedom that is the source of cyber charters' greatest strength -- and greatest problems.

Also, though "cyber" is an integral part of their name, cyber charters often offer programs beyond just computer-based lessons. These can include physical education classes coordinated with organizations such as the YMCA; regular educational trips with teachers and other cyber charter students; and various extra-curricular activities (McCluskey 2002).

Finally, cyber charter schools differ from brick and mortar schools in their delivery of instruction. Online schooling can be either synchronous (with interactions happening live or in "real time") or asynchronous, as is more commonly the case, especially with courses offered across time zones. They can be scheduled to be completed during a common time frame (e.g., a standard school semester) or be self-paced, with students completing a course when content mastery has been achieved (Fulton 2002). In the U.S., most virtual schools have courses begin and end within a common time frame. It has been estimated that 30,000 U.S. students have taken an online course (Ball 2001). More telling is that in the 2002 school year, 40,000 to 50,000 students were enrolled in online courses (Clark 2001). This has led some to estimate that

in the year 2006, a majority of American high school students will have participated in online courses before graduating (Rose 2001).

The combination of the charter school combined with the Internet emerged in the state of Florida. Florida Virtual School (FLVS) was founded in 1997 and was the country's first state-wide Internet-based public high school to offer this type of instructional delivery (School 2006). Florida Virtual School's first year they had 77 students enrolled in their middle and high school courses, and in January of 2006, those numbers had risen to 50,000 (Stern 2006). Since then, cyber charter schools have sprung up in many states such as Ohio, Colorado, Minnesota and New Jersey ; and across the world in such places Australia, Canada, China, Japan, and Mexico.

The Commonwealth of Pennsylvania was not far behind the state of Florida in creating charter and cyber charter schools, as the Pennsylvania Legislature passed Act 22 in 1997 (Education). This bill outlined the process for establishing and maintaining charter schools 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." The bill went on to state: "Nothing in this clause shall preclude the use of computer and satellite linkages for delivering instruction to students." The door was officially opened for the development of cyber charter schools. During the law's first year of operation only six charters were granted, but expansion was rapid. By the 2003-04 school year, the number of charter schools had increased sixteen fold (Education 2004).

SusQ-Cyber Charter School was the first cyber charter to open in Pennsylvania. It served students located within one specific region served by the Central Susquehanna Intermediate Unit (Clark 2001). The intent was to serve, "highly motivated, independent learners" by using technology to deliver personal educational programs for students (General

2001). The Western Pennsylvania Cyber Charter School (WPCCS) was the first virtual school to enroll students from across the state in 1998 (Pickels 2004). Their success was immediate as students from all over Pennsylvania enrolled. Within two months of operation, the school increased its enrollment from 250 to over 500 students, surpassing the total student population of the Midland Borough District, where the school operated (Consulting 2001). Since then several other cyber charter schools have opened, each established with approval of a local school board. Approximately 11% of all charter schools in Pennsylvania are cyber schools, the largest proportion in the nation (Education 2006). There are currently 113 Pennsylvania charter schools which serve more than 50,000 students (2001).

After reviewing the literature around cyber education, it is a viable educational option for our children. For example, one major study by Cavanaugh, Gillan, Kromey, Hess & Blomeyer (Cavanaugh 2004) completed a meta-analysis of fourteen studies focusing specifically on student outcomes. Their conclusion was:

Students can experience similar levels of academic success while learning using telecommunications and learning in classroom settings. While distance learning as it is practiced in today's virtual schools uses technology that is less than ten years old and advances rapidly, the literature has shown that a student's education online can be as effective as it is in a classroom...

Barker and Wendel's (Barker 2001) study found that students in virtual schools showed greater improvement than their conventional school counterparts in critical thinking, researching, using computers, learning independently, problem-solving, creative thinking, decision-making, and time management. The National Association of State Boards of Education stated, "Evidence



to date convincingly demonstrates that, when used appropriately, electronically delivered education – ‘e-learning’ – can improve how students learn, can improve what students learn, and can deliver high-quality learning opportunities to all children”(Education 2001). Also, Duffy and Jonassen (Duffy 1992) said:

Online learning environments, when designed to fully use the many tools of communication that are available, is often a more active, constructive, and cooperative experience than classroom learning. In addition, technologies that are easily employed in online environments, such as mind mapping tools and simulations, are effective means for helping students make meaning of abstract phenomena and strengthen their meta-cognitive abilities.

As of the end of 2006, 38 states have established state-led online learning programs, policies regulating online learning or both. Of these, 25 states have state-led online learning programs, and 18 states are home to a total of 147 virtual charter schools serving over 65,000 students (Learning 2006). Although the future guidelines for cyber schools may evolve in the legislature and through the courts, one certainty exists: cyber schools are an idea whose time has come; there is no turning back.

## **Research Question #2**

### **What do the leaders consider the present state of their cyber schools to be?**

Interview questions: What are the current strengths of the Cyber School? What are the basic needs of the Cyber School? How are the students in your cyber school performing academically? How are you growing and developing your teachers through professional

development? What methods of supervision and evaluation do you utilize in your school? Are there any barriers at this current time that would hamper the growth of the Cyber School?

The intent of the researcher asking the second research question was to gain insight into what each of the cyber C.E.O.'s thought of their school's academic performance, professional development, supervision as well as its strengths, weaknesses and barriers for growth.

**Consensus Theme: The cyber C.E.O.'s utilize both internal and external providers to deliver professional development.**

Eight out of the nine C.E.O.'s indicated that they provide professional development to their staff using both internal and external sources.

**Cyber C.E.O. "A": We do a tremendous amount of internal and external professional development. Two years ago, 100% of our staff was enrolled in a college program. Last year it was in the upper 80%. We recruit good teachers and talk them into taking professional development college courses. Internally, our master teachers teach newer teachers. We also encourage teachers to move on if they wish to teach in a brick and mortar school.**

**Cyber C.E.O. "D": They are able to attend conferences, we pay for graduate courses, and we have fifteen in-service days—five during and ten after the year. They get training on technology, and we also bring people in to present to staff.**

**Cyber C.E.O. "E": We are committed to our staff. Many of them continue their education at the University of Pittsburgh. We also have the staff in small academies for**

professional development. Mentoring is given through these academies. They also learn how to teach online, have re-training sessions, learn about assessments and learn from each other. Their workspaces are set up so they can collaborate and support and assist each other—it is the best professional development we can provide in this environment. They can also receive training online, and off campus as well. These academies we have are usually about 20 people with a team leader (who has been here 3-5 years) and has a principal certification or is taking classes for that certification. Then it is further broken down to eight people to a captain. We implemented it two years ago and it is working.

Cyber C.E.O. “H”: We look for outside sources to provide training, we also do some internally. We let them go to conventions, out of state events—teachers must interact with other teachers to get ideas. Professional development must take place outside of the office and engage with other teachers so they are not isolated. I have a personal interest in wanting to change the image of cyber school teachers. I have also found that you can’t take new kids out of college and have them be successful in cyber education.

**Supporting Theme: The cyber C.E.O.’s believe that their staff is the reason for the strength of their school.**

Cyber C.E.O. “E”: Staff, curriculum and experience. Our staff are highly qualified, well prepared and we are very selective in who we hire. We have trained our teachers to understand the mission and vision of our school. Our curriculum is tailor/custom made and was audited by former superintendents. We have experience in the

fact that we were the first K-12 school in Pennsylvania, so we have been doing this the longest. We realize this is about people, not about technology—if you are not student centered, you will not be in this for long.

Cyber C.E.O. “H”: When I came to the school, the ship was sinking—the teachers were not certified, the previous leader was not certified as an administrator and on the PSSA they had made 3 out of the 11 benchmarks on the test. The current strengths are the leadership, a great staff—they are very young with a different work ethic. Last year we made 19 out of the 21 benchmarks on the PSSA. I have been weeding out the deadwood over time. The board is now far more involved; previously the management company had been telling the board what to do. I work for the board, not for the management company—the board members are very bright—most are CEO’s of their own companies. The board is now involved in the day to day activities, and they gave the staff salary raises of 20% when I came on board. Staff can receive bonuses of up to \$5000 for student growth; \$2500 if the students make AYP. We created a strict truancy policy, a strong student/parent contract and students must show up to take the PSSA or they will be dismissed from our school.

**Supporting Theme: The cyber C.E.O.’s believe that their students are performing well academically.**

**Cyber C.E.O. “F”:** Our students are performing well academically. All of our subgroups made AYP with the exception of the Special Education subgroup in reading last year.

**Cyber C.E.O. “J”:** As for the PSSA we made AYP every year, last year we were put on warning due to our math scores. We have a small school with good administration and teachers—they get all the credit.

**Supporting Theme: The cyber C.E.O.’s utilize the state 426, 427 and 428 forms for supervision and evaluation of their staff.**

**Cyber C.E.O. “A”:** We evaluate teachers four times a year. We use two tools based on a project staff evaluation form developed by our IU—it is good for school wide goals, customer service, etc. The second tool is based around the 426, 427 & 428—we modified it and put a cyber spin on it. We do mid and end of the year evaluations using both forms. We spend a lot of time--150-200 hours per year evaluating staff as it gives us a clear picture of what and how teachers are doing.

**Cyber C.E.O. “B”:** We spent a significant amount of time translating the state 426 form into something we call the “Sources of Evidence” to show what teachers are doing in their classes. We can listen to recordings, live sessions, do walkthroughs and review their “mini” portfolio of lesson plans, parent/student communication, etc.

**Supporting Theme: The cyber C.E.O.'s believe that current legislation (Bill 446) would hamper the growth of their school.**

**Cyber C.E.O. "A": Legislation. But we are happy with the size of our school. Socialization is the number one reason kids leave our school as we do not offer a lot of this at the current time as we do not want to.**

**Cyber C.E.O. "E": People fear what they don't understand, and they can't embrace change. Cyber schools have created uncertainty in public schools. We have been attacked—for example, the Byer bill will hurt cyber schools.**

### **Research Question #3**

**What developments are currently taking place in their schools and in the state of Pennsylvania?**

Interview questions: Are there any internal changes going on that could affect your school? Are there any state-wide changes happening that could affect your school? Are there any national or international changes taking place that could affect your school?

The intent of the researcher asking the third research question was to gain insight into what internal, state-wide, national or international changes were occurring in each of the cyber schools.

**Consensus Theme: There are state-wide changes currently taking place that could affect Pennsylvania's cyber schools.**

Nine of the nine cyber C.E.O.'s reported that there are state-wide changes occurring that could affect their school.

**Cyber C.E.O. "A": Yes. In 2005 it was House Bill 1278 that allocated \$2000 per student for cyber schools. In 2006 it was House Bill 2616 that was to allocate \$3000-\$5000 per student, with the biggest schools to get less money. In 2007 it was House Bill 446 that allocated \$5000 which was based on our amount of funding—which is skewed low as I didn't have time to fill positions—so this is not an accurate price. This is all being done to put the cyber schools out of business or to ignore us, but we won't go away. Sloan studies and NACOL indicate that cyber schools are exploding all over the country.**

**Cyber C.E.O. "E": The new Legislation could hamper us from offering quality services to our students. Every time there is a change and we get a new Secretary of the Department of Education, a different government and governor, things change. Since Rendell has two years left, most likely his staff will change and that change will likely affect our schools.**

**Cyber C.E.O. "H": Legislatively there is. Funding is an issue by billing districts—they do not like that—can be confrontational with districts. Cyber schools were supposed to have mandates lifted from them, now the state is trying to do the opposite. For example, what do we need a school nurse for in a cyber school? The state is trying to restrict funding and add more mandates to us. I feel that if the funding changes occur, we will not be able to provide FAPE or meet the IDEA requirements we must follow due to NCLB.**

Cyber C.E.O. “T”: PIMS, the secretary of education is against cyber schools, others in legislation are against cyber schools. PCCS and the CEO’s need to be more aggressive against the Byer bill, but many of the CEO’s are turf oriented and are not concerned with others. It is important to put Byer in her place. We need to try and get a relationship with PSEA, but that may just be wishful thinking. We act as victims rather than having a proactive mentality.

Supporting Theme: There are national or international changes taking place that could affect the cyber schools; namely No Child Left Behind (NCLB).

Cyber C.E.O. “A”: NCLB—it affects everyone. People will get better at cyber education with curriculum and with such things as Moodle and Blackboard—which are built for online programs. Online curriculum will change as big textbook companies will find ways to make money from cyber education. There is a lot of money to be made in cyber education.

Cyber C.E.O. “T”: I spent three weeks in Kenya as I support a school there. It is a microcosm of what will happen in other third world countries. The US is not doing well on international tests. Energy costs increase which affects taxpayers. If taxpayers feel the schools are not helpful and anti-education people get elected to school boards, this does not help the situation. Changes in leadership in Iran and Kenya eventually effects education. Nationally, with NCLB—how will it look—will a growth model be used? We need a president who is really for education and puts money where it needs to be. I don’t mind being accountable for my actions, but the playing field needs to be leveled.



**Supporting Theme: There are internal changes going on with staffing that could affect the Cyber School.**

**Cyber C.E.O. “E”:** The Board of Trustees is taking a more active role and they are now more diverse—they are located from all across the state. This will affect the running of the school. Some of our school administrators have chosen to move on.

**Cyber C.E.O. “T”:** Yes, a lot. We replaced our technology person as they were out of synch with the organization. We had to terminate people who were not effective. We eliminated other positions as we found out there were certain things that were left undone. I want to attract higher end students, work with better companies, do strategic planning, board trainings, and look for other funding services to help with the costs.

#### **Research Question #4**

**What do the leaders foresee for the future of cyber education?**

Interview questions: How will the future of cyber education impact public education?

As a follow up to your answer to my previous question, what do you see for the future of cyber education? Is there anything else we have not covered or touched on that you would like to share with me?

The intent of the researcher asking the fourth research question was to gain insight into their views of the future of cyber education, how they feel cyber education will impact traditional public education and any other information that they wanted to share.

**Consensus Theme: The leaders foresee change for the future of brick and mortar schools due to cyber schools.**

Six out of the nine cyber C.E.O.'s stated that they believed that traditional brick and mortar schools will change due to cyber schools.

**Cyber C.E.O. "A": A dozen local school districts want to put in an online program and I am helping them to build it. Large districts want to replace a building with a cyber program. In our affluent county, the students have access to high speed internet and cars. Parents will drop them off late at school so they can participate in an online program. We have had one dozen visitors from outside of the state to see what we do here. Cyber education is not for every student and it does not work for everyone—and as full time program it is for even less students. Florida Virtual has 80,000 seats and students can take only one class and leave school early or come in to school late to participate in a class or make up a credit. Full time cyber education programs are where students come to hide—we wrote a policy to prevent this at our school. We are helping our local districts with students who are truant and are not working in our school.**

**Cyber C.E.O. "B": So far districts are looking at ways to utilize technology better—I thought they would do this faster, and to set up their own online programs. But, districts are missing the boat—it's not the technology that makes the difference it is the relationships with the students that is suffering which is why districts will continue to lose students to cyber schools.**

**Cyber C.E.O. “H”:** It already has. There is an Air Force saying that goes, “If you are catching flack, you’re over the target”—which applies to cyber schools. At first no one cared when cyber schools came to be, but now they do, and they want to copy what we do. PSBA is trying to take us out of existence—just like what happened in the steel industry or the airline industry. All the big steel companies we had—Bethlehem steel, Armco are all gone thanks to their unions. The smaller companies like Nucor are still around. The smaller airlines like Air Tran and Southwest are still around while some of the giants are gone. The auto industry is the same way—American Motors is gone, GM and Ford are doing badly, and Toyota is succeeding. The common denominator in all these industries was the unions—this is also what will happen in education. Only 19% of taxpayers have kids in public schools. How long will they fund schools—and new buildings? Property taxes cost much more than what the real cost of an education costs—there is talk about making all schools private.

**Cyber C.E.O. “I”:** It will be a positive sense in a negative way. Smart school districts will realize that cyber schools are here to stay. PSEA, PSBA who think it’s all about saving money need to self reflect. We will be around and people are acting like an ostrich by sticking their heads in the sand. Districts will think it’s easy to set up a cyber school or blended program to save money, but they will be rudely awakened. I hope districts will want to reduce building costs and will turn to cyber schools to want to partner to do what’s best for kids. It is all about choice with accountability and responsibility. We owe it to the constituents to let them pick—the consequence to us is we may be gone. We

are trailblazing what will be done worldwide. This is not for everyone as some will hide behind the concept. People outside of education are intrigued by cyber education.

**Supporting Theme: Cyber C.E.O.'s see "blended" models for the future of cyber education.**

Cyber C.E.O. "B": I think there will always be a market for students doing online learning from home. Opportunities to have smaller schools that have online learning with a wider curriculum at some point may occur. Schools blending will get bigger but tradition is a strong thing—football, cheerleaders and the prom are not going away.

Cyber C.E.O. "H": It won't always look like this—they will evolve. Districts will either get on board, or go downhill. I envision classrooms with laptops with high speed internet where students have headsets on in class—some students will be at home but all will be taking a part in the same lesson. I imagine equal access with sophisticated software. I see residency programs as well as others.

#### **4.2.4 Summary**

In this chapter, the interview process, data collection and analysis were reviewed. A summary of the interviews and data analysis were presented. The emerging consensus and supporting themes were identified. The supporting data quotes for each theme were listed.

## **5.0 CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 OVERVIEW**

With more accountability in the era of No Child Left Behind and the pressure for change, the field of education has been transformed, now offering parents choices for their child's education. No longer are the consumers of public education left with just the basic subjects and little else, they can now choose to send their child to a school with an emphasis on the arts or other specialty area or have their child attend a cyber charter school.

Research has confirmed that cyber schools are growing at a rapid pace here in the state of Pennsylvania and across the United States. Approximately 11% of all charter schools in Pennsylvania are cyber schools, the largest proportion in the nation (Education 2006). There are currently 113 Pennsylvania charter schools which serve more than 50,000 students (2001). In 2007, cyber enrollment alone topped over 20,000 students and has been growing 3,000 students per year for the last several years (2008). As of the end of 2006, 38 states have established state-led online learning programs, policies regulating online learning or both. Of these, 25 states have state-led online learning programs, and 18 states are home to a total of 147 virtual charter schools serving over 65,000 students (Learning 2006).

Today is a very exciting time for technology and education. Online programs offer technology-based instruction in environments that expand learning opportunities and can

provide top quality education through a variety of formats and modalities. With the special needs of learners who need or want to continue their education, online programs offer a convenient solution to conflicts with work, family and study schedules. Educational institutions have found that online programs are essential in providing access to education for the populations they wish to serve. With the emphasis on technology in school and in the workplace, cyber charter schools will continue to exist for a long time.

## **5.2 SUMMARY OF PURPOSE OF THE STUDY**

The purpose of this study was to investigate cyber C.E.O.'s perceptions regarding the present state of their cyber school in the state of Pennsylvania, and their views of cyber schools in the future. Through this investigation, the researcher analyzed the statements of the C.E.O.'s about their schools and what the future holds for cyber education. The researcher interviewed nine of the eleven cyber C.E.O.'s across the state in regards to the current state of their school and what they believed to be the future of cyber education.

## **5.3 SUMMARY OF RESEARCH METHODOLOGY**

A case study approach was used to develop insights into the phenomenon, in this case, the present and future of cyber education. Qualitative inquiry methods were used in this

study. These methods allowed the researcher to capture an understanding of the perspectives of the C.E.O.'s regarding cyber education. Semi-structured interviews were used as the descriptive data collection tool regarding the current and future state of cyber education in the state of Pennsylvania. The researcher was the primary instrument for data collection and analysis.

The interview consisted of twelve open ended questions that were developed to collect descriptive data in the subjects' own words and from the subjects' perspective. The subjects expressed their thoughts and opinions and his or her own perspectives on how they believe the current state of their school to be and what they believe cyber schools will be in the future. The critical factor was not the quantity of informants, but the quality of the responses. The selection of the informants of the study was based on the fact that they were all current cyber C.E.O.'s in the state of Pennsylvania. The interviews were scheduled over a six week period and were done primarily over the phone. The interview data was transcribed by the researcher. The transcribed information and data from the interviews were then analyzed using a content analysis method. The researcher coded and identified themes that emerged from the data. Using the analysis process recommended by Lincoln and Guba (1985) the identified emerging themes were reported by 1) consensus themes, which are when the majority of the participants stated the theme, and 2) supporting themes, which are when two or three of the participants stated the theme.

Nine of the eleven cyber charter leaders were utilized for this study. The researcher attempted to contact the two other leaders repeatedly by phone, email and written correspondence with no response. After multiple attempts, the researcher regrets that the two other cyber charter school C.E.O.'s refused to be involved.

## 5.4 SUMMARY AND ANALYSIS OF FINDINGS

The data gathered from the interviews of the C.E.O.'s were organized within the following eleven emergent themes:

1. They utilize both internal and external providers to deliver professional development.
2. They believe that their staff is the reason for the strength of their school.
3. They believe that their students are performing well academically.
4. They utilize the state 426, 427 and 428 forms for supervision and evaluation of their staff.
5. They believe that current legislation (Bill 446) would hamper the growth of their school.
6. There are state-wide changes currently taking place that could affect Pennsylvania's cyber schools.
7. There are national or international changes taking place that could affect the cyber schools; namely No Child Left Behind (NCLB).
8. There are internal changes going on with staffing that could affect the Cyber School.
9. They foresee change for the future of brick and mortar schools due to cyber schools.
10. They see "blended" models for the future of cyber education.

Although the findings of this study are not generalizable, as there are many other voices to be heard, such as that of the parents, students or staff and how they view cyber education. However, these findings do provide valuable insight into the present and future state of cyber education.



## 5.5 SUMMARY OF MAJOR FINDINGS

From the study, three major findings emerged from the interviews with the leaders of the cyber charter schools. One is that most of the C.E.O.'s utilize internal and external sources for the professional development of their staff. The leaders noted a variety of sources from their local Intermediate Units, Pattan, the Pennsylvania Department of Education as well as others. From my experience, there is not one provider that best meets the needs of cyber charter schools' professional development needs. Perhaps in the future one will arise, but for now a mix of providers are used.

The second finding was that there are state wide changes that could affect cyber charter schools in the way of funding. House Bill 446 proposes the cutting of funds that cyber charter schools receive. This bill wants to place a cap on what the schools would receive for special and regular education students. Many of the leaders indicated that if this would happen that they would need to close their doors as they would not have adequate funding. Other leaders noted that they would have to cut programs and offer students fewer choices, which is not what the C.E.O.'s intended. House Bill 446 has been around for some, as well as others like this bill, and only time will tell if it will ever come to pass.

The last major finding is that the C.E.O.'s foresee changes in traditional brick and mortar schools due to the advent of cyber charter schools. One of the leaders noted that the cyber charter school movement has had a greater impact on public schools than the federal No Child Left Behind has. Many of the leaders believe that brick and mortar schools will add more technology, change plans for building or renovating their structures and add cyber courses. Some have also indicated, and from my experience I believe more brick and mortar schools will have a more "blended" structure. Students may eventually take some classes in the brick and

mortar school, take some at home online and possibly work the rest of the time or participate in an apprenticeship program. There are so many combinations and options that are available for today's student thanks to online courses. Students can make their schooling experience more relevant to them by spending their time volunteering, helping to provide for their family or taking an advanced course at the local community college on campus. I believe that cyber charter schools have caused leaders at the traditional brick and mortar schools to finally think outside of the box. If we want our students to be competitive globally, things need to change and internet access to online courses has made that possible.

### **5.5.1 Addressing the First Research Question**

**What does the literature say about cyber education and the current state of cyber schools?**

The intent of the researcher asking the first research question was to gain an understanding of the literature around cyber education, with a focus on what the leaders of Pennsylvania think of their cyber school and what they believe the future to be.

Not a lot of literature was found about cyber education and the current state of cyber charter schools in the state of Pennsylvania. What is important to the state of Pennsylvania and everyone involved with cyber charter schools is accountability and how the schools are performing academically.

Education started to change with the onset of standards and anchors. The No Child Left Behind Act (NCLB) of 2001 was signed into law by President Bush. This Act represents the President's education reform plan and contains the most sweeping changes to the Elementary

and Secondary Education Act (ESEA) since it was enacted in 1965. NCLB changes the federal government's role in K-12 education by focusing on school success as measured by student achievement. Penalties for failing to meet benchmarks were more stringent than before, and methods for assisting (and sanctioning) schools more specific. In short, NCLB raised both the stakes for schools aiming to narrow gaps in student achievement, and the profile of the federal government in education policy generally (Rudalevige 2005).

Pennsylvania schools felt the pressure of accountability due to NCLB and were working harder than ever toward student achievement. School district's report cards that listed how they were performing appeared in local papers and on websites. Parents were making their voices heard when they were unhappy with their current school district, they were free to choose to send their children to private, charter or cyber charter schools. Pennsylvania's cyber charter schools performance in making Adequate Yearly Progress (AYP) for the year 2006 is listed below:

- Made AYP – 1 cyber charter school (9% of the schools)
- Warning – 1 cyber charter school (9% of the schools)
- School/District Improvement I – 3 cyber charter schools (27% of the schools)
- School/District Improvement II – 2 cyber charter schools (18% of the schools)
- Corrective Action I – 1 cyber charter school (9% of the schools)
- Corrective Action II – 1 cyber charter school (9% of the schools)
- Making Progress – 2 cyber charter schools (18% of the schools)

Students who choose cyber charter schools have certain characteristics. CEO Nick Trombetta of the Western Pennsylvania Cyber Charter School said cyber charter schools are a

haven for a variety of students who have trouble at regular high schools—those who are perhaps, “too gifted, too hurt, too scared” to fit in (Hardy 2001).

On the other hand, Cyber School is not for everyone. “Students sometimes find that this is more difficult than they anticipated,” said Dr. David Martin, the C.E.O. of Pennsylvania Learners Online. “They not only have to show up, they have to produce results...A lot step up and begin (producing). Some say it is not what they expected and they return to their traditional school” (Pickels 2004).

Today is a very exciting time for technology and education. Online programs offer technology-based instruction in environments that expand learning opportunities and can provide top quality education through a variety of formats and modalities. With the special needs of learners who need or want to continue their education, online programs offer a convenient solution to conflicts with work, family and study schedules. Educational institutions have found that online programs are essential in providing access to education for the populations they wish to serve. In order for an online program to be successful, the curriculum, the facilitator, technology and the students must be carefully considered and balanced in order to take full advantage of the strengths of this format and at the same time, avoid pitfalls that could result from its weakness (Illinois).

### **5.5.2 Addressing the Second Research Question**

#### **What do the leaders consider the present state of their cyber schools to be?**

The intent of the researcher asking the second research question was to gain insight into what each of the cyber C.E.O.’s thought of their school’s academic performance, professional development, supervision as well as its strengths, weaknesses and barriers for growth. There

was a consensus theme across the interviews, which was that the C.E.O.'s utilize both internal and external providers to deliver professional development. The leaders felt that the present state of their school to be positive and that they were constantly looking for ways to improve and to become even better, often through professional development. Most of the schools pay towards tuition for college and university programs. Many of the leaders reported that they have mentoring opportunities for their staff and believe that their teachers can learn from one another as well as teachers outside of the cyber environment.

The leaders believe that their staff is the reason for the strength of their school. Many indicated that they were very selective in hiring as it takes a great deal to train them to operate successfully in their schools. Most, if not all of the schools utilized only teachers who were highly qualified in their subject area according to the Pennsylvania Department of Education. A few of the schools offered teacher incentives in the form of monetary bonuses if the students showed progress on state tests or other benchmarks. The literature indicates that teachers play a large part in the cyber education process:

The online format allows for a high level of dynamic interaction between the instructor and students and among the students themselves. Resources and ideas are shared, and continuous synergy will be generated through the learning process as each individual contributes to the course discussions and comments on the work of others. The synergy that exists in the student-centered Virtual Classroom is one of the most unique and vital traits that the online learning process possesses. The constant and sometimes immediate feedback from teachers in an online environment often encourages students to appreciate or value the learning task, which in turn, has been found to enhance cognitive learning (Rodriguez 1996).

The cyber leaders believe that their students are performing well academically. Some of the smaller schools attributed their success to their smaller size. They felt that their teachers got to know the students better and could offer more individual help. The PSSA is the indicator for academic success in the state, but the leaders felt that that was not the only indicator of success. Many schools focused on yearly growth that the students made, as well as success on benchmark assessments. Of the schools that made AYP, some subgroups were successful, but often times the special education subgroups were not. Statewide, students seemed to be having greater difficulty reaching proficiency in math. The literature reflects that cyber education is effective:

In Pennsylvania, the eleven public cyber charter schools met 42 of 45 Annual Yearly Progress (AYP) academic performance targets in the 2005-2006 school year on the Pennsylvania System of School Assessment (PSSA). The three schools that did not meet academic AYP missed it by only 1 target. Pennsylvania's cyber charter schools have dedicated teachers, staff and school communities that are committed to student achievement as these findings indicate (Williams 2007).

The cyber C.E.O.'s utilize the state 426, 427 and 428 forms for supervision and evaluation of their staff. Most of the leaders have adapted the state forms so that they are able to be utilized for a cyber environment. Many of the C.E.O.'s indicated that they utilize many of the same instruments used by brick and mortar principals to understand how the teachers are performing. Some of those materials are lesson plans, teacher/student communications, teacher portfolios, observations of live classes and class walkthroughs. I feel that as a cyber administrator that it is easier to complete an observation or a walkthrough of a class and the students will be less distracted. It is easier for me to complete these via computer with fewer

interruptions; in a brick and mortar school I would have several interruptions as I was walking to the teacher's classroom and many times have to tend to those issues and reschedule the observation. And being in an elementary building, many times the student's focus was on me, rather than the teacher's lesson, which did not give me an accurate picture of the class.

They believe that current legislation (Bill 446) would hamper the growth of their school. In the review of literature, I did not find another state or Bill in any other state like the current House Bill 446. I believe it exists and is an issue in our state because cyber charter schools are taking more students—and subsequently money—from the brick and mortar schools' budgets. Unfortunately, not everyone in Pennsylvania embraces change or the rise of cyber schools. Districts who lose students (and the tuition provided by those students) to cyber schools have lobbied against them. The Byer Bill or Bill 446 has been introduced into legislation with the outcome to cap the amount of monies that cyber schools could claim per student. Some leaders believe this will put an end to their school. As a cyber administrator, I see the stress that this current bill poses to all of us. We need to guess if we think the bill will pass and try to budget accordingly. It is unfortunate as the bill has been a threat for the last several years, therefore we have spent much administrative time trying to project budgets each year to try to meet the projected funding each year. This time was wasted as the bill has not yet come to pass and we could have spent that administrative time working with staff or students to improve academic performance. I wish the local districts would be more self reflective as to why the students left their school. The districts are the reason we exist. The parents and students come to us for a reason. The choice needs to exist—brick and mortar schools are no longer the answer for all students.

### **5.5.3 Addressing the Third Research Question**

#### **What developments are currently taking place in their schools and in the state of Pennsylvania?**

The intent of the researcher asking the third research question was to gain insight into what internal, state-wide, national or international changes were occurring in each of the cyber schools.

The majority of the C.E.O.'s that were interviewed by the researcher believed that there are state-wide changes currently taking place that could affect Pennsylvania's cyber schools. The leaders again indicated the impact that the Byer Bill would have on their school. One C.E.O. said that if the funding changes occur, his school will not be able to provide FAPE or meet the IDEA requirements we must follow due to NCLB. Many believe that the current price per student listed in the Byer Bill (\$5000) is not an accurate price for educating all students, and this would hamper the schools from offering quality services and programs. Another leader believes that this attack to restrict funding will continue to add more mandates to the schools; and cyber schools were set up to be different than the traditional brick and mortar schools. This hot topic has appeared in many Bills throughout the years and will be interesting to see the outcome in the months or years to come. No Child Left Behind (NCLB) survived a grueling conference committee process and became law January 8, 2002 (P.L. 107-110). In the end, the new law required (among many other things):

- All students be taught by "highly qualified" teachers
- All states devise "challenging," "coherent and rigorous" academic standards



- That all students be judged at least proficient on those standards within twelve years (that is, by school year 2013-14)
- This judgment be based on assessing all students annually in reading and math between grades three and eight, and again in high school, the results to be publicized via school “report cards” and vetted, through only informally, by mandatory participation on the National Assessment of Educational Progress (NAEP) in grades four and eight
- A specified level of adequate yearly progress be achieved, not just overall but disaggregated by race, economic status, English proficiency, and disability
- Schools failing to make such progress be subject to a variety of corrective actions that escalate each year, ranging from technical assistance and the provision of publicly-funded supplemental services to intra-district school choice to the replacement of staff or curriculum to school restructuring.

All of these initiatives require money to be able to put them into place. “Highly qualified” teachers cost money as does “challenging,, “coherent and rigorous” curriculum to meet the academic standards. If the Bill passes and cyber schools receive a lesser amount of money per student, some of these programs and teachers will need to be eliminated. I believe it is a shame to place a monetary amount per student all in the name of politics. It is unfortunate that the politicians calling the shots are not thinking first of the students they will be hurting.

There are national or international changes taking place that could affect the cyber schools; namely No Child Left Behind (NCLB). Many of the leaders were concerned with NCLB and the current presidential race. With a new president, how will NCLB change? Will

the candidate be pro-education? If not, how will education be affected? We do need a president who is for education and makes sure that it is equally funded. No Child Left Behind (NCLB), as it stands now, changes the federal government's role in K-12 education by focusing on school success as measured by student achievement. The Act also contains the President's four basic education reform principles:

- Stronger accountability for results
- Increased flexibility and local control
- Expanded options for parents
- An emphasis on teaching methods that have been proven to work (Education 2006).

It is possible that a new president can change these tenets of NCLB or eliminate them all together. I believe it would be unfair to have a major change in the midst of a child's academic career. The students are now used to the state test standards anchors, it would not be fair to change everything and have students learn a new system.

There are internal changes going on with staffing that could affect the Cyber School. Some of the C.E.O.'s indicated that newly graduated teachers do not do well in cyber education, as they have not had the chance to first hone their craft in front of a real classroom. Cyber education is more difficult as the students are not face to face with the teacher; therefore the teacher can not always tell if the student understands the topic as he or she is not able to read the student's face. I do not believe in generalizing that all new teachers cannot teach in a cyber environment well. I believe this all depends on the ability of the teacher. I have seen teachers fresh out of college become great cyber teachers, just as I have seen adults, who have chosen teaching as a second profession, become great teachers as well. Other leaders indicate a

difficulty finding quality candidates or staff who wants to stay in a cyber environment. It was also noted by many of the C.E.O.'s that it would be beneficial for local colleges and universities to focus on training teachers on how to be successful in a cyber environment. Since this environment seems to be growing, it would be beneficial for teachers to be able to master teaching in this realm. The literature supports some of the cyber C.E.O.'s concerns:

An online instructor must be able to compensate for lack of physical presence by creating a supportive environment in the Virtual Classroom where all students feel comfortable participating and especially where students know that their instructor is accessible. Failure to do this can alienate the class both from each other from the instructor. However, even if a virtual professor is competent enough to create a comfortable virtual environment in which the class can operate, still the lack of physical presence at an institution can be limited for an online program. For the faculty as well as the participants, such things as being left out of meetings and other events that require on-site interaction could present a limiting factor in an online program (Illinois).

#### **5.5.4 Addressing the Fourth Research Question**

##### **What do the leaders foresee for the future of cyber education?**

The intent of the researcher asking the fourth research question was to gain insight into their views of the future of cyber education, how they feel cyber education will impact traditional public education and any other information that they wanted to share.

They foresee change for the future of brick and mortar schools due to cyber schools. Time and time again the leaders noted that cyber education—especially full time cyber education

is not for everyone, and unfortunately in Pennsylvania the more challenging students with greater learning needs are attending cyber schools, instead of the self-motivated students. Students who excel and need enrichment and are self motivated do well at full time cyber schools; but unfortunately our students have come to our schools to try and hide. Many of the C.E.O.'s noted that local districts are adding online programs. The leaders added that the schools who are adding cyber programs think it is easy to do, but will realize it is not. They also said that the districts are adding these programs in the hopes that the students who left them will return, when in reality the districts need to understand why the students left in the first place—which usually has little to do with the program. Cyber education is a cost efficient way to reduce building costs in the future. The C.E.O.'s hope that districts will look to us the “experts” to help them implement their programs, but realize this will not often be the case. The literature also notes that cyber education can be a cost saving move:

In an age when many of our schools are overcrowded or crumbling, cyber learning makes financial sense, too, because schools using distance learning do not need to modernize or build new buildings in order to provide quality cyber instruction (Chaika 1999).

McEwan (McEwan 1997) states that:

In addition to potential cost savings, e-learning has pedagogical potential beyond traditional methods related to the principles of learning discussed. For instance, multimedia capabilities can be used with learning exercises that allow learners to apply concepts realistically. Or, animation can help demonstrate concepts and events difficult to portray in traditional classes, which, in turn, can facilitate a more accurate

communication of important ideas. E-learning can deliver “new” information not contained in traditional sources, effectively reinforcing other course information through offering examples, explanations, assessments, and exercises. In this way, online instruction can potentially enhance learning compared to what can be accomplished using a classroom-only approach.

They see “blended” models for the future of cyber education. Many of the leaders indicated that they believe there will be a trend to a more blended form of education—a brick and mortar aspect as well as a cyber aspect. This could be successful in Pennsylvania so districts will not have to forego tradition—social activities, football games, prom and the like. Some of the C.E.O.’s said that they could envision some students participating at home, and some participating at school with updated technology. Either way, it is an exciting time to be in education. One leader said he feels that cyber education has had a greater impact on education than NCLB or other initiatives have. It will be interesting to see how education will evolve and at what pace. The literature explains a blended or hybrid model as, “a course that blends online and face-to-face delivery. Substantial proportion of the content is delivered online, typically uses online discussions, and typically has some face-to-face meetings (Allen 2007).”

### **5.5.5 Conclusions and Recommendations**

Based upon the results of this study and the review of the literature on cyber education, it is obvious that cyber education can have a positive effect on student learning and that is here to stay in Pennsylvania and across the nation. Approximately 11% of all charter

schools in Pennsylvania are cyber schools, the largest proportion in the nation (Education 2006). There are currently 113 Pennsylvania charter schools which serve more than 50,000 students (2001). In 2007, cyber enrollment alone topped over 20,000 students and has been growing 3,000 students per year for the last several years (2008). As of the end of 2006, 38 states have established state-led online learning programs, policies regulating online learning or both. Of these, 25 states have state-led online learning programs, and 18 states are home to a total of 147 virtual charter schools serving over 65,000 students (Learning 2006).

What the researcher feels the most important strength that cyber education offers is accessibility for all students, as the literature states:

In a 2001 report by the National Association of State Boards of Education (NASBE) titled *Any Time, Any Place, Any Path, Any Pace: Taking the Lead on e-Learning Policy*, the benefits of virtual schooling are made clear. The “most valuable benefit of e-learning” writes NASBE, “is its potential ability to deliver quality instructional services to all learners regardless of location, family or cultural background, or disability” (Gulliver 2001).

Echoed by Chaika, 1999:

It permits students in small, rural, or low-wealth school districts to take specialized courses that would ordinarily not be available to them and it meets the needs of school phobics, those in hospitals or recovering at home, dropouts who would like to get back in, expelled students, single parents, and students in other states or even other countries looking for nontraditional educational solutions.

The cyber C.E.O.'s admitted to using internal as well as external sources for professional development, and many had indicated their concern as to lack of standardized training for all cyber teachers. Some of the leaders also realized that not all teachers can also teach in a cyber environment. This is supported by the following literature:

Successful on-ground instruction does not always translate to successful online instruction. If facilitators are not properly trained in online delivery and methodologies, the success of the online program will be compromised. The instructor must be able to communicate well in writing and in the language in which the course is offered. An online program will be weakened if its facilitators are not adequately prepared to function in the Virtual Classroom.

An online instructor must be able to compensate for lack of physical presence by creating a supportive environment in the Virtual Classroom where all students feel comfortable participating and especially where students know that their instructor is accessible. Failure to do this can alienate the class both from each other and from the instructor. However, even if a virtual professor is competent enough to create a comfortable virtual environment in which the class can operate, still the lack of physical presence at an institution can be limited for an online program. For the faculty as well as the participants, such things as being left out of meetings and other events that require on-site interaction could present a limiting factor in an online program (Illinois).

This researcher does believe that cyber education could be benefited by the state revising the current charter school law. Charter and cyber charter schools were to be different than brick

and mortar schools and follow different rules. Politics came into play and this was not the case. This researcher feels strongly that cyber charter schools should simply be charter schools (like “magnet” or “schools of emphasis”) with an emphasis on technology. It should be written into the charter that each school screens every student applicant to ensure that they can be successful. Too many students come to cyber schools to hide from problems they encountered in brick and mortar schools, quickly realize this and find out that Cyber School is tougher than it seems, and quickly move on. This constant flux of students coming and going is not good for the students or the Cyber School. The literature supports that cyber education is not for all students:

While an online method of education can be a highly effective alternative medium of education for the mature, self-disciplined student, it is an inappropriate learning environment for more dependent learners. Online asynchronous education gives students control over their learning experience, and allows for flexibility of study schedules for non traditional students; however, this places a greater responsibility on the student. In order to successfully participate in an online program, student must be well organized, self-motivated, and possess a high degree of time management skills in order to keep up with the pace of the course. For these reasons, online education is not appropriate for immature and other students who are dependent learners and have difficulty assuming responsibilities required by the online program. And lastly, some students feel a sense of learner isolation by not being face to face with a teacher (Brown 1996).

The researcher is hoping for a more student centered approach that will benefit both the school and the student.



### **5.5.6 Recommendations for Further Study**

As an administrator in cyber education, the researcher brought background knowledge and a thorough understanding of the workings of this cutting edge type of schooling to the research. But, since this topic is still relatively new, there is much to be learned on this topic. With that the researcher feels that there are several topics that could be further studied.

One topic worth looking into would be the types of technology utilized in the cyber schools. Some schools do have a platform for “live” lessons in which the teacher and students can interact with each other. Others do not. It would be interesting to find out if the schools that offer live sessions students do better academically than those that do not.

Another area would be academic performance. The researcher believes that the cyber schools are doing all that they can to impact student performance in their schools, but because the students who attend the schools are running from problems in their brick and mortar schools, they are not performing well. One cyber school in the state has done well on the PSSA. That school’s C.E.O. told me that they spend lots of time interviewing parents and that they are not filtering, but informing parents of all that is involved with cyber education. All the local surrounding school districts have also agreed not to send him students that will not be successful in Cyber School. It would be interesting to find out which curriculums have had the most student success in the schools as well as student engagement and retention. Some of the schools have large mentoring programs which help students to succeed, others do not. All those pieces play into academic performance and it would be helpful to know which do and do not help improve student success.

Professional development of staff is another area to consider for further study. The researcher found professional development to be at all ends of the spectrum from the

interviews. One school had an intensive cohort model which would be interesting to know its effectiveness. Some schools were doing a lot of specified, structured training with staff and others were doing more of a random method of this. Some schools allowed staff to take advantage of whatever training they were interested in, but the researcher didn't feel that this helped the school or came together in any way or support the school's mission and vision. Since cyber education is so new it would be beneficial to know what best practices were most effective and those that were not.

Marketing would also be an area to further study. Some cyber charter schools do extensive radio, television and print ads as others do not. Some of the cyber charter schools that are contained in Intermediate Units may not extensively market to avoid conflict with the local districts in the county. However, the largest cyber charter school in the state does market extensively. It would be interesting to study the amount of marketing budget per school and how that compares with the number of students attending that school.

The C.E.O.'s backgrounds would make for an interesting study. What I found was that all the leaders I interviewed had a wide variety of experiences. Some came from the business world, some had served in school districts' central office in various positions, and still others had served as principals or assistant principals. It would be interesting to see if the leaders' background plays a part in the success of the cyber charter school.

Lastly, evaluation of staff is an area of further study to consider. Most cyber schools are using the state 426, 427 and 428 forms which work well in brick and mortar schools, but are they effective for cyber schools? Also, how do you best observe a cyber teacher? Should you stand over their shoulder and watch them teach class? Should you log in as a student and observe that way? Or go in as an administrator and observe that view?

There are so many questions to be answered yet in the area of cyber education since this field is still relatively new across our state and across the nation. Anyone who is interested in this model of education would greatly help the field by exploring any of these topics in depth as this study is really just the beginning of research on cyber education.

## APPENDIX A

### SAMPLE TRANSCRIPT FROM INTERVIEW

1. What are the current strengths of the Cyber School?

**When I came to the school, the ship was sinking—the teachers were not certified, the previous leader was not certified as an administrator and on the PSSA they had made 3 out of the 11 benchmarks on the test. The current strengths are the leadership, a great staff—they are very young with a different work ethic. Last year we made 19 out of the 21 benchmarks on the PSSA. I have been weeding out the deadwood over time. The board is now far more involved; previously the management company had been telling the board what to do. I work for the board, not for the management company—the board members are very bright—most are CEO's of their own companies. The board is now involved in the day to day activities, and they gave the staff salary raises of 20% when I came on board. Staff can receive bonuses of up to \$5000 for student growth; \$2500 if the students make AYP. We created a strict truancy policy, a strong student/parent contract and students must show up to take the PSSA or they will be dismissed from our school.**

2. What are the basic needs of the Cyber School?

**One weakness is that the management company controls the purse strings, which therefore controls the school. Another weakness is that the board backs me 100% and therefore there has been push back on the management company. The state's open enrollment policy is a weakness. We have mandatory information sessions for students, but too many students are running from their brick and mortar school to us as a solution to their problem.**

**3. How are the students in your cyber school performing academically?**

**Our biggest issues are with the management company and with staffing issues. They are business people with formulas to decide on staffing. I have an MBA and a business background and I understand that it depends on the students if they need remediation or not. We are attracting kids who believe public schools failed them and come with troubles and issues. Cyber education is more for advanced students—they would flourish in this environment. Districts offer extra curricular things to these students which makes brick and mortar more appealing. The social aspects of high school are important to these students. The public sees public education as a baby sitting service so they can drop their kids off for the day and do whatever it is they do. Parents must be involved with education and don't want to be.**

**4. How are you growing and developing your teachers through professional development?**

**We look for outside sources to provide training, we also do some internally. We let them go to conventions, out of state events—teachers must interact with other teachers to get ideas. Professional development must take place outside of the office and engage with other teacher so they are not isolated. I have a personal interest in wanting to change the**

**image of cyber school teachers. I have also found that you can't take new kids out of college and have them be successful in cyber education.** 5. 5. What methods of supervision and evaluation do you utilize in your school?

**We use the state 426, 427 & 428 forms. Non-tenured teachers are evaluated 2 times per year; tenured teachers are evaluated 1 time per year. There are more standardized forms that teachers need to fill out such as a family contact log, a three-week unit plan and a reflection after their observation—they put all this together to present a portfolio at the end of the year. These things make it more standard and easier to compare teacher to teacher.**

6. Are there any barriers at this current time that would hamper the growth of the Cyber School?

**Capacity—being able to take on more students and staff. It takes time to train staff and have them go through induction. We also would need more office space. 11 cyber schools are competing for a fixed pool of students; one of the schools has more name recognition due to advertising.**

7. Are there any internal changes going on that could affect your school?

**The management company and getting the board more involved in setting policy and the ability to change the vision of the school.**

8. Are there any state-wide changes occurring that could affect your school?

**Legislatively there is. Funding is an issue by billing districts—they do not like that—can be confrontational with districts. Cyber schools were supposed to have mandates lifted from them, now the state is trying to do the opposite. For example, what do we need a school nurse for in a cyber school? The state is trying to restrict funding and**

**add more mandates to us. I feel that if the funding changes occur, we will not be able to provide FAPE or meet the IDEA requirements we must follow due to NCLB.**

9. Are there any national or international changes taking place that could affect your school?

**Yes, our management company feels that what is good for Ohio (or the other states where they have schools) is good for everyone else. The company sees that one system is cheaper than many other individual ones, and feels this should work for Pennsylvania. Thankfully, the board sees that this cannot be done. Blended Schools is an issue, but the districts that have this do not have the teachers involved and don't really believe in it—they just want their students back from the cyber schools. Instead, they are trying to do this cheaper and it will not work—just like most of the gifted programs in the state—it is all just smoke and mirrors. Schools have technology, but no one knows how to use it—and the unions protects the teachers from learning it.**

10. How will the future of cyber education impact public education?

**It already has. There is an Air Force saying that goes, “If you are catching flack, you're over the target”—which applies to cyber schools. At first no one cared when cyber schools came to be, but now they do. PSBA is trying to take us out of existence—just like what happened in the steel industry or the airline industry. All the big steel companies we had—Bethlehem steel, Armco are all gone thanks to their unions. The smaller companies like Nucor are still around. The smaller airlines like Air Tran and Southwest are still around while some of the giants are gone. The auto industry is the same way—American motors is gone, GM and Ford are doing badly, and Toyota is succeeding. The common denominator in all these industries was the unions—this is also what will happen in**

**education. Only 19% of taxpayers have kids in public schools. How long will they fund schools—and new buildings? Property taxes cost much more than what the real cost of an education costs—there is talk about making all schools private.**

11. As a follow up to your answer to my previous question, what do you see for the future of cyber education?

**It won't always look like this—they will evolve. Districts will either get on board, or go downhill. I envision classrooms with laptops with high speed internet where students have headsets on in class—some students will be at home but all will be taking a part in the same lesson. I imagine equal access with sophisticated software. I see residency programs as well as others.**

12. Is there anything else we have not covered or touched on that you would like to share with me?

**The model in this state is not effectively set up to enhance cyber education unless it's fixed with the funding. Teachers unions run schools, have so many contracts and work rules that hurt students. School board members are amateurs and don't know enough—they are being funded by public monies. It will be very difficult if school districts refuse to change—they are using political clout to shut us down. I'm glad I'm at the end of my career. Teachers get jobs through political connections at schools, and I have seen some teachers who are functionally illiterate. Parents come in and ask why their child has this teacher. I left two teachers on improvement plans; one had an unsatisfactory evaluation and still got a \$4000 raise due to the teacher's contract. If taxpayers really knew the salary schedules—for example, in my former district if a teacher had been there 17-18 years they would receive a \$17,500 jump step. Public education will change. I don't sugar coat**



things, I'm not politically correct—I tell it like it is. If I could do it all over again, I wouldn't have gone for my doctorate, but went to law school instead.

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