HOW CAN THE KARNS CITY CYBER ACADEMY BE IMPROVED?

A Doctoral Capstone Project

Submitted to the School of Graduate Studies and Research

Department of Secondary Education and Administrative Leadership

In Partial Fulfillment of the

Requirements for the Degree of

Doctor of Education

Eric D. Ritzert

California University of Pennsylvania

August 2020

California University of Pennsylvania
School of Graduate Studies and Research
Department of Secondary Education and Administrative Leadership

We hereby approve the capstone of

Eric D. Ritzert

Candidate for the Degree of Doctor of Education

8/3/2020

Dr. Peter Aiken
Superintendent, Manheim Central School District
Doctoral Capstone Faculty Committee Chair

8/3/2020 Ed.D.

Dr. Sean Arney
Supervisor of Elementar Math and Science
North Penn School District
Doctoral Capstone External Committee Member

Dedication

This work is dedicated to my family, who supported my efforts to complete this milestone, which has helped me grow professionally. Thank you, Krista, and my loving kids, Addison, Kendall, and Taylor, for being patient with me during the time that was needed to complete this project.

Acknowledgments

This work would not have been possible without the time and support of numerous educators that I have the privilege to work with daily. May we all continue to work together to make tomorrow a better day for the students we serve. I am sincerely appreciative of the encouragement and feedback I have received over the past two years from Dr. Aiken. He has been instrumental in keeping me on track. I am also very appreciative of the help and support from Dr. Arney, who served not only as a mentor with this project but as my friend. Your encouragement made all the difference.

Table of Contents

List of Tables

List of Figures

Abstract

Pennsylvania is a state with significant proportions of students who attend rural schools, as well as students who attend cyber schools. Parents have the right to enroll their child in any one of a dozen or more cyber schools, even if their local school district operates an online program. The purpose of this action research project was to examine the reasons why parents choose the option to enroll in an external cyber school rather than the local school district option. Results indicated that parents were unaware of the KC Cyber Academy option and reported having no choice but to enroll their child in an external cyber school. Findings also suggested that male students in grades 7-9, students with an IEP, and students who were from economically disadvantaged households depart the school system at a higher rate than other students. The implications of this study were that if improvements could be made to the existing online learning program, more students would take that option and obtain a quality education, and financial savings would be realized for the school district.

Keywords: rural Pennsylvania schools, cyber school students, online education, student-teacher relationships, professional development

CHAPTER I

Introduction

Reflection/Overview

This action research study explored the reasons why parents enrolled their children in an external cyber school. First, parents of students that have exited our school system and then subsequently enrolled in an external cyber school were surveyed to determine what factors contributed to their decision. Secondly, demographic data that existed on students that were once actively enrolled in the school system, but later left to attend an external cyber school were analyzed for common characteristics and patterns. Lastly, through the review of literature, "best practices" associated with offering and providing online instruction to K-12 students in the public-school setting were identified based on the existing research.

Due to the different data types contributing to this study, the focus was placed on triangulating the data sources to build confidence with the accuracy of the results of the study (Hendricks, 2017, p. 135). The information learned from this study was shared with the administrative team, the board of school directors, and teachers. The findings were used to identify realistic changes that could be made in the programming and operation of the KC Cyber Academy that would lead to improvements that meet the needs of students.

Financial Implications

The cost to the school district over the years has spent hundreds of thousands of dollars per year for students that attended an external cyber school. Thus, Karns City Area School District created the KC Cyber Academy several years ago to attempt to minimize the number of students leaving the school system to attend an external cyber school. From

the time of its inception, the KC Cyber Academy has since evolved to provide online credit recovery and enrichment courses to students who desire to take classes that were not offered by the traditional school. The goal of this study was to look at what could be learned about the reasons KC students leave our school system for an external cyber school even though they have an option to take online courses locally through the school district.

It was anticipated that this study would identify reasons why parents made the decisions they did regarding their child's education. It was also expected that considerations as to how to improve and expand the KC Cyber Academy would surface. With potential changes, it would be expected that funding from the school district would be needed to implement any changes effectively. In order to justify the funding, two separate fiscal budgets were produced, each reflecting a distinct path that would add instructional support to the current KC Cyber Academy program that would enhance the Academy's ability to help students. This information was provided to the Board of School Directors for their input and consideration.

The primary justification of requesting the funding for this project was supported by the fact that the KC Cyber Academy demonstrated its ability to retain some students from leaving the school system for an external cyber school, and the school district saved money. A secondary factor was that with improvements that would be made to the KC Cyber Academy, all students that would take courses through it would receive educational benefits from the program.

With what was learned by conducting this action research project, practical recommendations were identified that the school district could use to improve its online curriculum platform so that it could provide quality online classes to the students.

Ultimately, the online programming that the home school offered to students should be more valuable than what was available to students from an external cyber charter school. The KC Cyber Academy provides the student a Karns City diploma, access to participate in extracurricular activities, access to "in-person" contact with teachers and other staff as needed, and the ability of students to take vocational-technical classes. With enhancements and appropriate marketing of our program, our program could provide students that have desired an alternative educational path a quality option that they can use to meet their needs without uncoupling themselves from our school and community. The findings that would be uncovered from this action research would serve as a basis to lead a discussion within the school district with the administrative team and teachers. The results will be used to craft a plan of improvement that can be implemented in the next school year. If such an outcome can be accomplished, the students, the school, and the local community will benefit from the improvements to the local educational offerings and a reduction in costs to the school system.

The general public does not understand the negative financial impact that external cyber school has on their local school districts. The loss of students causes a significant economic impact on the school system due to the loss of revenue that follows the departing student when they enroll in an external cyber school. This cost is often difficult to budget for because the departure of students can take place at any time throughout the school year, and for any reason, as is permitted under the current cyber charter law in Pennsylvania.

During the 2018-2019 school-year, a total of forty-five Karns City Area School District students were enrolled in one of the external cyber schools for at least part of the school year at an overall cost of $487,041 to our school district. The cost equated to the value of almost six (6) mills of property tax that left the school district in the form of tuition

payments to external cyber schools. Framing the cost another way, this would be more than one and a half times what would be generated by a property tax millage increase to the index. This transfer of money from the public school to an external cyber school is legal. It will continue unless the school system develops meaningful ways to reduce the loss of revenue by decreasing the number of students that leave the system to enroll in a cyber school.

Desired Outcomes

This project was designed to identify the potential strategies that the school system can implement to enable it to meet the needs of its students. A survey was created and administered to parents to obtain their viewpoints. Parent participation in the survey was voluntary, and informed consent was obtained from everyone that participated in the study as outlined in (Mertler, 2019, p. 46). The data collected was interpreted with the goal of revealing the root causes as to why parents made the choice they did for their children and what factors may have influenced them to keep their children enrolled in the school district's KC Cyber Academy. Understanding the reasons why parents made the choice that they made will help the school system select the proper options to implement to improve the KC Cyber Academy.

With this study, it was desired that this project would help save the school system money, and at the same time, improve the course delivery options available to the students. If accomplished, the students and the taxpayers will benefit in the long run. The research questions to follow will serve to guide me as I seek solutions that could reduce the number of students leaving my school system to enroll in external cyber schools.

Research Questions

1. Why do parents choose to enroll their child(ren) in an external cyber school instead of our school district's own cyber academy program?
2. What does the school district's data on students that leave the system to enroll in an external cyber school indicate about these students as compared to those that stay enrolled in the school system?
3. What are the best practices for the design and operation of online cyber classes for K12 students?

CHAPTER II

Review of Literature

Introduction

This literature review explored the body of existing research to identify and better understand some of the reasons why students and their parents may choose a cyber school to accommodate their educational needs even if their home school offers an online programming alternative. The focus of the project was to identify practical ways that a traditional public school district can identify and implement to improve upon their online curriculum platform so that they may provide quality online classes to their students. Ultimately, the online programming that the home school offers students should be of more value than what is available to them from an external cyber charter school to keep students from leaving to pursue external options. If such an outcome can be accomplished, the students, the school, and the local community will have benefited from improvements to the local educational offerings and a reduction in costs to the school system. With that, the journey began with a look at a problem that many small rural school districts currently face.

Current Challenges and Concerns

One of the challenges that traditional public schools in Pennsylvania face is the loss of students to cyber school. Even though school districts offer their own online cyber courses to students, some students continue to migrate from the home school system to an external cyber school when the traditional model of education delivery does not meet their needs. The loss of students has a significant financial impact on the school system due to the loss of revenue that follows the departing student when they enroll in an external cyber school. This cost is often difficult to budget for because the departure of students can take

place at any time throughout the school year, and for any reason, as is permitted under the current cyber charter law in Pennsylvania.

The current situation is very much a problem for the Karns City Area School District, where, for example, during the 2018-2019 school-year, forty-five (45) students were enrolled in external cyber schools for at least part of the school year. As such, it cost the school district over $487,000 in lost revenue that was ultimately deducted from the school district's state subsidy payments and transferred to external cyber schools. In Pennsylvania, this is how cyber schools are funded under the terms of the state's charter cyber school law, which requires the funding to follow the student. It does not matter whether the student chooses to attend their district school, a charter school, or one of the cyber charter schools within the state. Students in Pennsylvania are permitted to enroll in cyber charter schools at no cost to their family, and cyber schools advertise this fact routinely and aggressively to attract students. Unfortunately, people do not understand where the money truly comes from, and that tends to contribute to a degree of apathy around the problem and its impact on the traditional public school.

Under Pennsylvania's Charter Cyber School Law, the school district of residence is responsible for providing payment to the cyber charter school regardless of whether the student has even ever been enrolled in the school district. That is, a student is permitted to enroll directly into an external cyber school without ever first trying their home school district's school or online program. Every school district is required to annually calculate and publish a cyber school tuition rate that is based on a formula established and provided by the Pennsylvania Department of Education (PDE). Each school district must calculate their cost for regular education students and a separate and more expensive cost for special education students that the school district is responsible for paying the cyber school if a

resident student enrolls. Complicating things is that the cost paid to cyber schools varies significantly from school district to school district because the tuition rate is not based on the actual costs incurred by the cyber school to educate the student. The cyber tuition rate is based on what school districts spend to educate their students, which is why it varies.

The variance in the amount of the payments that different school districts make to the same cyber school is one of the items cited as a reason why Pennsylvania's Charter Cyber School Law needs to be reformed. If for no other reason other than the financial cost to taxpayers, this topic warrants being discussed openly by elected state officials. Most recently, Pennsylvania Governor Tom Wolf publicly proposed making several changes to the state's charter cyber law. Pennsylvania taxpayers spent $1.8 billion on charter schools during the 2018-2019 school year, including more than $500 million on cyber schools. The rising cost of charter schools is draining funding from traditional public schools, which has forced cuts to classroom programs and has caused property taxes to increases (PDE, 2019). The governor's proposal could save school districts an estimated $280 million a year by better aligning charter school funding to the actual cost spent educating a student in a cyber setting. The plan would set a limit on online cyber school tuition payments and applies the special education funding formula to charter schools, as it does for traditional public schools.

Despite costing Pennsylvania taxpayers $1.8 billion last year, cyber schools have little public oversight and no publicly elected school board. The for-profit companies that manage many cyber schools are not required to have independent financial audits as is required of traditional public schools. "There are high-quality charter schools, but some of them, especially some cyber charter schools, are underperforming," said Governor Wolf. "The inequities are not fair to students in charter schools or the children in traditional public

schools. It's time for change" (The Office of Pennsylvania Governor, 2019). On average, Pennsylvania charter schools have not improved student test scores in reading as compared to traditional public schools, and they have performed worse in math, according to a 2019 Center for Research on Educational Outcomes (CREDO) study from Stanford University cited by Wolf (The Office of Pennsylvania Governor, 2019).

The Stanford study also found that the academic situation was worse among the state's cyber charters, which dramatically underperform compared to public schools. Governor Wolf plans to propose several pieces of legislation, including one that would impose a moratorium on new cyber charter schools and cap student enrollment at low-performing cyber schools. These changes would require legislative approval, and that would be a long shot at this time due to the current political climate. Therefore, it would be prudent that school districts take steps to address the loss of their students to cyber charter schools.

In addition to financial costs, traditional public schools must be prepared to work with students who return from a cyber school to their home school district at any time. Often, when students do return, they are behind in their academics. Students that are behind must receive remediation opportunities that help them overcome any curriculum gaps that exist. Therefore, the home school needs to be prepared to dedicate additional resources such as tutoring or remediation courses to bridge the differences that exist. In a CREDO 2019 study, little changed in the academic progress of Pennsylvania online charter school students since the CREDO 2015 study. Online charter schools registered weaker learning gains in both reading and math as compared to the average traditional public school across both studies. Furthermore, there has been no substantial academic improvement of Pennsylvania's online charter sector across these two studies (CREDO, 2019).

The fact the cyber schools lag behind their public school peers provides an academic reason for school systems to be motivated to determine viable strategies to reduce the number of students that leave the local school system for an external cyber school. Offering students that consider an external cyber school for their education, an alternative to the traditional school day schedule might motivate some to stay. School systems should also reach out to the parents of students that have left the system to attempt to recruit the students back. Even if the effort is unsuccessful, the school system might be able to ascertain why the students left in the first place. This information would contribute to making strategic improvements to the school's online programming options leading to the development of a quality in-house cyber school program that meets the needs of the students and would be a step in the direction needed to stem student loss. If this can be accomplished, it would make a positive difference for the students' education and the school.

A Brief History of Charter Cyber Schools with a Pennsylvania Focus

The first charter school in the United States opened in Minnesota in 1992 and helped to create what has become a viable option for students who otherwise attend traditional public schools. Because charter schools and cyber schools are approved public schools, they can and do receive tax dollars to cover operational costs. However, unlike traditional K-12 public schools, cyber schools are not governed by publicly elected school boards and, in most cases, are managed by boards that are privately appointed. In contrast to traditional public schools, most charter cyber schools are operated as a for-profit enterprise, overseen and accountable only to individual charters that define each school's mission and educational purpose (Mann, Kotok, Frankenberg, Fuller, & Schafft, 2016).

Charter schools have continued to grow in number since the creation of policies that established these schools in the early 1990s. As of 2018, there are more than 7,000 charter schools throughout 43 states and the District of Columbia, educating approximately 3.2 million students per year (National Alliance for Public Charter Schools, 2019). These schools are made of both brick and mortar schools and online cyber schools. The desire for school choice has driven the expansion of charter schools as an alternative to the traditional public school and has enabled them to operate with less regulation than traditional public schools.

Charter and cyber schools in Pennsylvania are authorized under the state's Charter School law, known as Act 22, which was initially passed in 1997 and later became part of the Pennsylvania School Code. According to the Pennsylvania Department of Education:

> The Commonwealth's charter school system is intended to improve pupil learning, increase learning opportunities for all pupils, encourage the use of different and innovative teaching methods, provide parents and pupils with expanded choices in the types of educational opportunities that are available within the public school system, and hold the schools established under this act accountable for meeting measurable academic standards and provide the school with a method to establish accountability systems (PDE, 2019).

For almost the three decades, federal and state policies have enabled and promoted the growth of charter schools. Cyber schools have evolved out of the charter school movement as a result of the technology needed to make remote learning possible. Cyber schools have since become more readily available, enabling learning opportunities to take

place in offsite locations from anywhere that access to the Internet can be attained (Berends, 2015).

As a state, Pennsylvania has a significant number of students who attend rural schools and has a considerable number of students who participate in cyber schools. The enrollment patterns of students attending cyber schools in Pennsylvania differ somewhat across geographic regions. Overall, a higher percentage of rural students attend cyber schools than do students from urban areas. In some instances, it is thought that rural students attend cyber schools in higher numbers due to the lack of other options to them in their local community. When enrollment data was analyzed at the student-level, considering demographic characteristics, the data indicated that in contrast to traditional public schools, cyber schools attract students from a variety of areas, but rural students exhibit a higher likelihood of attending cyber schools than do suburban or urban students (Mann et al., 2016). The implications of findings in relation to educational equity, cyber school performance, and the fiscal impacts of cyber schools on the budgets of small school districts was significant for Pennsylvania school districts, and there is little doubt that their existence if hurting some Pennsylvania school districts (Mann et al., 2016).

According to PDE (2019), during the 2018-2019 school year, there were 15 approved cyber schools in operation in Pennsylvania, and they educated approximately 39,000 students according to data published by the Pennsylvania Department of Education. Enrollment in Pennsylvania's cyber schools has often been comprised of a higher percentage of students from poorer school districts, who have gravitated toward the cyber school option (Mann & Baker, 2019). As a result, the loss of funding when students leave the traditional public school more heavily impacts some of the school districts least able to bear the loss of revenue. This trend jeopardizes the quality of public education because the

school districts losing the highest percentage of students to cyber school competitors are the ones already struggling the most with funding. In some cases, as a result of parents enrolling their child in a cyber school, the traditional public school has been negatively impacted because the cyber school siphoned off revenue which added stress to traditional public school's budget (Molnar, Huerta, Barbour, Miron, Rankin-Shafer, & Gulosino, 2015).

Proponents of cyber schools have argued that competition will force schools to become better and more adaptive in their approach to education. This belief falls short because traditional public schools were never formed or designed for direct competition with cyber schools. The mission of the traditional public school was to meet the needs of society by educating the masses. Public schools must educate all students within its boundary, even while dealing with competition from cyber schools. Indeed, both traditional schools and cyber schools may compete for the same students, but they are not competing under the same set of operational rules and regulations. The discrepancy in how the state allows each of these two forms of education to operate prevents the traditional school from being able to compete equally with the cyber school schools.

The traditional public schools in Pennsylvania operate under a state accountability system that has evolved over many decades. It measures individual school performance against criteria determined by state policymakers and holds each school accountable for increasing student performance (Gemin, Pape, Vashaw, & Watson, 2015). However, a single system does not accurately measure all schools. Among the problems is that these systems do not adequately assess schools with high rates of student mobility. Although cyber schools face these same issues, they have less of an impact on cyber schools because the cyber school is not held to the same level of accountability as the traditional public

school. Therefore, the traditional school must look inward and reflect on what it can do to offer its students what they need and, more importantly, want so that students do not choose to leave the school system for alternative options.

As enrollment in Pennsylvania's cyber schools has increased, so has the criticism of their operation. The Pennsylvania Department of Auditor General, Eugene DePasquale (2012), and DeJarnatt (2013) have both suggested that there is a lack of fiscal oversight and accountability with Pennsylvania's cyber schools. Auditor General DePasquale recommended that Pennsylvania establish a uniform state tuition rate for students that attend cyber schools based on cost and not budgeted amounts. If a consistent cyber tuition rate were to be established, it would likely save school districts money because it would reduce the amount that flows from traditional public schools to cyber schools. Therefore, it is a point of contention for cyber school advocates who view any attempt to change Pennsylvania's charter school law as nothing more than an attempt to limit their operations and reduce parental options for their children's educational opportunities.

Although the Auditor General's comments were critical on the operational controls that are in place for Pennsylvania cyber schools, it has done little to erode the overall political support that exists for cyber schools as currently structured. Many Pennsylvania elected officials believe that cyber schools offer parents a legitimate choice and therefore continue to provide support for their operation and the current funding mechanism. Furthermore, Pennsylvania cyber schools appear to operate much like many of the other cyber schools from across the country, and when similar concerns with cyber charter school oversight have been raised nationally they have led to little change (Huerta, Gonzalez, & d'Entremont, 2006; Hasler-Waters, Menchaca, & Borup, 2014).

In addition to oversight concerns, there are some signs of a willingness to have a real discussion as to the overall effectiveness of current cyber schools. A growing area of research is beginning to show that students enrolled in cyber schools perform lower on standardized tests and other state-mandated tests than do their peers enrolled in traditional schools (Miron, Horvitz, & Gulosino, 2013). Before reports of ineffectiveness from mainstay media sources, cyber enrollments were continually increasing in many school districts in Pennsylvania. However, as the media stories questioning cyber school performance have increased, Pennsylvania school districts with more educated parents realized a decrease in student enrollment in cyber schools. The same was not the same for those with less-educated parents and fewer resources as they continued to see an increase in enrollment (Baker & Mann, 2019). This comparison has challenged the belief that cyber schools hold the answer to what was wrong with traditional public schools.

This review did not settle the argument of which one was better than the other academically or otherwise, as that would require a more thorough exploration of that area of literature. Instead, it served as a point of discussion and an attempt to undercover why might parents and students select a cyber school instead of a traditional school. What factors existed for a parent to choose the cyber school over the traditional school for their child's education? If a parent had any doubts about their decision, what swayed them to make the decision that they make? The factors that influenced a parent's decision-making process that lead to the actual choice to enroll in an external cyber school were an essential outcome of this study to address the problem.

Reason Parents Choose to Enroll their Child in an External Cyber School

Are there common reasons why parents choose to enroll their children in a cyber school instead of their traditional local public school? According to Ahn (2011), an online option provides an alternative to the traditional schedule that a school district offers and serves unique, niche populations of students. Ideally, being able to identify how the cyber school can or are perceived at meeting the student's needs could lead to information that can be used to improve upon the school's current online platform that it operates for online classes.

Whatever the motivations for parents and students in choosing a cyber charter school, they appear to seek an alternative to their traditional schooling experience. In some instances, Ahn (2011) found that students may have had previous issues with low achievement or social considerations such as bullying, employment, or health considerations, which influenced them to choose an alternative setting.

According to Gemin et al. (2015), hundreds of thousands of students are attending full-time online cyber schools that provide their entire education. Many of these students were once homeschooled, but by enrolling in a cyber school, they have become public school students. Other students are attending cyber schools due to medical or behavioral issues, are engaged in sports or a job, or have not been academically successful in the traditional public school and are seeking a different mode of instruction. Most full-time online schools are charter or cyber schools that enroll students from across entire states, but a growing number are now being run by school districts that enroll students from within their school district boundary.

Today, millions of students are taking supplemental online courses with many of these for credit recovery. Other students are taking advanced, honors, or dual enrollment online courses that may not be available in the traditional school setting. While, others are taking courses that are offered at their traditional public school but online during a study hall, or over the summer, in order to gain additional scheduling flexibility. There are significant differences, though, to the extent the student's enrolling school supports the online courses. In some schools, the student was provided with a room to work in, a computer, and a monitor who is often a teacher who can assist if needed. At the other end of the spectrum, some students take online courses through a cyber school from their home with minimal support from the school (Gemin et al., 2015).

Cyber schools provide a way for the students to complete their academic work from home and with the potential for increased parental guidance if parents wish to be involved in the learning. According to Huerta et al. (2006) and supported by Gemin et al. (2015), families who would typically homeschool their children may find cyber schools as an appealing education option because it provides homeschooling with a packaged curriculum.

It is crucial to examine the unique role parents play in K-12 online learning, their impact on student achievement, and how they engage in their students' learning to better understand what motivates parents to select this option for their child (Borup, Stevens, & Hasler-Waters, 2015). To date, there would appear to be limited research that exists which examines the role of parental involvement in the K-12 online learning environment, and thus, little is understood about the parents who enroll their children in cyber charter schools. Furthermore, there does not seem to be specific demographic profiles of parents whose students attend a cyber school that could be used in a predictive nature (Borup, Stevens, & Hasler-Waters, 2015).

Characteristics such as the parent's educational background and life experiences are thought to contribute to the decision-making process that is used by parents when they decide on their child's educational setting. The American Community Survey (ACS) is one source of data that can be used to obtain information on the income and educational demographics of residents of geographic areas such as a school district (Julian, 2012). This data source was used to determine the percentages of adults residing within Pennsylvania school districts with a bachelor's degree or higher degree and compared to the number of Pennsylvania students that attend cyber schools from those same areas. When reviewing information from the 2013-2014 school year, Mann and Baker, (2019), found that in 496 of the 500 school districts, there was a relationship that showed the many rural school districts had lower percentages per capita of adult residents that had obtained at least a bachelor's degree. Mann and Baker (2019), also found that the same school districts had a higher percentage of costs for students that attended a cyber school. This could imply that this is some relationship between a parent's educational level in rural communities and the likelihood they would select a cyber school as their child's educational provider. This is a topic that warrants additional research in order to determine if the relationship can shed light on the reasons why a parent's educational background plays a part in the decision parents may make for their child's educational programming.

Whatever the reason, students in cyber schools may differ from their peers in considerable ways if for no other reason than they are seeking some sort of a substitute to the typical public-school experience that most students still experience. Attempting to identify factors that motivate parents and students that influence them to want to leave the regular school setting and attend a cyber school setting will be helpful in identifying and understand what can be done to retain additional students from leaving.

It is apparent that students and parents are, in most cases, looking at the option of attending a cyber school as an alternative to the status quo. Whether or not the choice is made for a positive or a negative reason, it is lawfully available and is easily utilized. Therefore, the traditional public school will need to learn to adapt and implement strategies that minimize the loss of students to external cyber schools or continue to lose significant amounts in funding.

In the last twenty years, the number of parents and students choosing an online or cyber option of learning has increased, but there are signs that, as of recently, the number of students attending cyber schools has started to level off (Gulosino & Miron, 2017). Research indicates that while some of the available online and cyber school analyses focus on online schooling in general, little is known about whether online learning and blended schools are serving the general cross-section of the K-12 student population representing the same composite of student that is attending the traditional public school system (Gill et al., 2015; Pazhouh et al., 2015). It would, therefore, be important for additional research related to online and blended schools to examine whether all students are appropriately served. Also, further study needs to take place to determine if students are successful in the placement that they have chosen, especially since little is known on the public benefits of online schooling in the K-12 setting (Gulosino & Miron, 2017).

Educationally, although students who are highly motivated may be able to do well in an online environment, those who have struggled academically in the traditional public school setting may continue to struggle online (Hasler-Waters & Leong, 2014). Several meta-analysis studies that were reviewed on student performance found no significant difference in achievement or positive effects in online student performance compared to their brick-and-mortar counterparts (Bernard et al., 2009; Cavanaugh, 2001; Cavanaugh et

al., 2004; Tamim et al., 2011). However, an important caveat of these online studies was that the findings were focused on blended online instruction with in-person contact and concentrated in higher education rather than elementary or secondary schooling. Thus, the comparison may not be representative of the results related to full-time online schools for K-12 students.

In 2015, the Center for Research on Education Outcomes (CREDO), published the first nationwide data and analysis of K-12 virtual charter schools as well as their impact on students' academic growth in 17 states and Washington, D.C. (Woodworth, Raymond, Chirbas, Gonzalez, Negassi, Snow, & Donge, 2015). In this report, overall, students attending virtual charter schools showed lower performance as compared to students from traditional public schools in reading and math. A limitation of the study is its sole focus on full-time cyber charter schools and did not include data on students who have taken online courses in a blended school environment. Surprisingly, for a rapidly growing field such as cyber and blended schools, the body of research regarding the impact on academic performance remains largely unexplored (Molnar et al., 2015).

Parental Involvement

Parental involvement in schools is recognized as being a beneficial factor that contributes to the experience that the student has in school and increases the connection for both student and parent to the school. Schools, students, and parents all derive specific benefits from parental involvement (Epstein, 2001; Fan, 2001; Henderson & Mapp, 2002; Jeynes, 2005). Research shows that children receive the greater benefit, the earlier the parent involvement process began. Additionally, benefits can be derived for students at all grade levels regardless of gender or racial status of the children (Jeynes, 2005). In traditional schooling environments, teacher outreach that includes practices such as parent-

teacher meetings, regular progress updates, and consistent exchange of learning materials between the home and school results in improved student performance (Jeynes, 2005).

Research about parental involvement in K-12 online schools is limited, but what does exist explains that it can have a positive impact on the connection parents and students have with the school (Black, 2009; Liu, Black, Algina, Cavanaugh, & Dawson, 2010). Black (2009) maintains that parents who have students in an online school environment can have a positive influence on the achievement of their students, but encourages further study to determine perceptions and the roles of parents of students in cyber schools. Parents of cyber schooled students reported that cyber schooling empowered students who did not fit in traditional settings (Liu et al., 2010). Furthermore, full-time online schools often partner with parents to oversee and support students who are completing their education in an online environment.

Though parents play a significant role in educating students who school online, the research is nearly silent on their roles. Epstein (2001) discusses family, school, and community partnerships and how they can benefit student learning. The model of overlapping family and school spheres describes the type of cooperation that must be present in any school setting for students to succeed (Epstein, 2001). At the center of Epstein's model are three separate but overlapping entities: school, family, and community. External forces help determine how much each entity overlaps and how strong one or another is in the relationship. The forces determining the overlap of school, family, and community are:

- age, grade level of the student, and time
- experience, philosophy, and practices of the family

- experience, philosophy, and practices of the school
- experiences, philosophy, and practices of the community (Epstein, p. 163)

Applying Epstein's research to the online educational setting, full-time, online schools that partner with parents can increase the overlap in the school and family spheres, which should, in turn, positively affect the success of students. This partnership also serves as a basis to build the level of satisfaction that parents and students have with their school, which should further the feeling of being connected to the school.

Learning why parents and students view the option of cyber schooling as favorable to the prospect of remaining in the traditional education setting, will shed light on what can be done differently and better to retain and recruit students that otherwise leave for external cyber schools. With my action research, parental options will be sought and utilized through a survey instrument to determine their views and opinions of the traditional public school and the external cyber school setting that their child was or is in for their schooling.

According to Beck, Maranto & Lo (2013), there are significant differences in parental and student levels of satisfaction across demographic groups of students and significantly higher satisfaction among special education students in the cyber school environment. Some students indicated that they did not feel connected to their home schools before the decision to transfer to a cyber school. The lack of connectedness contributes to the feeling of being unattached and enabled deciding to leave their school easier because they felt somewhat removed from their school environment. With this feeling of disconnectedness with the school, comes discontentment, which contributed to the desire to make a change.

How do parents resolve the differences as to how effective each setting will be in helping their child achieve? If the student is unhappy in the current setting, does that automatically equate to lower achievement? Conversely, if the student is happy in their setting, will it equate to higher achievement? Most of the existing research that exists was conducted on students within the traditional educational setting. Several decades of research have supported that children perform better and attain higher academic achievement in traditional school settings when parents are involved in their education (Hasler-Waters, Menchaca, & Borup, 2014; Fan & Chen, 2001). Further, parental engagement in traditional settings is related to greater academic achievement in terms of both grades and standardized test performance (Cheung & Pomerantz, 2011).

Thus far, there has been limited research on the educational background of parents of Pennsylvania cyber school students, and the influence their educational background has on decision-making related to their reason for selecting a cyber school for their child's education. One might expect that parents with higher levels of education would better understand the options that are available to them and the impact of the decision when considering the choice they make for their children's education. It would be expected that parents with higher levels of education would be more involved in their child's education.

Additionally, in a study by Hoover-Dempsey, Walker, Sandler, Whetsel, Green, Wilkins, & Closson, (2005), self-efficacy was identified as a motivator of parental involvement in their child's education. In this study, self-efficacy was defined as the belief in one's ability to act in a way that produced the desired outcome that was connected to the goals one would pursue. In the case of parents, it would suggest that parents have goals for their involvement in their child's education. Furthermore, parents

with a high level of efficacy tended to make positive decisions about participation, whereas parents with a low level of efficacy tended to be involved to a lesser degree (Hoover-Dempsey et al., 2005).

Parental efficacy was also shown to be a predictive indicator of whether or not parents monitored and supervised their children's activities. Parental monitoring of schoolwork was shown to have a positive effect and was helpful for students who took online courses. Furthermore, parents who regularly assisted and motivated their children who were taking online courses were able to help the student persevere with their work. Parent involvement was shown to lead to a higher likelihood of success and achievement for the student. Importantly, the effects of parental efficacy also held true across differences in the socioeconomic status of the families (Hoover-Dempsey et al., 2005).

The research that this action study explored focused on providing insight and understanding of the reasons why parents made their decision to enroll their children in a cyber school. The reasons parents reported, along with what was learned from the review of literature, helped identify several traits that the cyber students had in common with each other. Parents that were surveyed and the data collected were analyzed to determine findings that helped the school system make informed decisions on its existing online programming.

Parent-Teacher Partnerships

Educators and parents play critical roles in the educational success of students in both traditional and online school settings. The parent-teacher expectations, roles, and relationship in an online environment, however, differs from that of the traditional school setting. Research finds that the role of the teacher in an online environment was

significantly different from that of the role of the teacher in the traditional public school setting (Hasler-Waters & Leong, 2014; Barbour, 2009). Being a good classroom teacher does not automatically translate into being a good online teacher (Davis & Roblyer, 2005). Therefore, when teachers prepare to teach online courses, it should be expected that they will require and need to be provided the appropriate training to be effective in this new role. Archambault and Larson (2015) found that K-12 teachers that teach online can face challenges such as lack of receiving timely feedback on their instruction from their students that would often be experienced in the live setting by their face-to-face counterparts.

In a cyber school, the teacher was not the sole provider of instruction, as many may think, and changes have resulted in their traditional role of just presenting information to facilitating the information (Hasler-Waters & Leong, 2014). While they were a central component in the support for students, cyber school teachers relied heavily on the parents to partner as co-educators. Hasler-Waters and Leong (2014) explored the overlapping roles that teachers and parents shared as co-educators in supporting students in cyber charter schools. Parents that were involved in their child's cyber education became learning coaches and assumed the responsibility for helping to manage their own children's education and academic progress. Teachers were then able to focus on being content experts, facilitators, and ensuring student mastery of content.

Getting parents to be more involved required making them aware of opportunities and by inviting them to participate in their child's learning. Invitations from teachers and others from within the school setting significantly increased the chances that parents would participate in some manner and increased their opinions within the school environment (Hoover-Dempsey et al., 2005). According to Borup et al., (2013), the interaction between high school-aged students enrolled in online charter schools and their parents was viewed

positively and motivated students to want to learn. Although parents did not fully understand the impact that their involvement had on their student's learning or fully understood the motivational value of their involvement on their children, the results had a positive effect (Borup et al., 2013). It would be important that more research was conducted in this area to understand better how to effectively persuade parents to be more involved in their children's schooling in both the traditional public school and the cyber school settings.

Online Learning

The literature around online learning programs for K-12 students originated from the mid-1990s and builds upon research and practice from the K-12 distance education era (Cavanaugh, Barbour, & Clark, 2009). While K-12 online programs have evolved and grown over the past decade, the amount of published research on why online learning was selected as a method of learning over the traditional education pathway has not significantly been explored. The current literature on online learning included practitioner reports and quasi-experimental studies, both published and unpublished, but contained limited research studies (Cavanaugh et al. 2009). Themes throughout the literature included steady growth and a focus on the benefits, challenges, and broad effectiveness of K-12 online learning. Also, newly developed standards for K-12 online learning have emerged in descriptions of effective practices.

Table 1. contains the national standards for online teaching that was published by the International Association for K-12 Online Learning (iNACOL). These standards reflect what online teachers should be able to do for evaluation purposes and were designed to provide quality guidelines for online teaching (iNACOL, 2011, p. 4-16). At their core,

these standards represent the competencies that instructors should be able to demonstrate when teaching online courses to students.

Table 1. National Standard for Quality Online Teaching, Version 2

Standard A - The online teacher knows the primary concepts and structures of effective online instruction and is able to create learning experiences to enable student success.
Standard B - The online teacher understands and is able to use a range of technologies, both existing and emerging, that effectively support student learning and engagement in the online environment.
Standard C - The online teacher plans, designs, and incorporates strategies to encourage active learning, application, interaction, participation, and collaboration in the online environment.
Standard D - The online teacher promotes student success through clear expectations, prompt responses, and regular feedback.
Standard E - The online teacher models, guides, and encourages legal, ethical, and safe behavior related to technology use.
Standard F - The online teacher is cognizant of the diversity of student academic needs and incorporates accommodations into the online environment.
Standard G - The online teacher demonstrates competencies in creating and implementing assessments in online learning environments in ways that ensure the validity and reliability of the instruments and procedures.
Standard H - The online teacher develops and delivers assessments, projects, and assignments that meet standards-based learning goals and assesses learning progress by measuring student achievement of the learning goals.
Standard I - The online teacher demonstrates competency in using data from assessments and other data sources to modify content and to guide student learning.
Standard J - The online teacher interacts in a professional effective manner with colleagues, parents, and other members of the community to support students' success.
Standard K - The online teacher arranges media and content to help students and teachers transfer knowledge most effectively in the online environment.

To some degree, the introduction of online learning was borne from the development and public release of the Internet. Dabbagh and Bannan-Ritland (2005) defined online learning as "an open and distributed learning environment that uses pedagogical tools, enabled by the Internet and Web-based technologies, to facilitate learning and knowledge building through meaningful action and interaction" (p. 15).

According to a study by Dabbagh and Bannan-Ritland (2005), there are four key components of online learning, and they include pedagogical models, instructional and learning strategies, and pedagogical tools.

Pedagogical models are views about teaching derived from learning theory and enable the implementation of specific instructional and learning strategies (Dabbagh & Bannan-Ritland, 2005). Instructional strategies are the plans and techniques that the instructor uses to engage and facilitate learning (Jonassen, Grabinger, and Harris, 1991). Instructional strategies are the means through which pedagogical models are put into practice.

Learning technologies such as asynchronous and synchronous communication tools, such as email and chat, and multimedia technologies, such as video, and animation, enabled the implementation of these strategies (Dabbagh & Bannan-Ritland, 2005). With Internet connectivity, these learning technologies have evolved to form online learning environments that facilitated collaborative activities, and information sharing, to which students can experience learning anytime (Dabbagh & Bannan-Ritland, 2005).

Online learning also may be referred to as e-learning, cyber learning, web-based, or remote instruction. The advantages of online learning included accessibility, convenience, and flexibility (Killion, 2000) as well as financial benefits in the form of increased efficiency and increased student enrollment. According to Khan (1997), a well-designed online learning program has the potential to provide numerous features conducive to learning and instruction that can address pedagogical, technological, organizational, institutional, and ethical issues. In reference to Howard Gardner's multiple intelligences, Khan (1997) stated that the flexibility provided in online learning increased the potential

for all intelligences to be represented and cultivated regardless of the physical location of the student.

According to Hasler-Waters et al. (2014), online learning is categorized into four types of educational delivery methods such as:

- virtual schooling
- cyber schooling
- online charter schooling
- blended learning

Although sometimes used interchangeably, each of these terms represents different pathways to deliver online courses. Table 2. provides a working definition that describes the practice each method generally represents (Hasler-Waters et al., 2014, p. 306).

Table 2. Terms and Definitions for K-12 Online Learning

Term	Practice
Virtual Schooling	Supplemental online learning; sometimes identified as a la carte
Cyber Schooling	Full time online learning, with little to no brick and mortar schooling experiences; sometimes identified as flex model
Online Charter Schooling	Full time online learning with brick and mortar practices; sometimes identified as enriched virtual
Blended Learning	Primarily brick and mortar based schooling with some online work; sometimes identified as rotational

Online schooling provided students with access to online educational opportunities that fulfilled a need in the educational system by giving students access to learning.

Research by Cavanaugh et al. (2004) identified factors that influence the success of a distance education program; these factors include:

- Abilities and disabilities of the student
- Quality of the teacher
- Demands of the content
- Design of the distance learning environment

A characteristic that sets successful distance learners apart from their traditional classroom-based counterparts was their autonomy and need for greater student responsibility in their learning (Cavanaugh et al. 2004). Students in the K-12 setting needed instruction to be scaffolded, and online school teachers must be capable of helping students acquire the skills of autonomous learning, including self-regulation.

A second characteristic that differentiated successful online learners from unsuccessful online learners was an internal locus of control, leading students to persist in the educational endeavor (Cavanaugh et al. 2004). The research found that older students had developed a more internal locus of control than younger students. Effective online programs for K-12 learners needed to include frequent teacher contact with students and parents, lessons that were divided into short segments, and regular feedback provided on the student's progress (Cavanaugh et al. 2004).

Design and operation of online courses

A decision that must make regarding the online course was whether classes would be asynchronous or have synchronous components. Asynchronous communication was defined as the exchange of messages, not requiring the simultaneous presence of the sender

and the receiver (Haythornewaite & Bregman, 2004). In other words, the students and teachers were able to communicate with each other, but not in real-time. Examples of asynchronous communication would be e-mail, discussion boards, and blogs to exchange ideas and materials. With asynchronous communication, there was found to be a delay between when one participant made a comment and when another participant replied to that comment, even if both were online at the same time. What was nice about asynchronous communication was that it allowed participants the ability to communicate with each other while still being able to take advantage of the "anytime, anywhere" aspect of online learning. With this mode, participants did not need to be on their computers at the same time to engage in discussions of content, which research has found to be a significant selling point for K–12 students (Journell, 2010; Tunison & Noonan, 2001).

A potential downside to asynchronous communication was that for students who desired or even needed immediate feedback, they could be disappointed. For example, when students posed a question or comment on a discussion board and received no response for hours or even days, it could be frustrating to the student and created a feeling of not being connected to the class. Moreover, there was no guarantee that asynchronous posts would be read at all, especially if replies were not required, or students felt as though there were too many posts to read (Journell, 2010).

Activities such as talking with others in chat rooms, on instant messenger programs, or even via video-conferencing would be examples of synchronous communication. The apparent downside to synchronous communication was that it took away from some of the flexibility provided by online learning because the participants would need to be engaged with each other at the same time. Students who took online courses primarily because they wished to fit their academic responsibilities around work and personal needs may find

synchronous requirements restrictive or even impossible to meet their needs based on the time allotments.

The need for flexibility was a major item to be considered when districts decide on the format of their online curricula, but it should not be the only consideration. Research has found that synchronous communication offers teachers and students benefits. The environment was more authentic and closer to what students would find in a traditional classroom situation. Discussions were productive, and the conversation moved at a much faster pace. Similarities to face-to-face conversations promoted a sense of community among students, and students could receive immediate feedback on ideas (Hrastinski, 2008; Journell, Beeson, Crave, Gomez, Linton, & Taylor, 2013; Mabrito, 2006).

There were also limitations to synchronous communication. Students could find the speed of synchronous conversations challenging, especially for those that were slow at typing. Students who required time to compose an answer or response may find that the pace caused them to fall behind (Hou & Wu, 2011). One tool to help mitigate that problem was to use synchronous video software. This type of software allowed users to simulate face-to-face classroom experiences using microphones and webcams so that users would be able to see and hear each other in real-time.

Combining synchronous and asynchronous communication methods may be desirable, depending on the content that was taught. Teachers that incorporated a balance between the two modes of communication when they planned the structure of their online courses allowed students to reflect on issues while still maintaining some of that "anytime, anywhere" component of online learning. They were also able to provide regular opportunities for synchronous communication to increase the sense of community among

students and allow for immediate feedback on assignments or discussions related to content.

An ideal balance would be something like having one synchronous chat session per week, held at a consistent time. Teachers could use that opportunity to explain upcoming assignments and discuss issues about content. Too many synchronous class meetings, however, would probably restrict students' flexibility and disrupt the reason that many of them chose to take online classes in the first place. If synchronous sessions were limited to one or two per week and held at consistent times, students should be able to plan and better able to work around them. The way teachers structure a balance of their instruction will help determine the learning management system they need to implement their pedagogical vision.

The teacher must also develop skills that foster interaction and communication with and between students during the online learning experience. This requires the teacher to use pedagogical techniques that draw on and integrate the available online tools needed to support student collaboration and knowledge acquisition (DiPietro, Ferdig, Black, & Preston, 2008). Teachers that have the knowledge to use technology that was available to them effectively were better at assisting their online students in accessing the information needed that contributed to learning remotely.

An additional component of online learning for students in the K-12 setting was the need for parent involvement. Teachers need to decide how they can most effectively engage and contact parents, and vice versa, if there are concerns about a student's performance in an online course. Establishing a channel of communication between the teacher and the parent of the online student increased the likelihood that the student were

successful. It was also important that the school developed policies that allowed parents to meet face-to-face or through web-based meeting sessions with their children's teachers if that was needed. These types of policies were needed to reinforce the importance of parental involvement in students' success in online courses. Recent research suggested that parental involvement may be even more critical for online students than those in face-to-face classrooms because of time students spend learning at home without the direct guidance of the teacher (Liu, Black, Algina, Cavanaugh, & Dawson, 2010). Parental involvement was thereby very important, and schools should do their best to allow online parents to play an integral part in their children's education.

As noted earlier, the differences in types of online learning can be attractive to different types of learners. Working to determine the best format and most supportive venue for students can impact the choice that they make for their education. Traditional public schools that offered students the choice of taking online classes from home or during the school day when at school may find that these options retain and attract students that were in external cyber schools.

Conclusions and Recommendations

Creating the best means to educate every student will require school personnel to think beyond the normal bounds of the educational delivery by which they received their education. Online schooling and cyber schools provide an alternative to traditional schools. They may be an appropriate option for some students, but the evidence suggests that online cyber schools do not always do well with the atypical student that attends these schools. In most cases, academic benefits from online cyber schools were the exception rather than the rule. Online cyber schools did, however, provide maximum flexibility for students with

schedules that did not fit the traditional public school setting. This could be a benefit or a liability as flexibility required discipline and maturity to maintain high standards. Not all parents can provide the direction and support needed for online schooling, and that was a drawback to this venue of learning. It would be beneficial if there were an objective way that permitted online cyber schools to screen students to ensure their programs are a good fit for potential students' needs before enrolling them in their school.

There was evidence that some cyber schools had been able to produce consistent academic benefits for students, but most cyber schools did not. The tradeoff has been "increased flexibility for less accountability," and the balance has been left to each cyber school to establish for themselves. States should examine the progress of existing online programs before allowing more cyber schools to operate. Online schools have the potential to serve significant numbers of students with practically no physical restraints on expansion. As such, mechanisms that have typically played a role in regulating the growth of brick-and-mortar schools such as facility construction and limited student populations do not exert the same pressure on online schools. Without these natural constraints, online schools have the potential to expand more rapidly than traditional schools. This makes it important for school districts to advocate that online cyber schools demonstrate positive outcomes for students before being allowed to grow.

With this action research, the possible root causes or reasons why parents from the school district choose to enroll their children in an external cyber school as opposed to continuing with the traditional public school's online program were sought. Determining these reasons was beneficial to understanding what if, anything that the traditional public school can do to improve the school district's online program. Much of the research thus far on parental satisfaction has focused primarily on the traditional school setting rather than

the online setting. Additional research is needed in the area of why parents want their child(ren) to leave the school system to seek a cyber school for their educational programming.

As the opportunity to choose among the various school options continues to be encouraged through state and federal legislation, traditional public schools will need to be able to provide compelling information on the value of their school system to diverse stakeholders. Traditional public schools need to evaluate factors that can inform their pursuit of improving school operations and performance. One way would be to find out what parents are thinking by administering satisfaction surveys that would obtain input from school stakeholders who might otherwise be disenfranchised with their school experience. Satisfaction surveys could be an important step in a strategy of the traditional public school to begin to hold themselves accountable to their educational consumers, both from an internal and external perspective. The information collected would, at the very least, provide some guidance on what students and parents like about their school and what they dislike.

CHAPTER III

Methodology

Introduction

One of the challenges facing traditional public schools is the loss of students to external cyber schools. This is true in the state of Pennsylvania, where parents have educational choices and are able to enroll their children in any one of Pennsylvania's public cyber schools. The problem is complex and has serious implications on traditional public schools because students can leave at any time, without any reason, and at no direct financial cost to their family. Traditional public schools must cover the cost of the student's tuition to attend the cyber school and are negatively impacted by the loss of students because the funding they would otherwise receive goes to the cyber school for tuition payments. Therefore, traditional public schools must explore ways to make their educational environments more appealing to their students if they wish to retain them.

Purpose of the Study

The purpose of this action research study was to explore a practical and meaningful project that would identify reasons why parents would choose an external cyber school placement for their child's education over their school district's online course offerings. With this action research study, parents who have chosen to cyber school their children were surveyed, and their responses analyzed to identify areas of focus that would lead to opportunities for improvement of the school system’s online platform. These improvements would then be used to help the school district’s KC Cyber Academy become a more viable option for students who would otherwise choose an external cyber school over the traditional model for their educational needs. A guiding assumption was that a benefit of

the study was that by improving the school district's online course offerings, the school district would see fewer students migrate to an external cyber school. This will lead to a favorable financial impact, and the students educated in the traditional public school would also benefit from the additional educational options available to them as a result of the improvements.

The cost to the school district for students that attended external cyber schools was over $400,000 annually since the 2015-2016 school year. Thus, the Karns City Area School District (KCASD) was motivated to create the KC Cyber Academy during the 2016-2017 school year as an alternative to external cyber schools. The Academy's intended goal was to reduce the number of school district students leaving the school system to attend an external cyber school. From the time of its inception, the KC Cyber Academy has continued to evolve, but it has not been evaluated to see how it can be improved to be even more valuable. The Academy now provides online credit recovery opportunities to students who are behind in their studies and enrichment opportunities to students who desire to take a course that is not offered in the traditional school schedule. However, the underlying goal of this study was to better understand the reasons KCASD students leave the school system for an external cyber school when they have a similar in-house option available to them through the school district.

It was anticipated that this study would identify reasons why parents made the choices they did regarding their child's educational placement. It was expected that by analyzing parental responses to a survey, reasons why parents made the decision that they did, could begin to be identified, and generalizations could be made. This would provide a set of realistic considerations that could factor into how the KC Cyber Academy could be improved and even expanded.

Realizing that enacting changes would require approval and funding from the school district, the Board of School Directors were informed and shown that this was beneficial to the school district and its students. The primary justification for requesting the funding was supported by the KC Cyber Academy's ability to reduce additional students from leaving the school system to attend an external cyber school, saving the school district money. A secondary benefit would be that when improvements are made to the KC Cyber Academy, all students that take courses through it will receive the educational benefits.

External cyber schools have advantages over traditional public schools because they can operate under flexible rules and with minimal oversight. Cyber schools throughout Pennsylvania receive their revenue from the traditional public schools and do not need to seek approval for expenditures from elected governing boards. Therefore, unlike public schools that need to raise local property tax rates to obtain additional revenue when needed, cyber schools do not need to navigate such a politically challenging process.

Unaware, the general public does not understand the financial impact on their local school system when students enroll in an external cyber school. The loss of students has an immediate impact on the school system due to the loss of revenue that follows the departing student when they enroll in an external cyber school. This cost can be difficult to budget for because the departure of students takes place throughout the school year, and for any reason, as permitted under the current cyber charter law in Pennsylvania.

During the 2018-2019 school year, forty-five (45) KCASD students were enrolled in an external cyber school for at least part of the school year at the cost of $487,041 to our school district. The expense equated to almost six (6) mills of property tax leaving the school district in the form of tuition payments to external cyber schools. Framing the cost

another way, it was more than one and a half times what could be generated if the school district raised the property tax millage to the index. This transfer of money from the public school to an external cyber school was legal and will continue unless the school system develops creative and effective ways to decrease the number of students that leave the system to enroll in a cyber school.

Under Pennsylvania's Charter Cyber School Law, the school district of residence is responsible for providing payment to the cyber charter school regardless of whether the student has previously been enrolled in the school district. With the law, students are permitted to enroll directly into an external cyber school without first participating in their home school district's school or online program. Each school district must calculate and publish a charter school tuition rate based on a formula established and provided by the Pennsylvania Department of Education (PDE). School districts calculate the rate for regular education students and a separate and more expensive rate for special education students that each school district is responsible for paying the cyber school if a resident student enrolls. Further complicating matters, the price paid to cyber schools varies significantly from school district to school district because the tuition is based on budgeted numbers and not the actual cost incurred by the cyber school to educate the student.

The variance in the amount of the payments that different school districts pay to the same cyber school was an item cited as a reason that Pennsylvania's Charter Cyber School Law needs to be reformed. If for no other reason other than the financial impact on the local taxpayers, this topic has now begun to be discussed openly by elected state officials. Most recently, Pennsylvania Governor Tom Wolf publicly proposed making several changes to the state's charter cyber law. Pennsylvania taxpayers spent $1.8 billion on charter schools during the 2018-2019 school year, including more than $500 million on cyber schools.

"The rising cost of charter schools is draining funding from traditional public schools, which has forced cuts to classroom programs and has caused property taxes to increases" (The Office of Pennsylvania Governor, 2019). The governor's proposal would save school districts an estimated $280 million a year by aligning charter school funding to the actual cost spent educating a student in a cyber setting. The plan would set a limit on online cyber school tuition payments and apply the same special education funding formula to charter schools, as it does for traditional public schools.

Despite costing $1.8 billion last year, cyber charter schools have little public oversight and no publicly elected school board. The for-profit companies that manage charter schools are not required to have independent financial audits as required of traditional public schools.

"There are high-quality charter schools, but some of them, especially some cyber charter schools, are underperforming," said Governor Wolf. "The inequities are not fair to students in charter schools or the children in traditional public schools. It's time for change" (The Office of Pennsylvania Governor, 2019). On average, Pennsylvania charter schools have not improved student test scores in reading compared to traditional public schools, and they have performed worse in math, according to a 2019 Center for Research on Educational Outcomes (CREDO) study from Stanford University cited by Wolf (The Office of Pennsylvania Governor, 2019).

The same study also found that the academic situation was worse among the state's cyber charters, which dramatically underperformed compared to public schools. Governor Wolf stated he planned to propose several pieces of legislation, including one that would impose a moratorium on new cyber charter schools and cap student enrollment at low-

performing cyber schools. These changes would require legislative approval, and that would be a long shot at the current time. Therefore, it would be prudent that school districts take steps at the local level to address the loss of their students to cyber charter schools.

In addition to financial costs, traditional public schools must be prepared to work with students who return from a cyber school to their home school district at any time. Often, when students return, they were behind academically, and they must receive remediation opportunities to help overcome any curriculum gaps that exist. The additional needs require the home school to be prepared to provide additional resources such as tutoring or remediation courses to bridge the differences that exist. In a CREDO 2019 study, little changed in the academic progress of Pennsylvania online charter school students since the CREDO 2015 study. Online charter schools register weaker learning gains in both reading and math as compared to the average traditional public school across both studies. Furthermore, there has been no substantial academic improvement of Pennsylvania's online charter sector across these two studies (CREDO, 2019).

This provides an academic reason for school systems to be motivated to determine viable strategies that reduce the number of students that leave the local school system for an external cyber school. Offering students that may consider an external cyber school, an alternative to the traditional school day schedule might motivate some to stay. School systems could also reach out to students that have left the system to recruit them back. Even if the effort is unsuccessful, the school system might be able to ascertain why they left in the first place. Making strategic improvements to the school's online programming options by developing a quality in-house cyber school program that meets the needs of the students would be a step in the direction needed to stem student loss. If this can be accomplished, it would make a positive difference for the students and the school.

Setting and Participants

In this study, the active participants were parents of students who currently attend or attended an external cyber school and resided in the KCASD within the last four years. These parents became the population group for an online survey that was conducted. The KCASD can be described as a small rural traditional public school that spans parts of Armstrong, Butler, and Clarion Counties in western Pennsylvania. The school system operates two, K-6, elementary schools and one, 7-12, junior/senior high school that combined provided educational services to approximately 1,325 students. The demographic information used in and obtained from the study on parents and students that attended the school district will be provided in the results section of the report.

The parents selected to participate in the study all resided in the school district and had at least one child who was enrolled in an external public cyber school at some point after August 1, 2016. The participant group included parents of students who may have ultimately returned to the traditional educational setting from an external cyber school. The student demographic data collected from the survey instrument was compared to the demographic information available on students that continued their studies within the traditional model. All data used in the study had personal and identifying characteristics removed so that it was anonymous to the reviewer, protecting the identity of both the parents and students.

The study plan was discussed and shared with the administrative team, key teaching staff, and the Board of School Directors of the school district, who ultimately approved the study before it commenced. The parties understood that the study was in partial fulfillment of the requirement of the researcher's doctoral degree and that the identities of all

participants would be kept anonymous. Upon the completion of the study, all data collected were destroyed.

Intervention/Research Plan

This action research design was based on a constructivist assumption that "individuals seek understanding of the world in which they live and work" (Creswell, 2003, pg. 9). In this case, as the researcher, I wanted to learn more about the reasons why parents make the decisions that they do in order to determine if there would be any viable changes that the school district could consider making that would reduce the number of students that leave the school system. With the goal of the inquiry to explore why parents made the educational decisions that they did for their children when considering a cyber school, an online survey instrument was created to obtain parental feedback. Before conducting any data collection, IRB approval, and a letter of cooperation from the high school principal who assisted in pulling anonymous student data from the school district's student data warehouse, edInsight by On Hand Schools were obtained (Appendix C & D). Any data collected from parents and students was devoid of identifying characteristics and was used by the researcher to review solely for the purposes of the study. Parents that voluntarily participated in the survey electronically signed the consent form (Appendix A).

Research Design

The methodology used for this study was a non-experimental research design using descriptive research and triangulation of data. According to Mertler (2017), "the purpose of descriptive studies is to describe and interpret the current status of individuals, settings, conditions, or events" (p. 95). With this study, a baseline understanding was needed to help appropriately inform the researcher and the school system as to what the root cause of the

problem(s) was in order to formulate reasonable and practical solutions. The non-experimental design was chosen because a cross-sectional sample of parents was surveyed from the relevant population to address answers to research question one. With research questions two and three, and due to the different data types contributing to this study, I focused on the importance of triangulating the data sources to build confidence about the accuracy of the results of the study (Hendricks, 2017, p. 135).

The research questions used to guide this action research were:

1. Why do parents choose to enroll their child(ren) in an external cyber school instead of our school district's own cyber academy program?
2. What does the school district's data on students that leave the system to enroll in an external cyber school indicate about these students as compared to those that stay enrolled in the school system?
3. What are the best practices for the design and operation of online cyber classes for K12 students?

Methods of Data Collection

In order to obtain answers to the research questions, multiple forms of data collection were utilized. Although the primary data collection tool used was a parental survey, existing school district student data, and a review of information on similar studies were reviewed to help address the questions. The surveying of parents of students that enrolled in an external cyber school was the focus of this study because it offered an authentic way to obtain the opinion of parents as to why they made the decision that they did. Prior to this survey, no previous effort was attempted by the school district to obtain

parent input, and therefore we did not have any credible information as to the reason(s) parents left our school system for an external cyber school.

The parent survey found in Appendix B was provided to the population group of 110 unique families. Each family had the opportunity to voluntarily complete and submit a response that would be included in this study. The participants were not offered any incentive for their participation in the survey, nor did they face any negative impact for choosing not to participate in the study.

The informed consent was shared with the survey population group twice. It was initially mailed to all participants, and then it was also embedded in the online survey instrument. By inserting the informed consent within the online survey and requiring a response as question one on the survey, approval was able to be recorded for all respondents that submitted a response. With the mailing of parental survey invitations, it was explained to respondents that their information would be treated with strict confidentiality. No data was collected that would or could identify any participant at any time during the study.

The survey instrument was administered by using Google Docs to create an online form to collect responses and was available to authorized respondents on a secure server. The potential respondents were provided a generic four-digit code that they entered to gain access to the online survey instrument. This was done only to contain responses to those from the intended population group. Of the 110 possible respondents, 22 or 20% of the invitations were returned unopened, and 17 or 15.5 % of the respondents submitted a response to the survey. The information will be analyzed and explained in a later section of the report.

An answer to research question two was sought by reviewing existing student data contained in the school district's student database called edInsight. Demographic data that was reviewed on students that left the school system to enroll in an external cyber school was compared to demographic data on a similar-sized random set of students that remained in the traditional public school setting. The random selection of students from the school district in grades 3-12 from the school district was taken to determine if there was a difference in the number of IEPs, the number of students at the poverty level, in Title 1, the number of absences, attendance percentage, grades, or risk score as compared to the group of students that departed the school district to attend a cyber school. The data was compared with a statistical test to determine if the differences were significant. All data that was provided to the researcher was done so without any personal identifying characteristics.

Finally, research question three was addressed through the review of the literature on the topic. This approach was used to determine if any solutions to the problem of losing students to external cyber schools were studied previously and whether viable solutions could be generalized to help the KC Cyber Academy improve upon its current operation. This included a review of the online platform software currently being used to deliver the online programming.

Role of the Researcher

Researchers are not without bias. I have worked in the traditional public school setting since 1997 and have served as a classroom teacher, principal, and superintendent of a school system. My experience leads me to the belief that being connected to the school was essential to the outcome a student has with their academic success. I strongly believe

that the online model will not replace the traditional model of education in the K-12 setting, but it does have its place. Research indicates that online learning was just as effective as traditional schooling when appropriately structured (Cavanaugh et al., 2004). As an educator, the level of the student, teacher, and parent engagement were all important ingredients to the result. My role in this research was that of an observer, trying to analyze and assemble information that enabled the KCASD to make its KC Cyber Academy better next year for all students.

Validity

In order to ensure a high level of confidence in the survey results, measures were taken to ensure that surveys were provided to only parents that meet the study criteria as being defined as a KCASD resident that has or once had a student enrolled in an external cyber school since August 1, 2016. The invoices from external cyber schools were used to determine the names of the parents that were mailed the invitations to participate in the study. These participants were provided with an access code to enable participation in the survey.

A small pilot of the survey instrument was conducted with several school administrators and teachers to verify its online functionality and to check for respondent understanding of the questions asked. Several questions were modified slightly based on feedback received from the small pilot of the tool, but this is an area that could be improved upon if another survey were conducted in the future.

Limitations

There are limitations to every study. One such limitation is that the site for the research was small and familiar to the researcher. As an administrator, my position is one

of authority within the school system, and assurances had to be made to the participants, so they understand that what they share will not reflect on their child in any way and that their participation was strictly voluntary. Although this was provided and steps are taken to ensure the privacy of the participants, I believe the participation rate in the survey was somewhat lower than it would have been if it were conducted by a guidance counselor or no administrator.

The small sample size of 110 parents and the overall response rate of 15.5% is also a limitation of this study and requires taking a cautious approach to drawing significant conclusions. The results collected were important, and were the first attempt to truly capture the thoughts and beliefs of the parents who permitted their child to depart our school system for an external cyber school.

Methodology Summary

The information learned from this study was shared with the administrative team, the Board of School Directors, and teachers. It will be used to identify realistic changes that can be made in the programming and operation of the KC Cyber Academy that would lead to improvements that meet the needs of students.

With what I learn by conducting this action research project, I will identify practical recommendations that my school district can use to improve its online curriculum platform so that we may provide quality online classes to our students. Ultimately, the online programming that we as the home school offer our students should be more valuable than what is available to them from an external cyber charter school. We will provide the student a Karns City diploma, access to participate in extracurricular activities, access to “in-person” contact with teachers and other staff as needed, and the ability of students to take

vocational-technical classes. With these enhancements and appropriate marketing of our program, I believe that as the superintendent of the Karns City Area School District, we can provide students that have desired an alternative educational path a quality option that they will find meets their needs without uncoupling themselves from our school and community. The findings that were uncovered from this action research will be used by me to lead a discussion within the school district with the administrative team and teachers. The results will be used to craft a plan of improvement that can be implemented in the next school year. If such an outcome can be accomplished, the students, the school, and the local community will have benefited from improvements to the local educational offerings and a reduction in costs to the school system.

COVID-19 Pandemic Impact on this Study

The COVID-19 pandemic has had a profound effect on the field of education. Late in the day on Friday, March 13, 2020, Pennsylvania Governor Tom Wolf ordered all public schools closed in the Commonwealth for an initial two-week period due to concerns of the COVID-19 virus. The timing of the announcement was late in the day and caught many of us in education off guard. Had we known earlier in the day that this was to take place, we could have prepared differently. Students that needed a device such as a Chromebook at home could have been provided one to taken one with them when they departed for the day. Instead, we missed this opportunity to distribute the technology that we did have to students when they left school that day.

Governor Wolf's initial announcement of a two-week closure of schools, was since expanded by the Pennsylvania Department of Education in conjunction with the Pennsylvania Department of Health to require public and private schools closed for the

remainder of the 2019-2020 academic term. With the prospect of schools closed due to the COVID-19 concerns, the need to focus on providing education to students in a remote manner became paramount. As the school district worked on creating its Continuity of Education plan, the most likely format became moving the traditional method of educational delivery to an online format of delivery where possible. The KCASD took steps to quickly assess the needs of families and adapted by loaning devices, helping secure Internet access for students without a connection and provided training to teachers on the use of the various resources that were available to assist with their online instructional delivery.

I genuinely think that although the desire was to return to some sense of normalcy, which included a return to students attending the traditional school setting, the attitudes and beliefs of students, parents, and teachers toward online learning has been forever changed. The COVID-19 pandemic has accelerated the focus of developing and improving online learning at KCASD. We have confronted the challenges that remote learning has posed by adapting, and we have accomplished more in a few months than we would typically have been able to achieve in a year. Out of necessity, teachers and administrators were immersed in the use of Google classroom and other online resources.

The data collection for this study was completed prior to the closure of schools that COVID-19 caused. Therefore, the COVID-19 pandemic did not directly impact my study as it was completed prior to the disruption caused by the virus. However, it has likely impacted the beliefs of students, parents, and educators alike on the concept of online learning. It would be interesting to look at the parental beliefs in a post-COVID-19 era now that their local school district has provided most of its educational programming via an online format from mid-March until early June.

CHAPTER IV

Data Analysis and Results

Introduction

There was a need for additional research in the area of K-12 online education to understand why parents and students chose this format over the traditional school pathway of education (Black, 2009; Cavanaugh et al., 2009). Most of the research in the area of online education has been conducted in the post-secondary arena or on large cyber schools (Black, 2009; Liu et al., 2010). This action research study looked at determining the factors that influenced why parents chose a cyber school educational placement for their child over the traditional public school placement. The study focused on a small rural school district and was designed to identify practical information that can be used to make educational improvements that will benefit students. The research questions guiding this action research were:

1. Why do parents choose to enroll their child(ren) in an external cyber school instead of our school district's own cyber academy program?
2. What does the school district's data on students that leave the system to enroll in an external cyber school indicate about these students as compared to those that stay enrolled in the school system?
3. What are the best practices for the design and operation of online cyber classes for K12 students?

This section reports the results obtained through the investigation of the reasons that parents chose an external cyber school for their child's placement even though the local school district has a similar existing option. The section: (a) describes the report

findings from a parental survey on why parents choose to enroll their child(ren) in an external cyber school instead of our school district's cyber academy program; (b) describes the report findings on what the school district's data on students that leave the system to enroll in an external cyber school indicate about these students as compared to those that stay enrolled in the school system, and (c) describes the findings from the literature review that were identified as best practices for the design and operation of online cyber classes for K12 students.

Summary of Sample and Survey Factors

Detailed information regarding the survey and methods utilized for data collection are found in Chapter three. As a summary, this study employed an online survey instrument that was constructed to sample the parents of students that resided in the school district and that were enrolled in various external cyber schools for at least part of the year during 2017-18, 2018-19 and 2019-20 school years. The online survey instrument was built with Google Docs, and 110 parents were provided a survey link through a mailing with a request to participate. The survey completion rate was 14.5%, which included 16 parent participants. This was a lower number of responses than was expected but was nonetheless helpful at obtaining valuable input into reasons parents enroll their child in an external cyber school instead of the school district's online program.

A possible theory as to the low response rate was that the sample population has a higher mobility rate as compared to that of the school district population. When information was mailed to parents informing them of the survey, there were 20.9% or 23 survey invitation mailings that were returned by the post office for reasons such as "not

deliverable as addressed," "unable to forward," and "vacant." This could be an indication that this population changes their place of residence more frequently than do the parents who have children that remain in the public school setting. The school district's student information system was used to calculate a three-year average parent mobility rate of 7.2% for students that remained within the school system, indicating that there was a higher address change rate for students enrolled in cyber schools.

Although some survey invitations were returned as unable to be delivered, it provided an opportunity for the school system to cross-check the address records on external cyber students. In doing so, two students were removed from the school district's cyber bills due to having moved out of the school district without notifying their cyber school where they were enrolled. This finding enabled the school district to recover $11,888.10 from a cyber school that it was not obligated to pay. Most of the other discrepancies with mailing addresses were able to be resolved, and the school records were updated.

Research Question 1

While there has been a growing body of educational research in the field of online education, there continues to be limited research that contributes to the reasons parents from small communities chose online learning for their child over a traditional educational experience. Research question one addressed this gap when it asked: Why do parents choose to enroll their child(ren) in an external cyber school instead of our school district's cyber academy program? The online survey that was administered to the parents of students that were enrolled in a cyber school produced data that provided insight into

why parents made the decision they did. The results of this parent survey represented authentic data that was collected from this population.

Upon accessing the survey, each respondent was asked to review and confirm the consent to participate in the online survey. Figure 1 indicated that 100% of the respondents confirmed their understanding and agreement of the informed consent and were then able to proceed with completing the online survey. The survey participants were informed that all data collection was done anonymously, and participants were free to discontinue their participation in the survey at any time and without any negative ramifications to them or their child.

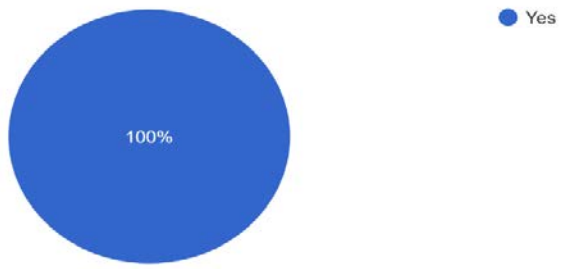

Figure 1. Informed consent notice was provided to the participants and acknowledged in the initial question of the survey.

In survey question two, the gender results revealed that the children of the respondents were 68.8% male and 31.3% female. This relationship was comparable to the gender composite of the sample population group of cyber school students that were surveyed, which was 71.8% male and 28.2% female. However, the gender reported does represent a discrepancy when compared to the gender statistics on the students that remain in the traditional school system. The student cohort that stayed in the public school system was 47.9% male and 52.1% females based on an average of 1,325

students. The data indicated that a higher than expected rate of male students departed the school system than did female students to attend an external cyber school, and this would warrant a closer look as to why this would occur.

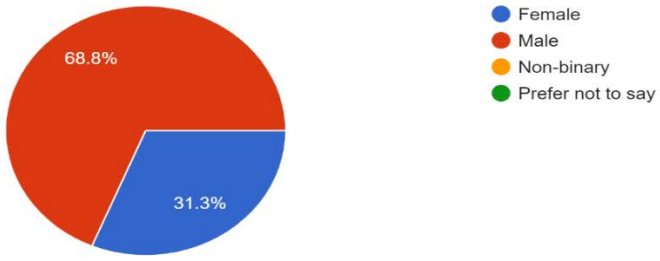

Figure 2. Identifies the gender of the students in external cyber schools, as reported by their parents.

Most of the respondents, 14 of 16 or 87.5%, were comprised of parents that had earned a GED or High School diploma, as noted in Figure 3. Only 1 of 16 or 6.3% of the parents responded having earned a bachelor's degree. According to Mann & Baker (2019), there was a relationship that showed many rural school districts in Pennsylvania had lower percentages of per capita of adult residents that had obtained a bachelor's degree level of education. The results to this survey question agreed with Mann & Baker's findings.

Looking deeper at the data from the 14 respondents, all reported that obtaining a high school diploma was very important to them as a parent. Of the other two respondents, one had an associate's degree and rated a high school diploma as very important. In contrast, the other respondent had a bachelor's degree and rated a high school diploma as of only medium importance to them.

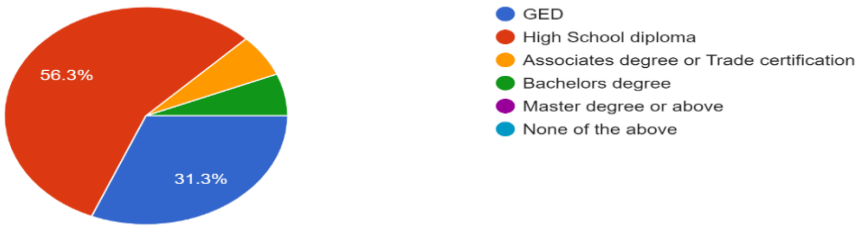

Figure 3. Identifies the highest level of education for the parent who participated in the survey.

Figure 4 shows what grade the children of the respondents first enrolled in a cyber school. Most of the parents, 14 of 16 or 87.5%, reported that their child first attended an external cyber school sometime when their child was enrolled in the school district's secondary school building, which was comprised of grades 7-12. Of note, 12 of 16 or 75% of the students departed the school system when the student would have been in junior high school, with eighth and ninth grades representing the highest number of student departures.

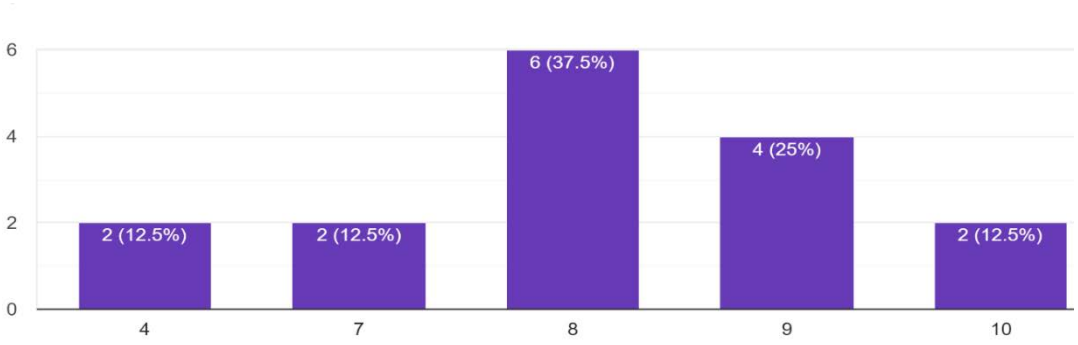

Figure 4. Identifies the grade level of students when parents first enrolled them in a cyber school.

In Figure 5, the data was mixed but showed that the grade level showing the highest return rate was that of eleventh grade, where 5 of 16 or 31.3% of the students

returned to the public school setting in that grade. Anecdotal information suggested this trend was accurate because some students in an external cyber school enroll in the public school setting again near the end of their educational career to be able to graduate from the public school, thereby earning a high school diploma.

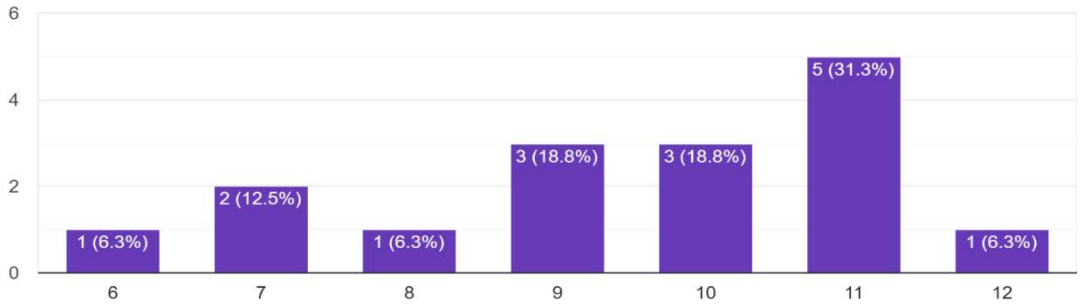

Figure 5. Identifies the grade level that students most recently completed.

In question six, almost a third (31.3%) of the parents reported that their child would likely pursue higher education, such as college. However, most parents, 13 of 16 or 81.3%, said that their child would likely pursue a job upon completing their high school level of education. These responses do not necessarily mean that the parents do not value higher education, but they do indicate that parents have a greater appreciation for the pursuit of employment.

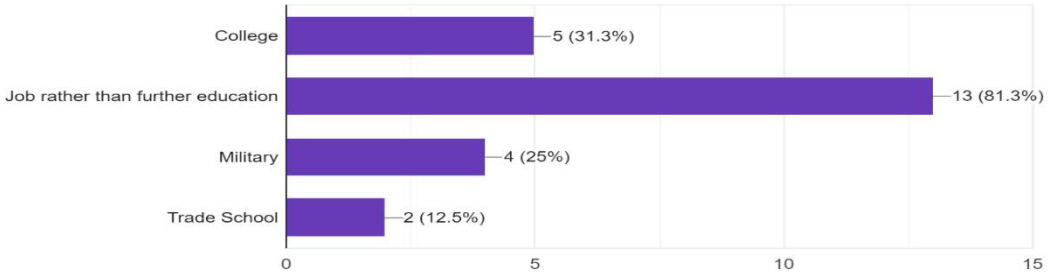

Figure 6. Identifies what parents reported as the likely plan(s) for their child after they graduated from secondary school.

In question seven, the data indicated that grade levels that the administration should focus their efforts on the most. By monitoring students who were more likely to consider cyber-school, staff could be prepared to provide them with more help and if need be information on the KC Cyber Academy if necessary. Twelve of the 16 parents reported that they first enrolled their children in a cyber school when their child was in seventh or eighth grade. These grade-levels would seem to deserve more attention so that we may keep students either in the traditional instruction pathway or transition them into the KC Cyber Academy as opposed to them enrolling in a cyber school.

Once the students reached their junior year of school, the data suggested that they continue in the traditional setting. Thus, it would not necessarily be as important to focus attention on cyber-school for upper-grade level students as it is on the junior high-grade levels.

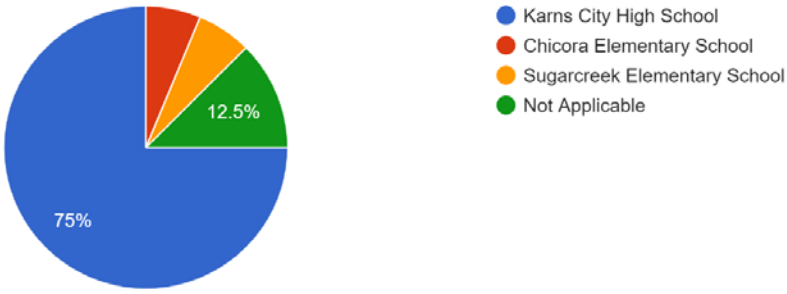

Figure 7. Identifies the school within the Karns City Area School District (KCASD) that the student most recently attended if enrolled before departing to a cyber school.

In Figure 8, the data from parental responses suggested that parents felt their child was safe while attending KCASD. Therefore, safety was not likely a significant concern for parents. The responses were on the positive side of the scale and thus may not have

been a substantial contributor to the decision to leave the public school to enroll in an external cyber school.

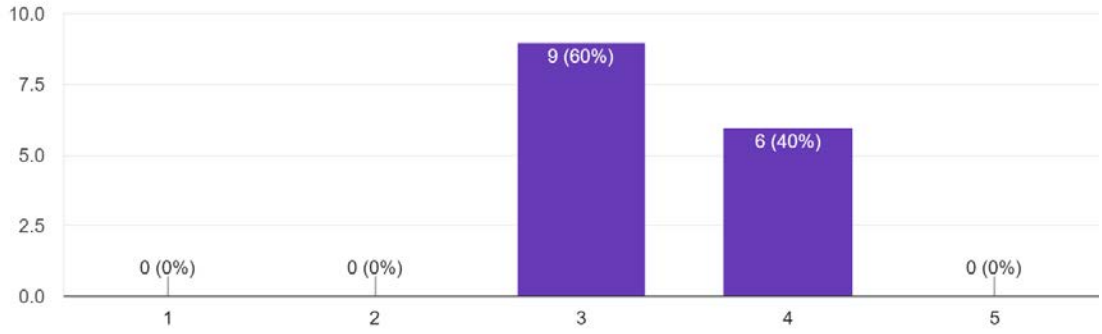

Figure 8. Identifies the parental responses indicating how safe they believed their child was when attending his/her KCASD school.

In Figure 9, the data suggested that the lack of friends may not be a significant contributing factor as to why parents to switch their children to cyber school.

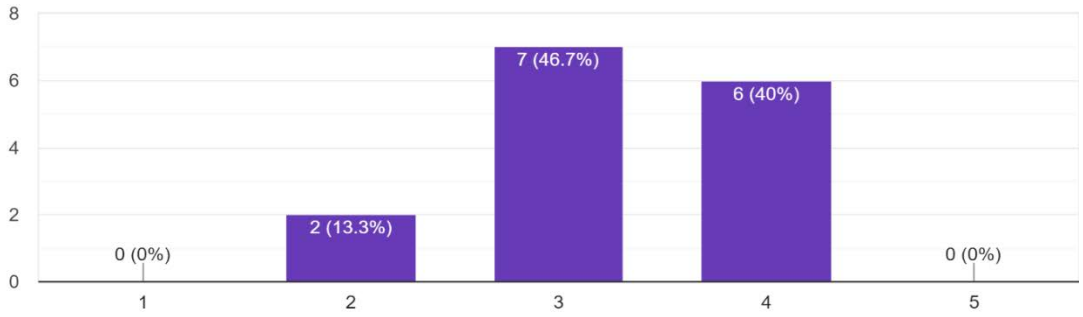

Figure 9. Identifies parental responses indicating whether their child had friends while attending his/her KCASD school.

In Figure 10, the data suggested that the students that departed the public school setting reported not enjoying the school they last attended. This conclusion was supported by 9 of 15 of the parents, or 60%, who indicated that their child did not like attending school when enrolled at KCASD. The other 6 of 15 parents choose what would be

considered a neutral rating for the question. No parent reported that their child enjoyed attending school.

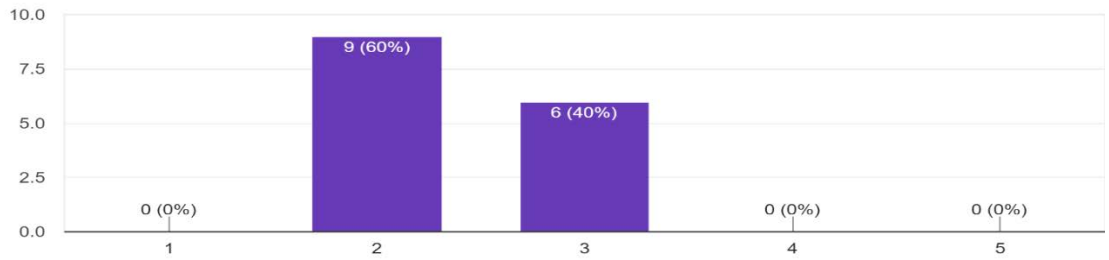

Figure 10. Identifies parental responses indicating whether their child enjoyed school while attending his/her KCSAD school.

In Figure 11, the data suggested that cyber-students enjoyed the current setting more than the traditional setting they left. The result was not surprising since one would expect the decision to depart the previous setting for another would be the result of some desire for change. The response to this survey question was significant based on the results of the t-test (Table 3). It was noteworthy to point out that the overall increase in the survey ratings reflected a one-point change on the scale. If increased enjoyment were a side effect of simply changing to cyber-school, a more significant increase might have been observed based on the student and parent's experience.

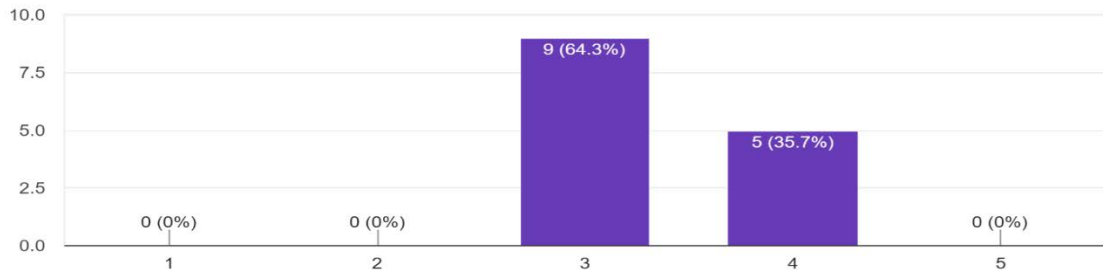

Figure 11. Identifies parental responses indicating whether their child enjoyed school while attending his/her cyber school.

The results in Table 3 confirmed that there is a relationship between responses to questions ten and eleven that with the change in placement being more positive than the former placement for the students involved. As noted by the t-value and the p-value, there was a significant difference in enjoyment of school ratings after the change in placement was made, t(46) = -6.75, p = 1.37E-05, for the parents reported that students who enrolled in an external cyber charter school (M = 3.36, SD = 0.06) being higher when compared to the sample of 14 students who remain enrolled in the Karns City Area School District (M = 2.36, SD = 0.06).

Table 3: Enjoyment of former school versus current school placement

t-Test: Paired Two Sample for Means

	Enjoyment in KCASD	*Enjoyment in Cyber Placement*
Mean	2.36	3.36
Variance	0.25	0.25
Observations	14	14
Pearson Correlation	0.38	
Hypothesized Mean Difference	0	
df	13	
t Stat	-6.75	
P(T<=t) one-tail	6.86E-06	
t Critical one-tail	1.77	
P(T<=t) two-tail	1.37E-05	
t Critical two-tail	2.16	

In Figure 12, these data indicated that schoolwork was a problem for students, and that was a part of the reason they ended up attending a cyber school. Homework was identified by 14 of 15 or 93.3% of the parent respondents as a problem for their child. It

could be that the amount and type of schoolwork expected were too much or did not resonate with the students. In the future, determining more about this area could clarify the impact that it had on the parent's decision to enroll their child in an external cyber school.

In a follow-up question on the survey, parents were asked an open-ended question that directly asked for comments regarding academic problems that existed while attending the traditional public school. The responses to this question clarified some of the thinking around the degree that schoolwork influenced the decision to leave the public school setting.

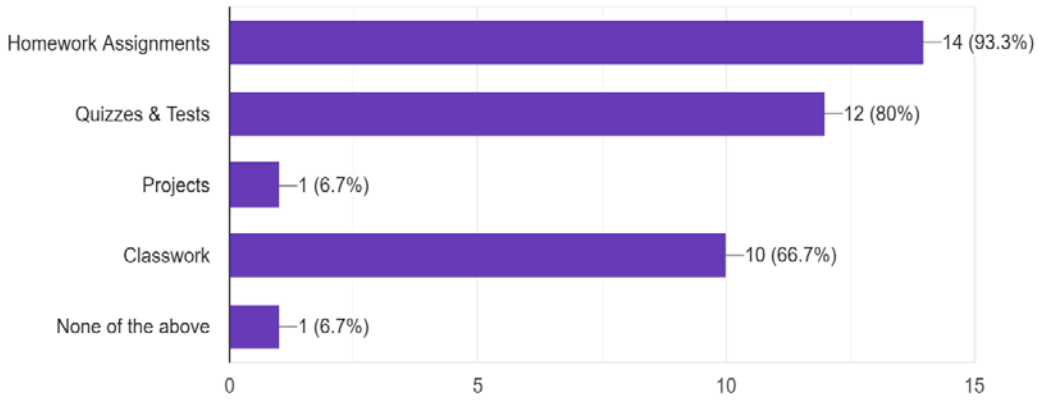

Figure 12. Identifies parental responses indicating which items their child experienced academic problems with while attending his/her KCASD school.

In question thirteen, parents were asked an open-ended question about problems with academics. The responses that parents provided were reported as submitted without edits. The comments suggested that issues with homework can be grouped into two categories. The uselessness of the homework itself was identified by 8 of 13 or 61.5% of the respondents as a problem, and the amount of homework assigned was identified by 6 of 13 or 46.2% of the respondents as a problem. The only comments related to content

difficulty placed the blame on the teacher for not teaching the material well enough as opposed to suggesting that the material is too difficult. The responses that follow reflected what parents stated about problems with academics.

- Some teachers gave too much work.
- The work was not related to what teachers tested. Teachers rarely graded the homework and did not give much if any feedback.
- The classwork was mostly busywork. Teachers seemed to enjoy giving lots of work but didn't want to explain why it was needed. My daughter fell behind and then didn't want to go to school.
- The work seemed to be unrelated to what was needed to learn the material.
- The teachers gave too much work that seemed just to be busywork. Teachers didn't seem to care about some kids.
- Too much busywork that didn't relate to anything.
- Too much work and not enough teaching
- Too much busy work!
- Schoolwork was too much for my child. He did not want to go to school and cyber school was really the best option.
- The work was just busy work and was not valuable. Too many worksheets.
- Not Applicable
- The teacher's homework was just busy work and did not relate to what was tested.
- There is too much work and not enough teaching to help students.
- Some teachers need to do a better job of teaching the material so that students can actually learn.

In questions fourteen and fifteen, parents reported responses to problems with individuals in the school setting focused mostly on the teachers. Issues or concerns with another student were reported by 9 of 16 or 56.3% of the respondents, whereas 14 of 16 or 87.5% reported there were problems with the teacher at their child's school. Parents indicated such things as teachers had favorite students who were not punished, and teachers ignored "bad" behavior in general. Five parents felt that the teachers did not care about the students, while two other parents felt teachers had mistreated their child. Two negative responses referenced an administrator. The comments parents stated were somewhat surprising as often anecdotal comments from parents through casual

conversation would seem to lead you to believe that problems were mostly with peers and not employees. Therefore, the data that parents provided indicated that problems with employees were more of a concern than problems with their child's peers.

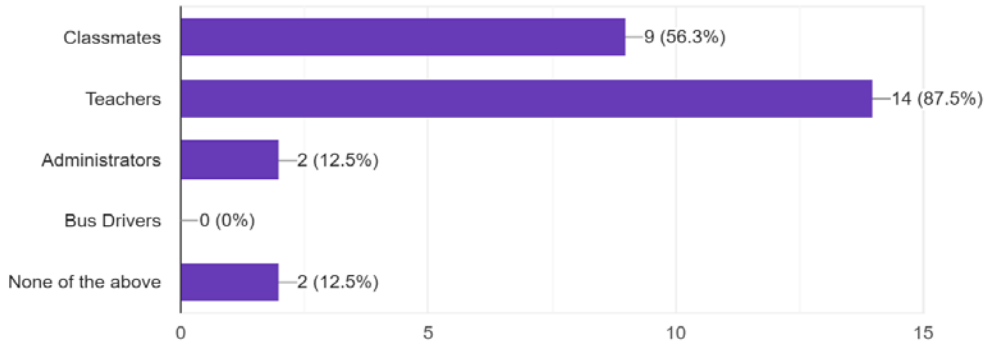

Figure 13. Identifies parental responses indicating whether their child had problems with others in the KCASD school setting.

In question fifteen, parents were given the opportunity in an open-ended question to share if their child experienced problems with other individuals while attending his/her KCASD school. The responses that follow reflected what parents stated without edits.

- Kids picked at each other and nothing was done to stop it.
- Some teachers left some kids get away with whatever they wanted but punished other kids.
- Teachers expected students blindly be able to do all of the busy work without their help. If a student fell behind they were left behind.
- Teachers didn't seem to care about some kids.
- Teachers let some kids do what they wanted and punished others. They played favorites and that lead to problems between kids.
- Teachers treated my son as he was a bad kid even though he wasn't.
- The teachers did not seem to care about my child
- Teachers do not seem to care about some students that need extra help.
- The principal would not help me and actually encouraged me to consider cyber school for my son.
- My son did not get along with his teacher. She was mean to him.
- Not Applicable
- Schoolwork was hard for my son. He got in trouble from teachers and principal and stopped wanting to go to school.

- My child was bullied and teacher had favorites.
- Teachers have favorites and kids pick on each other with anything being done to stop it.
- Some teachers didn't seem to like their job or care about the students. Some teachers did care but seemed to be afraid of the teachers that didn't care and were afraid to speak out publicly about the problem.

In question sixteen, the parents were able to share the reasons why they chose to enroll their child in a cyber school. This question went to the heart of the study and provided parents an opportunity to be specific with any of the reasons that contributed to why they enrolled their child in a cyber school. Despite the free-response format, patterns still emerged. Six of the 16 or 37.5% of the responses referenced the parent having grown tired of fighting with their child about going to school or that they reached a general feeling that there was no other choice. Two more referenced not wanting to continue to deal with problems and the student not wanting to go to school. Another two referenced needing a fresh start, and one other response involved needing a change to due unhappiness. In each of these groups of responses, one could argue that the parents did not state that cyber-school was a better option than the public school; they just viewed it as a necessary alternative to traditional school. These eleven parents may still believe that traditional school could be a suitable option and thus could have been persuaded to keep their children in the traditional setting with some type of intervention.

Of the remaining five responses, only two gave reasons that would suggest a cyber-education program was superior to a traditional program. One references "busy work" associated with traditional education and the other references being better able to tailor coursework to the student's ability and interest. Two others involve teachers in what would be described as a personality conflict. The final response referenced relocating and not enrolling in the traditional setting due to the move. While more

challenging to persuade, these parents might be persuaded to stay in or return to traditional education if a personal connection could be made.

In question sixteen, parents were asked to share the reasons why you chose to enroll your child in a cyber school. Changes were made to the transcription of a couple of responses by removing the personal names of employees that were mentioned by the parent. The changes were identified by underscoring the text in the specific responses. The personal names used were substituted with the person's job category, such as student, teacher, principal, etc. and only to protect the individual's identity.

- My daughter did not want to go to school and I got tired of fighting her about it.
- I just didn't want to deal with it anymore.
- I had no choice but to get my daughter out of the school. She didn't want to go and I was then being fined for attendance. I was told by the principal that I might as well enroll my daughter in cyber school because she wasn't going to make it at KC.
- It gave my son a fresh start.
- I wanted to avoid the problems and this was the only way I could think of to help my daughter.
- I wanted him to have a fresh start and a chance to succeed.
- My child needs an education and does not need to do busywork
- It was the only option I had to help get my son to be able to graduate.
- I got tired of fighting the battle of trying to get my son to go to school.
- To get away from the teacher. I just have not switched my son back to the school system.
- We moved after the beginning of the school year. Both of my sons chose to try cyber-school rather than enroll in a new school right away.
- I didn't want to continue dealing with the problems and the principal wouldn't help us.
- My student did not want to go to school and his grades were low.
- To get away from the problems and help my kid be happy
- I wanted my child to avoid certain teachers.
- Student-to-teacher ratio and the tailor-ability of courses to meet the student's learning style and interests.

In question seventeen, all but one parent indicated that they were unaware of the KC Cyber Academy option for their child. This suggested that the school system did not engage the parents and students that were considering leaving the school system in sharing information regarding their options before a decision was made to enroll in an external cyber school. Discovering this provided an opportunity for the school district to reach out to these families in an effort to attempt to recruit students back to the home school and reduce costs to the school district.

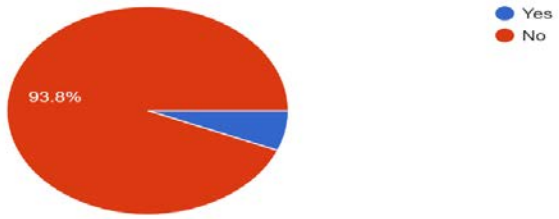

Figure 14. Percentage of parents reporting awareness of the KC Cyber Academy as an option to Cyber School.

Figure 15 represents that 13 of 16 or 81.3%, of the parents reported that it was important for their child to earn a high school diploma. The same number of parents reported in question six that their child would likely pursue a job after graduation. Since earning a high school diploma or equivalent is a minimum precursor to obtaining a job, the responses to the two questions seem plausible and complementary. In the future, it would be of interest to see if the school district's curriculum could be shaped to be more supportive of delivering workforce-related instruction and skills that prepare students for obtaining a job. Doing so would perhaps help these students see greater value in the educational opportunities a traditional school setting can offer. While this can be

challenging in the current high-stakes testing era of education, improvement in this area could have a substantial impact on these students.

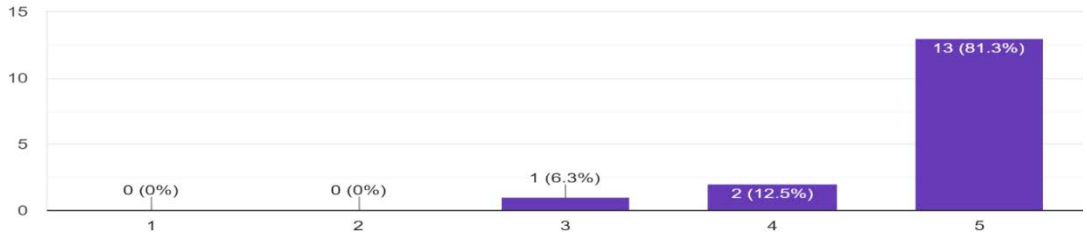

Figure 15. Indicates the importance parents placed on their child earning a high school diploma from a public school such as KCASD.

In questions nineteen through twenty-one, the data collected provided insight into potential selling points when trying to convince students and parents to stay in a traditional school or at least take advantage of KC Cyber Academy. In all three questions, parents responded that it was important for their children to have the opportunity to participate in extra-curricular activities (Figure 16), access to the Butler County Area Vocational-Technical School (Figure 17), and the school district's behind the wheel driver education program (Figure 18). Thus, access to these three items could be used to possibly persuade students and parents to maintain enrollment with the traditional school plan or in the KC Cyber over an external cyber-education.

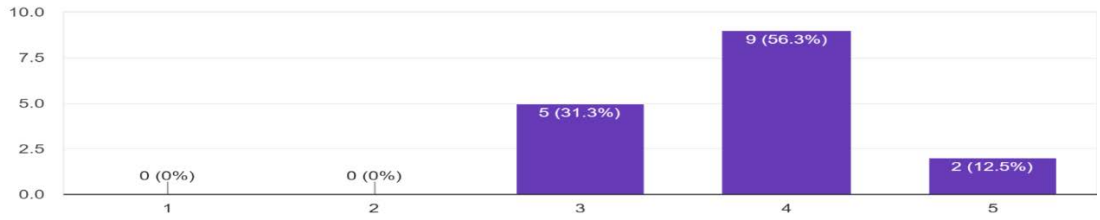

Figure 16. – Indicates the importance parents placed on their child being able to participate in extra-curricular activities.

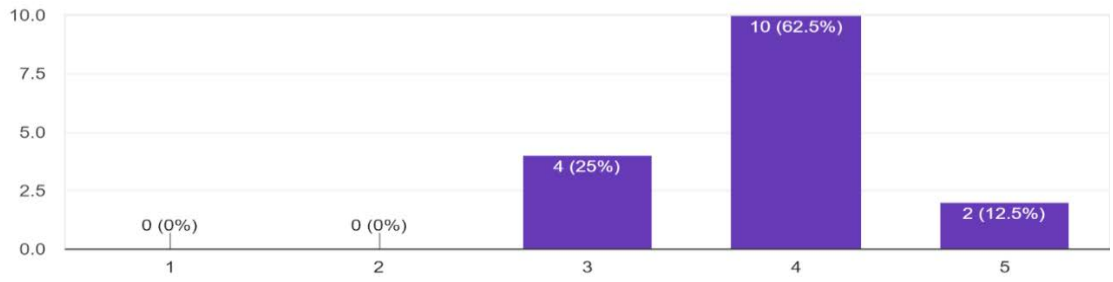

Figure 17. Indicates the importance parents placed on their child being able to attend the Butler County Area Vocational Technical School (BCAVTS)?

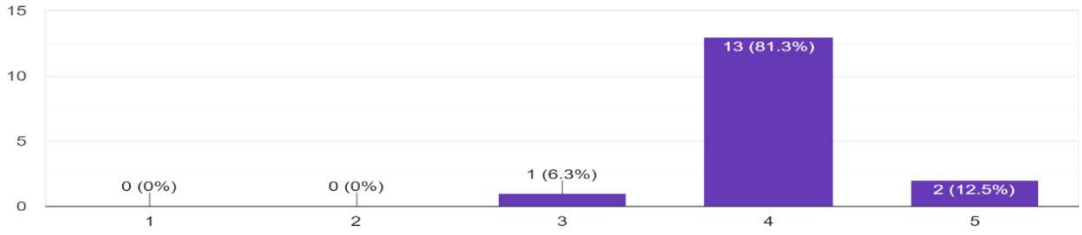

Figure 18. Indicates the importance parents placed on their child being to take a driver education class that enables him/her to earn a driver's licenses from an onsite instructor.

Figure 20 shows how parents rated the importance of a flexible schedule for their child. Eight of 16 or 50% of the parents selected a neutral rating, but all the other eight respondents selected positive ratings for the question. Cyber-schools not affiliated with the school district have a distinct advantage of flexible scheduling, and this was an area that the public school sector would need to adjust to compete better. The responses, however, indicated that this was not as important to the parents as their children being able to participate in extra-curricular activities and participate in driver education. Therefore, it appeared that parents valued how their child felt about the school experience more than the need for a flexible schedule.

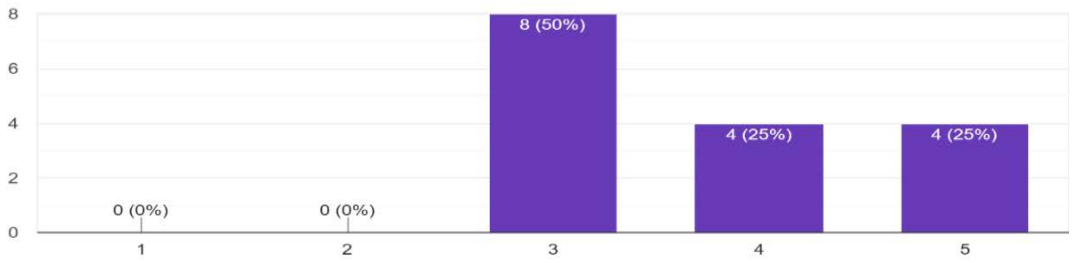

Figure 19. Indicates the importance parents placed on their child having the opportunity to have a flexible schedule to complete their educational requirements.

In question twenty-three, parents were asked to identify the best way for them to obtain additional information on the school district's online program. The responses indicated that parents seemingly preferred a self-discovery method of receiving more information that allowed them to maintain the ability to pursue additional information on their own rather than with a phone call that would enable two-way communication. Publicizing and promoting of the KC Cyber Academy was needed and essential so that parents and students were at least aware of it as an option.

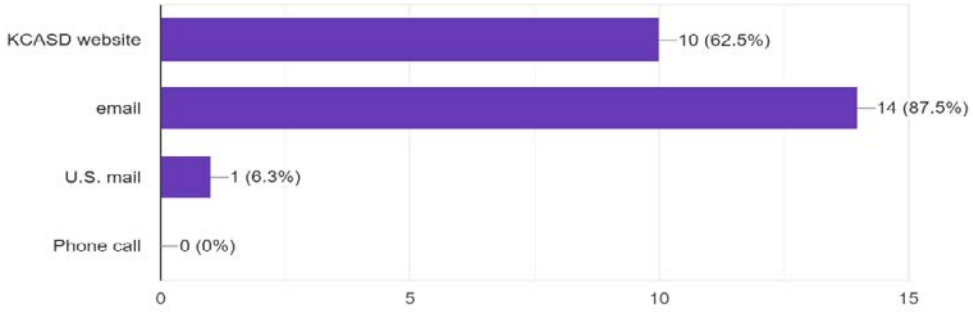

Figure 20. – Indicates the method of how parents would like to receive additional information on the KC Cyber Academy.

Summary of Results for Research Question 1

With the results from the survey, insight into the reasons parents enrolled their child in an external cyber school, and what the typical cyber student looks like for our school district started to take shape. The average cyber school student was male, departed the school system sometime in junior high, likely intended to join the workforce after graduation, has a dislike toward schoolwork, and lived in a household with a parent that has a GED or high school diploma. The student and the student's parents were not aware that the school district offers an online option to take classes and therefore viewed an external cyber school as the only option as an alternative to the traditional public school pathway.

Looking closer at the open-ended responses to the question on the survey that asked parents to share why they chose to enroll their child in a cyber school, a pattern was noticeable. The responses were grouped into two categories. One category representing responses that implied that the cyber school might be "better" than the traditional school and another that represented the respondents felt they had "no other choice" but to select a cyber school as an alternative. In taking the responses from question sixteen, they were arranged into the two categories.

The first group represented the responses that indicated that parents felt that a cyber school option was better than the traditional setting. In this grouping, 5 of 16 or 31.3% of the parents may have felt that cyber school was better than the traditional public school setting. The five parental responses representing the "better" group follow.

- I wanted my child to avoid certain teachers.
- Student-to-teacher ratio and the tailor-ability of courses to meet the student's learning style and interests.

- My child needs an education and does not need to do busywork
- To get away from the teacher. I just have not switched my son back to the school system.
- We moved after the beginning of the school year. Both of my sons chose to try cyber-school rather than enroll in a new school right away.

The second group represented 11 of 16 or 68.6% of the parent responses that indicate parents felt they were "out of options" or just did not know of any alternatives other than a cyber school placement for their child. The eleven parental responses representing the "no other choice" group follow.

- My daughter did not want to go to school and I got tired of fighting her about it.
- I just didn't want to deal with it anymore.
- I had no choice but to get my daughter out of the school. She didn't want to go and I was then being fined for attendance. I was told by the principal that I might as well enroll my daughter in cyber school because she wasn't going to make it at KC.
- It gave my son a fresh start.
- I wanted to avoid the problems and this was the only way I could think of to help my daughter.
- I wanted him to have a fresh start and a chance to succeed.
- It was the only option I had to help get my son to be able to graduate.
- I got tired of fighting the battle of trying to get my son to go to school.
- I didn't want to continue dealing with the problems and the principal wouldn't help us.
- My student did not want to go to school and his grades were low.
- To get away from the problems and help my kid be happy

Looking at the parent responses provided some hope that if parents were provided options within the traditional school setting for their child, some might decide to keep their child enrolled with our school system. Offering parents a choice is essential and can lay the groundwork for creating a stronger sense of a connection to the school.

Research Question 2

The review of the school district's student databases helped address research question two by asking: What does the school district's data on students that leave the system to enroll in an external cyber school indicate about these students as compared to those that stay enrolled in the school system? The school district has contracted with edInsight OnHand Schools (edInsight) for the use of its student data management tool since the 2011-2012 school year. The data used for this analysis was pulled and provided to the researcher in an anonymous format, as was agreed to prior to the onset of conducting the study.

Data set one represented data on twenty-four students that were once enrolled in the school system for which information existed within the edInsight database on students who departed the school system and enrolled in an external cyber school. This group represented the experimental group for this study. The second data set was created from a random selection of twenty-four students from the same edInsight database to serve as the control group. The selection process was based on assigning each student a number and then using the website www.random.org to generate the twenty-four numbers that were then used to pull the student data for the control group.

A comparison of student absences, math GPA, language arts GPA, science GPA, economic status, or free and reduced lunch eligibility, IEP status, and gender was made between the two groups. A comparison of the risk factor that was generated by edInsight based on a matrix that takes into consideration the types of absences (excused, unexcused, and suspensions), two years of grades, and two years of standardized test

results were also analyzed. Data on each variable were compared to determine if any variance was significant between the two data sets.

In Table 4, the number of absences from school was compared between the former KCASD student group who were in cyber students and the current KCASD student group. As noted by the t-value and the p-value, there was not a significant difference in attendance rates, $t(46) = -.51$, $p = .61$, despite the number of days absent for the students who enrolled in an external cyber charter school ($M = 5.67$, $SD = 3.97$) were lower when compared to the sample of 24 students who remained enrolled in the Karns City Area School District ($M = 6.29$, $SD = 4.46$). This was somewhat surprising but informative.

Table 4: Comparison of Absences from School

Attendance t-Test: Two-Sample Assuming Equal Variances Student

	Cyber Students	*KCASD Students*
Mean	5.67	6.29
Variance	15.80	19.87
Observations	24	24
Pooled Variance	17.83	
Hypothesized Mean Difference	0	
df	46	
t Stat	-0.51	
P(T<=t) one-tail	0.31	
t Critical one-tail	1.68	
P(T<=t) two-tail	0.61	
t Critical two-tail	2.01	

When math GPAs, as shown in Table 5, were analyzed, there was not a significant difference in math GPA rates, t(45) = .04, p = .97, despite the math GPA for the students who enrolled in an external cyber charter school (M = 2.70, SD = 3.25) were slightly higher when compared to the sample of 23 students who remained enrolled in the Karns City Area School District (M = 2.70, SD = 1.00).

Table 5: Comparison of Math GPAs

Math GPA t-Test: Two-Sample Assuming Equal Variances

	Cyber Students	*KCASD Students*
Mean	2.71	2.70
Variance	1.80	1.02
Observations	24	23
Pooled Variance	1.42	
Hypothesized Mean Difference	0	
df	45	
t Stat	0.04	
P(T<=t) one-tail	0.49	
t Critical one-tail	1.68	
P(T<=t) two-tail	0.97	
t Critical two-tail	2.01	

When language arts GPAs, as shown in Table 6, were analyzed, there was not a significant difference in language arts GPA rates, t(45) = .04, p = .97, despite the language arts GPA for the students who enrolled in an external cyber charter school (M = 2.83, SD = 2.02) being lower when compared to the sample of 23 students who remained enrolled in the Karns City Area School District (M = 2.86, SD = 1.14).

Table 6: Comparison of Language Arts GPAs

Language Arts GPA t-Test: Two-Sample Assuming Equal Variances

	Cyber Students	*KCASD Students*
Mean	2.83	2.86
Variance	1.42	1.07
Observations	24	23
Pooled Variance	1.25	
Hypothesized Mean Difference	0	
df	45	
t Stat	-0.07	
P(T<=t) one-tail	0.47	
t Critical one-tail	1.68	
P(T<=t) two-tail	0.94	
t Critical two-tail	2.01	

When science GPAs, as shown in Table 7, were analyzed, there was not a significant difference in science GPA rates, $t(45) = .90$, $p = .37$, despite the science GPA for the students who enrolled in an external cyber charter school ($M = 3.17$, $SD = 1.21$) being higher when compared to the sample of 23 students who remained enrolled in the Karns City Area School District ($M = 2.87$, $SD = 1.22$). In all, after analyzing the math, language arts, and science GPAs, the data was unexpected because it was previously thought that grades would be an indicator that influenced whether a student left the school system for a cyber school.

Table 7: Comparison of Science GPAs

Science GPA t-Test: Two-Sample Assuming Equal Variances

	Cyber Students	*KCASD Students*
Mean	3.17	2.87
Variance	1.10	1.48
Observations	24	23
Pooled Variance	1.29	
Hypothesized Mean Difference	0	
df	45	
t Stat	0.90	
P(T<=t) one-tail	0.19	
t Critical one-tail	1.70	
P(T<=t) two-tail	0.37	
t Critical two-tail	2.01	

In Table 8, the risk factor rating was evaluated to determine if there would be any difference between students in each data subset. The risk factor rating itself was a measure calculated by the edInsight data program on each student and was based on assigning points to various types of student absences, grade ranges, and performance on standardized tests. The higher the rating, the more "at-risk" the student was with academic problems. This rating allowed teachers and administrators to keep an eye on students that need additional attention. Therefore, looking at the risk factor rating for this study was desirable to see if it could be an indicator that might show any correlation that could be used to predict a student that might consider a cyber school over the traditional

public school setting. Upon review, the t-value and the p-value indicate there was not a significant difference in risk factor ratings, $t(46) = .68$, $p = .50$, despite the risk factor for the students who enrolled in an external cyber charter school ($M = 27.4$, $SD = 20.1$) being higher when compared to the sample of 24 students who remained enrolled in the Karns City Area School District ($M = 23.6$, $SD = 18.2$).

Table 8: Comparison of Risk Factors

Risk Factor Rating t-Test: Two-Sample Assuming Equal Variances

	Cyber Students	*KCASD Students*
Mean	27.38	23.63
Variance	402.85	332.70
Observations	24	24
Pooled Variance	367.77	
Hypothesized Mean Difference	0	
df	46	
t Stat	0.68	
P(T<=t) one-tail	0.25	
t Critical one-tail	1.68	
P(T<=t) two-tail	0.50	
t Critical two-tail	2.01	

In Table 9, data represented characteristics that were reported as the mean for each variable, along with the difference between the two groups. The cyber school group reported higher means in the areas of economic status, IEP status, and gender designation of being male. With a small sample size, it would be cautioned not to generalize that this data accurately described all cyber school students in this setting. Instead, it would be

appropriate to explore this area in more depth in order to determine the validity of what seems to be a difference in the too comparable data sets.

Table 9: Comparison of Economic Status, IEP Status, and Gender

	Cyber School Students	KCASD Students	Change
	n = 24	n = 24	
Free/Reduced Lunch	45.8%	33.3%	+12.5
IEP Status	25.0%	12.5%	+12.5
Female	45.8%	54.2%	-8.4
Male	54.2%	45.8%	+8.4

Source: KCASD edInsight OnHand Schools

Summary of Results for Research Question 2

Before completing the review of the available data that existed within the student database containing demographic information on students, it was expected that certain data would show enough of a difference for cyber students as compared to traditional public school students that would be significant. If so, these data would serve to provide a clue as to what characteristics could be discretely monitored and that help predict the likelihood that a student would depart the school system for an external cyber school. Unfortunately, of the characteristics looked at in this study, none proved to show enough significance to be used in the manner that was originally hoped. The data from this research question does, however, start to show a pattern in the characteristics for a potential cyber student but not with enough validity to make solid predictive decisions on who would likely depart and who would not.

Research Question 3

The review of the literature helped address research question three by asking: What are the best practices for the design and operation of online cyber classes for K-12 students? The literature around online learning programs for K-12 students originates from the mid-1990s and builds upon research and practice from the K-12 distance education era (Cavanaugh, Barbour, & Clark, 2009). Themes throughout the literature included steady growth and a focus on the benefits, challenges, and broad effectiveness of K-12 online learning. Also, newly developed standards for K-12 online learning have emerged in descriptions of effective practices.

Table 1 contained national standards for online teaching published by the International Association for K-12 Online Learning (iNACOL). These standards reflect what online teachers should be able to do for evaluation purposes and were designed to provide quality guidelines for online teaching (iNACOL, 2011, p. 4-16).

Table 1. National Standard for Quality Online Teaching, Version 2

Standard A - The online teacher knows the primary concepts and structures of effective online instruction and is able to create learning experiences to enable student success.
Standard B - The online teacher understands and is able to use a range of technologies, both existing and emerging, that effectively support student learning and engagement in the online environment.
Standard C - The online teacher plans, designs, and incorporates strategies to encourage active learning, application, interaction, participation, and collaboration in the online environment.
Standard D - The online teacher promotes student success through clear expectations, prompt responses, and regular feedback.
Standard E - The online teacher models, guides, and encourages legal, ethical, and safe behavior related to technology use.
Standard F - The online teacher is cognizant of the diversity of student academic needs and incorporates accommodations into the online environment.

Standard G - The online teacher demonstrates competencies in creating and implementing assessments in online learning environments in ways that ensure the validity and reliability of the instruments and procedures.
Standard H - The online teacher develops and delivers assessments, projects, and assignments that meet standards-based learning goals and assesses learning progress by measuring student achievement of the learning goals.
Standard I - The online teacher demonstrates competency in using data from assessments and other data sources to modify content and to guide student learning.
Standard J - The online teacher interacts in a professional, effective manner with colleagues, parents, and other members of the community to support students' success.
Standard K - The online teacher arranges media and content to help students and teachers transfer knowledge most effectively in the online environment.

Effective online programs for K-12 learners will need to include frequent teacher contact with students and parents, lessons that were divided into short segments, and regular feedback provided on the student's progress (Cavanaugh et al. 2004). Entities that plan to operate an online program need to determine if the online program will offer asynchronous or have synchronous classes. Each style has benefits, but with the age of the students in K-12 and their needs, a model that permits synchronous instruction permitting timely and frequent feedback will likely be more effective in delivering new instruction than an asynchronous program. Ideally, the program would have some of both components where it combines synchronous and asynchronous instructional methods. Teachers who incorporate a balance between the two when they plan the structure of their online courses enable students to have time to reflect on their learning but also provide regular opportunities for synchronous communication can increase the sense of community among students (DiPietro, Ferdig, Black, & Preston, 2008). This can allow for opportunities for immediate feedback on assignments or discussions related to content that was delivered and mirror the traditional style of learning but with the flexibility of the online or remote learning platform.

An additional element of online learning for students in the K-12 setting was the need for parental involvement. Teachers need to engage and contact parents, and vice versa, if there were concerns about a student's performance in an online course. Establishing an open channel of communication between the teacher and the parent of the online student increased the likelihood that the student was successful. The research suggested that parental involvement maybe even more important for online students than those in face-to-face classrooms because of time students spend learning at home without the direct guidance of the teacher (Liu, Black, Algina, Cavanaugh, & Dawson, 2010).

Educators are starting to accept that when learners have some control over their learning environment, they are more successful (Cavanaugh et al., 2013). In many online courses, students were permitted the ability to have an increased level of control, which in turn increased the level of engagement and ownership in their learning. More online courses are now moving toward individualized learning plans and concept mastery rather than discrete tasks such as homework and worksheets. Courses that assessed a student and dynamically provided content that fit the student's learning needs were considered most effective and contributed to learning (Curtis, 2013).

Summary of Results for Research Question 3

Characteristics of successful online experiences were ones with two-way communication between the teacher and student, parental involvement in a way that supported the experience, had defined expectations of the student, provided frequent feedback opportunities, and were flexible. Students must be self-motivated, engaged, willing to participate and be accountable for their learning. Parents should be available to monitor, mentor, and motivate their children as they complete their work.

Research has found that synchronous communication offered teachers and students benefits. The environment was more authentic and closer to what students would find in a traditional classroom situation. Discussions were productive, and the conversation moved at a much faster pace. Similarities to face-to-face conversations can promote a sense of community among students, and students could receive immediate feedback on ideas (Hrastinski, 2008; Journell, Beeson, Crave, Gomez, Linton, & Taylor, 2013; Mabrito, 2006).

Conclusion

In Chapter IV, a summary of the findings from data collection methods employed in the study to learn more about the reasons parents chose cyber learning for their child and what a school system can learn about these reasons so that it may better compete and retain students in their online program. There were some statistically significant relationships between the variables of economically disadvantaged status, education of the parent, student grade level, and gender of the student. Although no simple, definitive profile of the typical student who leaves the traditional education setting was developed, there were characteristics that surfaced for the parents and their children who attend cyber schools as compared to the average student who stays enrolled in the public school setting.

In the case of the parents, a majority of the sample population was looked at in this study could be described as being less educated, felt like they had no other choice but to enroll their child in a cyber school, were unaware of the KC Cyber Academy option, and valued their child earning a high school diploma. The typical student that ended up transitioning to a cyber school could be described as more often than not, a male in grade

7-9, from an economically disadvantaged household, had a dislike toward homework and schoolwork, and reported liking the change once they switched to the new school.

It was clear that although there were some objective characteristics that can help the school system be more observant to the student that might struggle in the traditional setting and consider cyber school, cultivating relationships that help anchor the student to the school played a significant role in keeping them enrolled in the school system.

CHAPTER V

Conclusions

Introduction

Although the Karns City Area School District has operated the KC Cyber Academy for several years, it has been underutilized as a resource to effectively recruit external cyber school students back to our school system. When first established, the option was used as an effort to reduce the number of future students that would leave the school system and ignored the students that had already left. Overlooking the problem was the result of internal uncertainty on how best to address the problem of students leaving the school district and its effect on the system's budget.

Initially, I was looking to creating an online option that permitted students to take classes that our school system offered without restriction, much like that of what an external cyber school permits and provides for its students. Unfortunately, our teacher association and some board members were concerned that this would lead to accelerating the number of students leaving the school system and thus preferred a more narrowed option. Therefore, we built our program predominately to help retain the students that were deemed at risk and focused our efforts there with the programming.

In the first year, the program was helpful in educating five students that very well would have left for an external cyber school or, worse, dropped out of school altogether. As a school system, we felt good about our initial efforts, but we failed to bring back any students that already left the school system. We also did not have a real sense of why students or their parents were deciding to leave our school district. Knowing the reasons why students left became essential to identifying what we needed to do differently to

bring them back. This, coupled with the sheer cost of tuition paid to external schools per year, brought about a new sense of urgency to the problem.

As mentioned in the onset of this study, during the 2018-2019 school-year, a total of forty-five Karns City Area School District students were enrolled in an external cyber school for at least part of the school year at an overall cost of $487,041 to our school district. This loss in revenue could be used to help provide our students with more opportunities if it could somehow be recaptured and keep within the school district.

Parental Survey and Reasons that Parents Enroll their Children in Cyber School

The desired outcome of this study was to understand why parents enroll their child in a cyber school rather than keeping the student in the school district. Learning about the reasons contributing to the decision would help us be able to identify changes to our program that would make it an attractive alternative to a cyber school. A parental survey was used to obtain feedback that could be used to determine why parents made the decision they do. The survey instrument contained a mix of closed-ended and open-ended questions that parents could answer. This provided me with an opportunity to use quantitative and qualitative methods to gain a better understanding of the issue.

Appendix B contains a copy of the survey instrument that was used to probe parents of students that enrolled their child in an external cyber school to obtain their viewpoints. In total, I provided information on the online survey to 110 parents via a mailing that contained the required privacy notices on the survey, my intention for conducting the study, and information on how the participants could access the survey link to complete the survey. Although the survey completion rate was only 14.5%, the results helped provide factual data from the parent’s perspective. During the process of

mailing the surveys, I received 20.9% or 23 survey invitations in return mail by the post office for reasons such as “not deliverable as addressed,” “unable to forward,” and “vacant.” I reviewed the information with the business office, and we were able to determine that at least two students had moved from our school district to a neighboring school district. Correcting this resulted in reducing the number of external cyber school students from forty-five to forty-three and lowered our cyber school cost by over $11,000. The high non-deliverable rate and low participation rate indicate that this population group is transient and not as attached to the school district as families of students that remain in the school district.

In analyzing the responses, it is telling that some patterns surfaced from the parent’s responses. Parents that responded to the survey reported that by a 2:1 margin or specifically, 68.8% to 31.3% that their child’s gender was male, which indicates that more males leave our school system than do female students for an external cyber school. This relationship was verified by reviewing the gender of all students that were enrolled in an external cyber school and finding that 71.8% were male and 28.2% female. Further analysis of the student body shows that it is almost equally divided, with 47.9% male and 52.1% female. The responses indicated for student gender provided validation that respondents were representational to the population group as a whole and that male students are more prone to leave our school system than female students.

Although only 1 of 16 or 6.3% of the parents reported having earned a bachelor’s degree, all respondents indicated that they valued their child obtaining a high school diploma. The data on the educational level of the parents complements the findings from a study by Mann & Baker (2019), which reported many rural school districts in Pennsylvania had lower percentages of per capita of adult residents that had obtained a

bachelor's degree level of education. Even though most of the parents 14 of 16 or 87.5% did not earn more than a high school diploma, they valued education and wanted their child to finish school and at least earn their diploma.

Another trend that surfaced from the data was that 14 of 16 or 87.5% of the respondents reported that their child first attended an external cyber school sometime when their child was in grades 7-12, which would be our school district's secondary school building. In particular, 12 of 16 or 75% of the parents reported that their child departed the school system when they would have been in junior high school with eighth and ninth grades seeing the highest rate of departure. This information warrants us taking a closer look at these grade levels to determine if there are additional resources needed to help reduce the number of these students leaving our school system in junior.

Parents shared that their child was more likely to pursue a job post-graduation as compared to the option of pursuing additional schooling, with l3 of 16 or 81.3% making such selection. Therefore, our school system should review its career readiness plan to verify that students have access to meaningful opportunities that prepare them with the skills that lead directly to employment. Parents also reported that their children liked the change in educational placement with the data showing that the change to the cyber school was determined to be significantly positive.

Surprisingly, parents reported that schoolwork or, more specifically, homework was a problem area for their child. The open-ended responses that parents provided indicated that the homework assigned was either unrelated to what was being taught, being just busywork, was rarely graded, and of little value to the learning process. All 15 responses to the question were negative in some way about the quality or volume of the

homework assigned by the teachers. It was clear from the responses that teachers could benefit from some training in the area of how to select fewer but high-quality homework problems that support the content being taught. Until this happens, there will continue to be a disconnect between what is taught and what is assigned as homework as there is no expectation this pattern changes on its own without intervention. This problem not only contributes to students leaving our school system but holds students back from reaching their educational potential. Working with teachers through professional development in this area presents an opportunity to benefit all students by enabling teachers to provide targeted assignments that translate into meaningful outcomes.

I also asked parents two questions that probed whether their child had any problems while attending the school district. I expected to find that bullying or issues with peers would be identified as the highest-rated problem for students by parents. The data, however, surprised me with 9 of 16 or 56.3% indicating there were problems with classmates, and 14 of 16 or 87.5% indicating there were problems with teachers. It was not expected that problems with teachers would rank as the highest item selected by the parents. The parental responses make it apparent that staff training in the area of how to build positive relationships with students could be beneficial. Creating supportive relationships between teachers and students would help students feel connected to their school.

It is possible that some teachers are unaware of their impact on their students. Simply sharing and discussing the data from this study with the teaching staff is a good first step. The awareness of the problem could lead to changes in interactions and a reduction in the feeling that teachers show indifference to certain students and ignore the behaviors of some students while disciplining others. Additionally, negative behaviors

should decrease by building positive relationships that create mutual respect. Working collaboratively and helping teachers become aware of the impact they can have on their students could be an important step taken to help reduce the number of students that depart our school system for a cyber school.

The survey revealed that more parents felt they were out of options when making the decision to enroll their child in a cyber school than thought the cyber school was better than the traditional school setting. Frustratingly, one parent indicated that a school principal told her that she might as well enroll her child in a cyber school because “she wouldn’t make it at KC.” This response did not help the student, the parent, or the school system and exemplified the need for further discussion on how best to address stressful situations.

The survey also reported that 15 of 16 or 93.8% of the parents were unaware that the school district provided an alternative option to its traditional educational model through the KC Cyber Academy, enabling students to take online classes. Creating a professional-looking brochure that can be shared with information on the KC Cyber Academy option would be a simple step to ensure students and parents are at least aware of the option.

Comparison of Student Demographic Data

The second question in this study addressed the identification of patterns from demographic data that might surface from reviewing student data that the school district had on students that left the school system for a cyber school with data on students that stay with the school system. A review of the school district’s student information database edInsight enabled data to be pulled and provided to the researcher in an

anonymous format. The edInsight system had demographic data such as student absences, math GPA, language arts GPA, science GPA, economic status based on free and reduced lunch eligibility, IEP status, gender, and a risk factor that was generated by edInsight on twenty-four students that left the school system and subsequently enrolled in an external cyber school.

A control group was selected with twenty-four students that were randomly selected to test for relationships between the variables mentioned to see if any patterns started to develop that would describe the typical student that departs for a cyber school. Interestingly, variables such as attendance, math GPA, language arts GPA, science GPA, and edInsight's Risk Factor showed no significant difference for students that left the school system and from those that stayed in the school system. Although the sample size was small, it provided an objective comparison based on data.

Data on variables such as economic status, IEP status, and gender showed differences between the two groups. The pattern that developed shows that most students that enrolled in an external cyber school were from economically disadvantaged households, had an IEP and were male. This profile is supported by the data but should not be relied on a definitive without further study that involves a larger sample size and differentiation of degrees within each variable. For example, although attendance rates in either group did not show as significantly different in this study, specific types of attendance should be explored further to determine if there is a correlation. The same could be said about looking at more closely at discipline infractions to determine if a correlation exists with specific infractions and consequences that were assigned.

The third question in this study focused on whether the review of the literature would identify the best practices for the design and operation of online cyber classes for K-12 students? The literature around online learning programs for K-12 students originates from the mid-1990s and builds upon research and practice from the K-12 distance education era (Cavanaugh et al., 2009). Themes throughout the literature include steady growth and a focus on the benefits, challenges, and broad effectiveness of K-12 online learning. Also, newly developed standards for K-12 online learning have emerged in descriptions of effective practices.

School districts that can create well-designed online and blended courses and offer students guidance along with explicit instructions, so they know how to “get started” with their work can address the void that currently exists in a school operated online program. In addition, providing assessments, instructional materials, interactions, and technology that align with measurable learning objectives will assist students with success. Ensuring these components work together can become a struggle for districts and organizations to create their own courses. Therefore, the design of online classes and the operation of an in-house online program will require a team effect with a realist vision.

It could be that it is necessary to purchase online courses from a commercial provider and use them for the curriculum or seek permission to adapt their course content to match the existing school district curriculum than the development of one’s material from the start. With the current nationwide challenges from the COVID-19 pandemic, an immediate and intense focus has been placed on online learning. Almost every school district in the country was confronted with the need to provide some form of online learning to students during the end of the 2019-2020 school year. Therefore, there is no

doubt that the concept of online or remote learning is in for a transformation where it will become a legitimate part of the traditional public school's educational offering. It will be improved and will become an acceptable method of K-12 delivery.

Limitations of this Study

There are several study limitations that should be considered when interpreting the data and recommendations from this study. First, the participation rate of the parents in the survey was 14.5%, with 16 of the total 110 parents participating. Care was taken to encourage the parents to participate, and with more time, additional follow up reminders would have been sent to remind and explain the importance of obtaining their views. Even though the response rate was somewhat low, the data suggest that the parents that did respond do represent the population group.

Secondly, although obtaining the views of the parents was informative to this study, it would also be desirable to engage the students directly to obtain firsthand responses to the questions to better understand the reasons why students leave the school system and enroll in a cyber school program. The vulnerability of student participation in a research study must be weighed and carefully protected, and, in this case, their opinions could serve as a crosscheck to the opinions of their parents.

Thirdly, when comparing the data on students that left the school system to the data on those that remained with the school system, the sample size of the group that departed was small at only twenty-four. Therefore, the comparison was made by constructing a randomly selected equal size group of twenty-four from the data on the students that stayed enrolled in the school system. With a larger set of data, the ability to drawn additional and stronger conclusions may develop.

Lastly, when conducting the review of literature, it was realized that most of the current research on online learning has occurred in the higher education arena or has focused on the academic performance of students in cyber schools as compared to students in K-12. Limited research has occurred on the specific reasons why students gravitate to cyber schools from rural public school settings, and therefore generalizing should be done with caution.

Financial Implications

The cost of students attending external cyber schools is significant to the school district exceeding $480,000 per year and will continue unless efforts are made to stem the departure of students. During the survey portion of the study, it was discussed the school district was charged tuition for part of a school year for two students that no longer resided in the school district. This matter was reconciled, and the school district recovered a little more than $11,000 that it may otherwise never became aware of without this study. This discovery has led to a process of verifying the physical addresses of the cyber school students to ensure that they still reside at the address listed on the billing invoice.

The cost of creating promotional materials for the KC Cyber Academy to share with parents and students of our school district would be nominal at under $2000. The money needed for this has already been recovered by recruiting two students back to the school system that were previously in an external cyber school. After the mailing of the parental survey forms, one parent reached out, asking for information on our internal program. The material that we had lacked eye appeal but was informative, and along with

talking with the parent was enough for her to decide to enroll her students in the KC Cyber Academy.

Additional money will be needed to be able to expand the course offerings and to provide personal support for our online classes. The expanded course offerings would be scalable and are currently purchased from a third-party vendor on a per-student or per-class basis. Therefore, the school district's financial exposure would be limited to the actual cost of content purchased and only when needed. Increasing the personal support to students using our teachers in this setting would be a valued added expense and come at an additional cost unless instructional time can be scheduled during the regular workday. Realistically, to provide adequate support, some supplemental payment would need to be negotiated with the professional staff association for time worked beyond the contracted day to work with KC Cyber Academy students. I would anticipate that, at minimum, $15,000 be allocated for supplemental payments for content area teachers to offer help and support to students outside of the teacher workday.

Funding for professional development for the teachers will also be needed but could be incorporated into the overall existing professional development budget because the skills needed are now universally important for all teachers in the system to acquire. The cost of expanding the KC Cyber Academy would be estimated to be approximately $17,000 plus an additional $20,000 in online content costs if twenty students enrolled in the program. Assuming the plan and allocation would be approved by the Board of School Directors and twenty external cyber school students participated, the school district would need to possibly spend $57,000 to be able to reduce expenses in cyber tuition by approximately $200,000 for a net savings of over $140,000.

Future Direction and Recommendations

The Karns City Area School District created the KC Cyber Academy several years to help keep students from leaving for an external cyber school placement. The intentions were good, and the online programming expanded to include support for students needing remediation and enrichment opportunities. However, the KC Cyber Academy was never effectively promoted as a viable option to external cyber schools in part because there was a concern from some that too many students would choose the online option over the traditional school day.

There has been very little positive associated with the COVID-19 pandemic, but it has emphasized the need for quality online learning in the K-12 setting. What was unthinkable in February 2020 became a reality in March 2020, with public schools closed in Pennsylvania and across the country. Unable to operate schools in the traditional sense, online learning became the only way to move forward with education. Our school system embraced the challenge and continued with the KC Cyber Academy for students enrolled in it and used Google Classroom as a method to deliver instruction to as many other students remotely as we could with the devices that we had on hand.

The pandemic forced our system to adjust, and we accomplished what would normally have taken years to occur in a matter of months. We undertook immediate planning steps to bolster our ability to offer online content by purchasing additional Chromebooks so that every student would have their own device to use for the 2020-2021 school year. Parents have been surveyed to find out which homes do not have Internet access, and we are exploring options such as hotspots and expanding our building Wi-Fi access to parking lots for drive-up access to download and upload schoolwork in the

future. Probably as important as anything else, the attitudes of the teachers has changed from being somewhat resistant to online learning to one of acceptance.

Teachers now understand that if we do not offer a quality option and experience for our students that meet their needs, students will leave and enroll in external cyber schools. Through open and honest dialogue, they now realize the financial cost to the school system when students leave. The decline in enrollment and the cost has finally been associated directly with the scale of the operation and how it could negatively impact teaching positions if we fail to make needed changes. Some staff have taken the initiative and suggested that the school district discuss a staff run online program.

With the need for change and improvement growing out of the pandemic's closures of schools, an opportunity presents itself to work collaboratively with the teaching staff to build a better online program for our students. A memorandum of understanding will be sought with the Karns City Education Association that will codify the use of our staff to provide online learning even beyond the current pandemic. We can proceed with promoting it as a viable option and use our teaching staff to engage students interactively. Professional development will be offered and be required in the areas of online instruction and teaching techniques to make the experience easier for teachers and consistent for students. All teachers and administrators will engage in dialogue on how to build genuine relationships with students and parents that demonstrate they are valued and establish a sense of connectedness to the school.

Future Studies and Research

This study identified some of the reasons why students leave our school system for and external cyber school and provided information on potential changes that would

help improve our KC Cyber Academy. Additional studies should focus on a more in-depth look into the effect specific types of student absences from school and specific discipline infractions to determine the impact these variables have on the decision parents make regarding their child's education. Although this study did not reveal a definitive profile for the student that is most likely to leave the school system for a cyber school, it confirmed the characteristics that start to describe the student who does. In this study, the characteristics of the student that left the school system pointed to that student being a male in grades 7-9, with an IEP, and who qualifies for a free or reduced lunch.

These traits deserve a closer look to determine why they fit the pattern of a typical cyber student from our school district. A future study could focus on one of these categories to further identify interventions that the school could implement to reduce the likelihood of the student departing. Lastly, a study looking at the connectedness that students have with their teachers and school would be beneficial. It is apparent that most students that left our school system for an external cyber school did so because they became disenfranchised more so than thought the cyber school was better at providing education.

Summary

This action research project helped identify some of the reasons parents remove their children from our school system from the perspective of parents. It revealed potential changes that the school system could make to its KC Cyber Academy to enhance the experience of its students while saving the school district money. The study refuted a misconception that students that left the school system did not do as well in school academically as those that stayed. In fact, prior to leaving the school system, the

students obtained similar grades to other students, they missed a similar number of days of school per year, and they had a similar number of discipline infractions per year as their peers.

The sharing of the results of the study with the administrative and teaching staff is just the beginning of the next step in the process of revamping our online learning program. Providing professional development to the teachers on how to plan, prepare, and teach online classes will be ongoing and prioritized. The professional development offered will support and underpin our current efforts of providing remote learning as a result of the impact of the COVID-19 pandemic. Ultimately, education has fundamentally changed due to the pandemic, and we need to strengthen our online offerings.

Further, collaborating with the teachers to establish a more positive learning environment will lead to students wanting to stay in their home school. Improving the school environment will increase the quality of education provided to students and will decrease the loss of revenue the school district spends on cyber school tuition for students. The changes that can be made in the upcoming school year should be positive for the school system and its students.

References

Ahn, J. (2011). Policy, technology, and practice in cyber charter schools: Framing the issues. *Teachers College Record, 113*(1), 1–26. Retrieved from http://www.tcrecord.org/PrintContent.asp?ContentID=15986

Archambault, L., & Larson, J. (2015). Pioneering the digital age of instruction: Learning from and about K-12 online teachers. *Journal of Online Learning Research, 1*(1), 49-83. Retrieved from https://www.learntechlib.org/primary/p/149852

Barbour, M. (2009). Today's student and virtual schooling: The reality, the challenges, the promise. *Journal of Open, Flexible, and Distance Learning, 13*(1), 5-25. Retrieved from https://www.learntechlib.org/p/148010

Beck, D., Maranto, R., & Lo, W. (2013). Parent involvement and student/parent satisfaction in cyber schools. *Society for Information Technology & Teacher Education International Conference,* (pp. 229-236). New Orleans, LA, United States: Association for the Advancement of Computing in Education (AACE). Retrieved from https://www.learntechlib.org/p/48099

Berends, M. (2015). Sociology and school choice: What we know after two decades of charter schools. *Annual Review of Sociology*, *41*, 159- 180. http://doi.org/10.1146/annurev-soc-073014-112340

Bernard, R., Abrami, P., Borokhovski, E., Wade, C., Tamim, R., Surkes, M., & Bethel, E. (2009). A meta-analysis of three types of interaction treatments in distance education. *Review of Educational Research, 79*(3), 1243-1289. Retrieved from https://www.jstor.org/stable/40469094

Black, E. W. (2009). *An evaluation of familial involvements' influence on student achievement in K–12 virtual schooling*. (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. AAI3367406)

Borup, J., Graham, C., & Davies, R. (2013). The nature of parental interactions in an online charter school. *American Journal of Distance Education, 27*(1), 40-55. doi:10.1080/08923647.2013.754271

Borup, J., Stevens, M., & Hasler-Waters, L. (2015). Parent and student perceptions of parent engagement at a cyber charter high school. *Online Learning, 19*(5), 69-91. Retrieved from http://onlinelearningconsortium.org/read/online-learning-journal

Cavanaugh, C. (2001). The effectiveness of interactive distance education technologies in K-12 learning: A meta-analysis. *International Journal of Educational Telecommunications, 7*(1), 73-88. Retrieved from https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED430547

Cavanaugh, C., Barbour, M., & Clark, T. (2009). Research and practice in K-12 online learning: A review of open access literature. *The International Review of Research in Open and Distributed Learning, 10*(1). Retrieved from http://www.irrodl.org

Cavanaugh, C., Gillan, K., Kromrey, J., Hess, M., & Blomeyer, R. (2004). The effects of distance education on K-12 student outcomes: A meta-analysis. Retrieved from https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED489533

Center for Research on Educational Outcomes. (2015). Online charter school study. Retrieved from https://credo.stanford.edu/sites/g/files/sbiybj6481/f/online_charter_study_final.pdf

Center for Research on Educational Outcomes. (2019). Charter school performance in Pennsylvania. Retrieved from https://credo.stanford.edu/sites/g/files/sbiybj6481/f/2019_pa_state_report_final_06052019.pdf

Cheung, C., & Pomerantz, E. (2011). Parents' involvement in children's learning in the United States and China: Implications for children's academic and emotional adjustment. *Child Development, 82*(3), 932–950. https://doi.org/10.1111/j.14678624.2011.01582.x

Creswell, J. (2003). Research design: Qualitative, quantitative, and mixed methods approaches (2nd ed.). Thousand Oaks, CA: Sage Publications.

Curtis, H. (2013). *A mixed-methods study investigating parental involvement and student success in high school online education.* (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3599425)

Dabbagh, N., & Bannan-Ritland, B. (2005). *Online learning: Concepts, strategies, and application*. Upper Saddle River, NJ: Pearson Education, Inc.

Davis, N., & Roblyer, M. (2005). Preparing teachers for the "Schools that technology built": Evaluation of a program to train teachers for virtual schooling. *Journal of Research on Technology in Education, 37*(4), 399-409. Retrieved from https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=EJ690980

DeJarnett, S. (2013). Keep following the money: Financial accountability and governance of cyber schools. *Urban Lawyer, 45*(4), 915-951. Retrieved from https://www.jstor.org/stable/24392648

Ding, C., & Hall, A. (2007). Gender, ethnicity, and grade differences in perceptions of school experiences among adolescents. *Studies in Educational Evaluation, 33,* 159–174. Retrieved from http://dx.doi.org/10.1016/j.stueduc.2007.04.004

DiPietro, M., Ferdig, R., Black, E., & Preston, M. (2008). Best practices in teaching K-12 online: Lessons learned from Michigan Virtual School teachers. *Journal of Interactive Online Learning*, *7*, 10-35. Retrieved from http://www.ncolr.org/jiol/issues/pdf/7.1.2.pdf

Epstein, J. (2001). Building bridges of home, school, and community: The importance of design. *Journal of Education for Students Placed at Risk*, *6*(1/2), 161-168. https://doi.org/10.1207/S15327671ESPR0601-2_10

Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, *13*(1), 1-22. doi:10.1023/A:1009048817385

Frankenberg, E., Siegel-Hawley, G., & Wang, J. (2011). Choice without equity: Charter school segregation. *Education Policy Analysis Archives*, *19*(1). Retrieved from http://epaa.asu.edu

Gemin, B., Pape, L., Vashaw, L., & Watson, J. (2015). *Keeping pace with K-12 digital learning: An annual review of policy and practice.* (12th ed.). Durango, CO: Evergreen Education Group.

Gill, B., Walsh, L., Wulsin, C., Matulewicz, H., Severn, V., Grau, E., & Kerwin, T. (2015). Inside online charter schools. A report of the national study of online charter schools. *Mathematica Policy Research, Inc*. Retrieved from https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED560967

Gulosino, C., & Miron, G. (2017). Growth and performance of fully online and blended K-12 public schools. *Education Policy Analysis Archives, 25*(123/124), 1–38. https://doi.org/10.14507/epaa.25.2859

Hasler-Waters, L. (2012). Exploring the experiences of learning coaches in a cyber charter school: A qualitative case study. (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3569079)

Hasler-Waters, L., & Leong, P. (2014). Who is teaching? New roles for teachers and parents in cyber charter schools. *Journal of Technology and Teacher Education*, *22*(1), 33-56. Retrieved from http://www.editlib.org/p/112373/

Hasler-Waters, L., Menchaca, M., & Borup, J. (2014). Parental involvement in K-12 online and blended learning. In R.E. Ferdig & K. Kennedy (Eds.), *Handbook of research on K-12 online and blended learning* (pp. 303-323). Pittsburgh, PA: ETC Press.

Haythornthwaite, C., & Bregman, A. (2004). Affordances of persistent conversation: Promoting communities that work. In C. Haythornthwaite, & M. Kazmer (Eds.), *Learning, culture and community in online education: Research and practice* (pp. 129–143). New York, NY: Peter Lang.

Henderson, A., & Mapp, K. (2002). A new wave of evidence: The impact of school,

family, and community connections on student achievement. Southwest Educational Development Laboratory, Austin, TX. (ERIC Document Reproduction Service No. ED474521)

Hendricks, C. (2017). Improving schools through action research a reflective approach (4th ed.). Boston, MA: Pearson Education, Inc.

Hou, H., & Wu, S. (2011). Analyzing the social knowledge construction behavioral patterns of an online synchronous collaborative discussion instructional activity using an instant messaging tool: A case study. *Computers and Education*, *57*, 1459–1468. https://doi:10.1016/j.compedu.2011.02.012

Hoover-Dempsey, K., Walker, J., Sandler, H., Whetsel, D., Green, C., Wilkins, A., & Closson, K. (2005). Why do parents become involved? Research findings and implications, *The Elementary School Journal 106*(2), 105-130. Retrieved from https://doi-org.proxy-calu.klnpa.org/10.1086/499194

Hrastinski, S. (2008). Asynchronous and synchronous e-learning. *Educause Quarterly*, *31*(4), 51–55. Retrieved from http://connect.educause.edu/Library/EDUCAUSE+Quarterly/EDUCAUSEQuarterlyMagazine/47674

Huerta, L., Gonzalez, M., & d'Entremont, C. (2006). Cyber and home school charter schools: Adopting new policy to new forms of public schooling. *Peabody Journal of Education*, *8*(1), 103-139. Retrieved from https://www.jstor.org/stable/25594700

International Association for K-12 Online Learning. (2011). National standards for quality online teaching. Retrieved from https://www.inacol.org/wp-content/uploads/2015/02/national-standards-for-quality-online-teaching-v2.pdf

Jeynes, W. (2007). The relationship between parental involvement and urban secondary school student academic achievement: a meta-analysis. *Urban Education, 42*, 82-110. doi:10.1177/0042085906293818

Jonassen, D., Grabinger, R., & Harris, N. (1991). Analyzing and selecting instructional strategies and tactics. *Performance Improvement Quarterly*, *4*(2), 77-97. doi:10.1111/j.1937-8327.1991.tb00505.x

Journell, W. (2013). *Online learning: Strategies for K-12 teachers*. Lanham, MD: Rowan & Littlefield Education.

Journell, W. (2010). Perceptions of e-learning in secondary education: A viable alternative to classroom instruction or a way to bypass engaged learning? *Educational Media International*, *47*, 69–81. Retrieved from https://doi:10.1080/09523981003654985

Journell, W., Beeson, M., Crave, J., Gomez, M., Linton, J., & Taylor, M. (2013). Training teachers for virtual classrooms: A description of an experimental course in online pedagogy. In R. Hartshorne, T. Heafner, & T. Petty (Eds.), *Teacher education programs and online learning tools: Innovations in teacher preparation* (pp. 120–143). Hershey, PA: IGI Global.

Julian, T. (2012). Work-life earnings by field of degree and occupation for people with a bachelor's degree: 2011. *American Community Survey Briefs*. ACSBR/11-04. US Census Bureau. Retrieved from http://purl.fdlp.gov/GPO/gpo73009

Khan, B. (1997). Web-based instruction (WBI): What is it and why is it? In B. Khan (Ed.), *Web-based instruction* (pp. 41-46). Englewood Cliffs, NJ: Educational Technology Publications, Inc.

Killion, J. (2000). Online staff development: Promise or peril?. *NASSP Bulletin, 84*(618), 38-46. Retrieved from https://doi.org/10.1177/019263650008461806

Liu, F., Black, E., Algina, J., Cavanaugh, C., & Dawson, K. (2010). The validation of one parental involvement measurement in virtual schooling. *Journal of Interactive Online Learning, 9,* 105–132. Retrieved from http://www.ncolr.org/jiol

Mabrito, M. (2006). A study of synchronous versus asynchronous collaboration in an online business writing class. *American Journal of Distance Education, 20*, 93–107. doi:10.1207/s15389286ajde2002_4

Mann, B., & Baker, D. (2019) Cyber charter schools and growing resource inequality among public districts: Geospatial patterns and consequences of a statewide choice policy in Pennsylvania, 2002–2014, *American Journal of Education, 125*, (2), 147-171. doi:10.1086/701249

Mann, B., Kotok, S., Frankenberg, E., Fuller, E., & Schafft, K. (2016). Choice, cyber charter schools, and the educational marketplace for rural school districts. *The Rural Educator, 37*(3). doi:10.35608/ruraled.v37i3.248

Mertler, C. A. (2019). *Introduction to educational research* (2nd ed.). Los Angeles, CA: SAGE Publications, Inc.

Miron, G., Horvitz, B., & Gulosino, C. (2013). Full-time virtual schools: Enrollment, student characteristics, and performance. *Virtual Schools in the US*, 22-36. Retrieved from https://nepc.colorado.edu/publication/virtual-schools-annual-2013

Molnar, A., Huerta, L., Barbour, M., Miron, G., Rankin-Shafer, S., & Gulosino, C. (2015). Virtual schools in the US 2015: Politics, performance, policy, and research evidence. National Alliance for Public Charter Schools. 2019. “Charter School Data Dashboard.” Retrieved from https://data.publiccharters.org/

Murphy, E., Rodríguez-Manzanares, M., & Barbour, M. (2011). Asynchronous and synchronous online teaching: Perspectives of Canadian high school distance education teachers. *British Journal of Educational Technology, 42*(4), 583-591. doi:10.1111/j.1467-8535.2010.01112.x

Pazhouh, R., Lake, R., & Miller, L. (2015). The policy framework for online charter schools. Center on reinventing public education. Retrieved from https://eric.ed.gov/?id=ED560949

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

Pennsylvania Charter School Law. Act 22 of 1997 § P.L.30, NO.14 (1949). Retrieved from https://www.legis.state.pa.us/cfdocs/legis/LI/uconsCheck.cfm?txtType =HTM&yr =1949&sessInd=0&smthLwInd=0&act=014&chpt=17A

Research for Action. (2013). Issue brief: An analysis of Pennsylvania's cyber charter schools. Retrieved from http://www.researchforaction.org/wp-content/uploads/2013/12/RFA-Issue-Brief-on-Cyber-Charters-Nov-2013.pdf.

Tamim, R., Bernard, R., Borokhovski, E., Abrami, P., & Schmid, R. (2011). What forty years of research says about the impact of technology on learning: A second-order meta-analysis and validation study. *Review of Educational Research, 81*(1), 4-28. Retrieved from https://www.jstor.org/stable/23014286

The Office of Pennsylvania Governor. (2019, November 15). *Gov. Wolf's charter school accountability plan saves nearly $280 million* [Press release]. Retrieved from https://www.governor.pa.gov/newsroom/gov-wolfs-charter-school-accountability-plan-saves-nearly-280-million/

Woodworth, J., Raymond, M., Chirbas, K., Gonzalez, M., Negassi, Y., Snow, W., & Donge, C. (2015). *Online charter school study 2015.* Center for Research on Educational Outcomes *(CREDO).* Stanford, CA: CREDO.

Appendix A

Informed Consent Form

TITLE OF STUDY

How can the Karns City Cyber Academy be Improved?

Informed Consent Letter

Dear Parent of a current or former Cyber School Student,

I am writing to you today as the Superintendent of the Karns City Area School District and as a doctoral student at the California University of Pennsylvania. I want to invite you to participate in a voluntary study that will help me better understand the reasons that you chose to enroll your child in a cyber school. Your responses will be used to help make improvements to our educational programming.

Purpose of Study and Contact Information

The purpose of this research project is to identify the key reasons why parents choose to enroll their child in an external cyber school program as opposed to enrolling them in the school district's own cyber academy program. The project will be conducted by me and has been approved by the California University of Pennsylvania Institutional Review Board. This approval is effective 10/15/19 and expires on 08/15/20. If you have any questions, I may be contacted at 724-756-2030 x 1021 or by emailing me at the following email address: RIT2335@calu.edu I will conduct this study under the direction of Dr. Peter Aiken, my faculty advisor at California University of Pennsylvania. His email address is Aiken@calu.edu.

Participation is Voluntary

Your participation in this research study is voluntary, and there is minimal risk from your participation. If you decide to participate in this research survey, you may withdraw at any time. If you choose not to participate in this study or if you withdraw from participating at any time, you will not be penalized. If you participate in the survey and submit your responses, you are providing your consent for your data to be used in this project. No monetary value is provided for participation in the study.

What will you be asked to do?

The procedure involves completing an online survey that will take approximately 5-7 minutes. Your responses will be confidential, and I will not collect identifying information such as your name, email address, or IP address. The survey questions will be about your general background, your child's interests, your knowledge of online learning options, and the reasons why you made the choice that you made for your child's

learning. You will have the opportunity to provide comments during the survey if you wish.

What happens to the data and who has access to it?

All data is stored in a password protected electronic format. The survey will not contain information that will personally identify you. The results of this study will be used for scholarly purposes that will lead to improvements in our school district's educational programming and shared with California University of Pennsylvania representatives. All online survey responses will be deleted after the study is completed.

Steps to complete the Parent Cyber School Survey

1. Please go to the school district's webpage which is www.kcasdk12.org
2. Hover on the "For Parents" tab
3. Click on the "Parent Cyber School Survey" tab
4. Click on the word "Survey" to open the survey
5. The password for the survey is 2020

Your opinions truly matter! Thank you for your consideration in participating in this study. If you completed this survey by February 7, 2020, it would be most helpful.

Respectfully,

Eric Ritzert

Consent will be accepted & signed online when you open survey

I have read this consent form, and I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason. I also understand that returning the surveys associated with this study is an indication of consent to use the data collected from the surveys.

Institutional Review Board Approval

This action research project has been approved by the California University of Pennsylvania Institutional Review Board, effective **8/15/19** and expiring **8/14/20**.

Participant's signature _____ Date _____

Appendix B

Online Parent Survey Instrument

Parent Cyber School Survey

If you have more than one child, please answer these questions about your oldest child that is enrolled in a cyber school.

* Required

Password *

Your answer

Have you read and understand the informed consent notice regarding your participation in this research study?*

- ○ Yes

What is your child's gender?*

- ○ Female
- ○ Male
- ○ Non-binary
- ○ Prefer not to say

What is your highest earned educational level?*

- ○ GED
- ○ High School diploma
- ○ Associates degree or Trade certification
- ○ Bachelor's degree
- ○ Master degree or above
- ○ None of the above

What grade level did your child first enroll in a cyber school?*

Your answer

What grade level did your child most recently complete in cyber school?*

Your answer

After high school graduation, I would like to see my child pursue _____. (mark all that apply)*

- ☐ College
- ☐ Job rather than further education
- ☐ Military
- ☐ Trade School

My child last attended which school within the Karns City Area School District (KCASD).*

- ○ Karns City High School
- ○ Chicora Elementary School
- ○ Sugarcreek Elementary School
- ○ Not Applicable

My child felt safe attending his/her KCASD school.

	1	2	3	4	5	
Lowest	○	○	○	○	○	Highest

My child had friends while attending his/her KCASD school.

	1	2	3	4	5	
Lowest	○	○	○	○	○	Highest

My child enjoyed school while attending his/her KCASD school.

	1	2	3	4	5	
Lowest	○	○	○	○	○	Highest

My child enjoys his/her current school they are attending.

	1	2	3	4	5	
Lowest	○	○	○	○	○	Highest

My child experienced academic problems with _____ while attending his/her KCASD school. (Check all that apply)

- [ ] Homework Assignments
- [ ] Quizzes & Tests
- [ ] Projects
- [ ] Classwork
- [ ] None of the above

If your child experienced academic problems while attending his/her KCASD school and you wish to provide comments, please do so.

Your answer

My child experienced problems with _____ while attending his/her KCASD school. (Check all that apply)*

- [ ] Classmates
- [ ] Teachers
- [ ] Administrators
- [ ] Bus Drivers
- [ ] None of the above

If your child experienced problems with other individuals while attending his/her KCASD school and you wish to provide comments, please do so.

Your answer

Please share the reasons why you choose/chose to enroll your child in a cyber school?

Your answer

Were you aware that the KCASD offers an online program called the KC? Academy to students as an alternative to enrolling in a cyber school?*

- ○ Yes
- ○ No

How important is it to you that your child earns a high school diploma from a public school such as the KCASD?*

	1	2	3	4	5	
Lowest	○	○	○	○	○	Highest

How important is it to you for your child to have the opportunity to participate In extra-curricular activities?*

	1	2	3	4	5	
Lowest	○	○	○	○	○	Highest

How important is it to you for your child to have the opportunity to attend a vocational-technical school such as the Butler County Area Vo-Tech?*

	1	2	3	4	5	
Lowest	○	○	○	○	○	Highest

How important is it to you for your child to have the opportunity to take a Drivers Education program that enables him/her to earn a drivers license from the onsite instructor teaching the program?*

	1	2	3	4	5	
Lowest	○	○	○	○	○	Highest

How important is it to you for your child to have the opportunity to have a flexible schedule to complete their educational requirements?*

	1	2	3	4	5	
Lowest	○	○	○	○	○	Highest

If you were to want information on the KC Cyber Academy, would you prefer to obtain it from _____? (Check all that apply)*

- [ ] KCASD website
- [ ] email
- [ ] U.S. mail
- [ ] Phone call

Submit

Appendix C

Internal Review Board Approval

Institutional Review Board
California University of Pennsylvania
Morgan Hall, 310
250 University Avenue
California, PA 15419
instreviewboard@calu.edu
Melissa Sovak, Ph.D.

Dear Eric,

Please consider this email as official notification that your proposal titled "How can the KC Cyber Academy be improved (Proposal #18-083) has been approved by the California University of Pennsylvania Institutional Review Board as amended.

The effective date of approval is 8/15/19 and the expiration date is 8/14/20. These dates must appear on the consent form.

Please note that Federal Policy requires that you notify the IRB promptly regarding any of the following:

(1) Any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented)
(2) Any events that affect the safety or well-being of subjects
(3) Any modifications of your study or other responses that are necessitated by any events reported in (2).
(4) To continue your research beyond the approval expiration date of 8/14/20 you must file additional information to be considered for continuing review. Please contact instreviewboard@calu.edu

Please notify the Board when data collection is complete.

Regards,
Melissa Sovak, PhD.
Chair, Institutional Review Board

Appendix D

Student Data Anonymity Verification Letter

Karns City Area School District

KARNS CITY JUNIOR-SENIOR HIGH SCHOOL
1446 KITTANNING PIKE
KARNS CITY, PA, 16041
(724) 756-2030
FAX: (724) 756-1060

MR. MICHAEL S. STIMAC
PRINCIPAL, GRADES 7-9
MRS. BRENDA R. KNOLL
PRINCIPAL, GRADES 10-12

August 12, 2019

To Whom It May Concern:

I am writing to attest that I will instruct a secondary guidance counselor to remove any personally identifiable data on students prior to the data being provided to Eric Ritzert for use in his study. The information will be extracted from the Karns City Area School District student databases and provided to him absent of any data that could reveal the identity of the student or his/her family.

If you should have any questions, please feel free to contact me.

Sincerely,

Brenda R. Knoll

Brenda Knoll

Principal, Grades 10-12

Karns City Area High School

Preparing our students for a future of endless possibilities