

K-12 Student Perceptions of Learning through Cyber School

Lee James Lesisko

(Corresponding Author)

Center for Education, Widener University

Pleasant Valley School System, District Office

2233 Rt. 115, Suite 100, Brodheadsville, PA 18322, USA

E-mail: lesisko.lee@pvbears.org

Abdulwahab Sraiheen

College of Business, Kutztown University of Pennsylvania

Kutztown, PA 19530, USA

E-mail: sraiheen@kutztown.edu

(Received: 29-1-16 / Accepted: 24-3-16)

Abstract

Due to the nature of 21st Century technologies now available and the popularity of school choice, both elementary and secondary school-age children may consider online learning at some point in their academic career. The purpose of this study is to answer the following research question: What are the perceptions and expectations of students attending the Granite Rock Cyber Academy? The results of the survey were presented in 28 tables. The top three reasons why students enroll in cyber school are flexibility of scheduling, health-related problems, and issues with other students. The most liked features about cyber schooling include flexibility and the absence of distractions. The most disliked facet is the amount of work students have to complete. Analysis revealed that male and female students were alike in most aspects of the survey. However, females spent statistically significant more time on average completing schoolwork than male students.

Keywords: Cyber School, Distance Education, School Choice, Cyber Learning, Online Learning.

Introduction

Over the past few years the cyber school movement has grown substantially due to school choice policies and the power of technology. Cyber schooling has certainly changed the way education is delivered. Today, school-age children have a flexible schedule and can engage in anytime, anywhere learning instead of attending the traditional, regimented brick-and-mortar classroom. With the availability of the Internet, integration of a user-friendly learning management system, advances in instructional design, and the push for school choice, students now have more learning options and opportunities than ever before.

With the utilization of a cyber model of learning, students learn at their own pace and proceed through the online curriculum while receiving individualized attention and support. However, cyber school is not for everyone, and it brings along with it a unique set of new challenges. Nevertheless, the cyber school model requires students to stay on top of their coursework, be self-motivated and remain in continuous communication with their online teachers, especially when issues arise. Learning online also requires increased parent/guardian influence if students are to be accountable and make progress with academic achievement. This poses a significant problem, especially if the parent/guardian chooses not to be involved and/or the student does not want the added oversight of the parent/guardian. In order to be successful in a cyber school learning environment, students, as well as parents, need to be actively engaged and involved in the learning process.

School System and Cyber Academy Background

The school system utilized in this study will be referred to as the Granite Rock School District because the Superintendent of Schools does not want the school system to be identified. Granite Rock enrolls about 5,000 students in grades Kindergarten through 12 in one elementary, one intermediate and two secondary facilities. The communities included in the school district cover almost 120 square miles, and 195 school bus routes transport children each day. This institution is rural, and the community is dominated by farming, retail, recreation, and light manufacturing businesses. The children are primarily Anglo-white with only 18% of the population of students being English Language Learners or ethnic minorities including African-American and Hispanic/Latino.

Granite Rock utilizes the services of an outside educational services partner to deliver the cyber program for the school system. The program is a unique cyber solution consisting of software, hardware, academic, and technical supports, in order to deliver an empowering and engaging online opportunity for children and youth.

Literature Review

The Internet with its versatility offers exciting opportunities for students choosing cyber learning as an alternative to the traditional schooling method. The Internet is a widely-distributed platform for the opportunity to share and integrate text, sound, pictures, video, and multimedia content (Shelly, Napier & Rivers, 2010). The Internet has opened the door to cyber learning. In their book, Simonson, Smaldino, Albright, and Zvacek (2009) determined that a separation of the student and the teacher is a fundamental definition of cyber learning, also called distance learning, distance education, or online learning. Draves (2000) postulated that the information superhighway represents the biggest technological aid in helping students to learn in over 500 years. Because of the Internet, students will learn more while working at their own speed, time and manner, and when online learning is coupled with high quality, interactive and facilitative learning, it easily outperforms the traditional classroom delivery system. According to Ahn (2011), the use of microcomputer technology is a necessary part of distance learning, and the online teacher is a vital mentor, consultant, and conduit of education and information between the school and student.

Simonson, Smaldino, Albright, and Zvacek (2009) averred that research on the effectiveness of distance education clearly shows that students who participate in online learning do not learn any worse or better than those students in a traditional classroom setting. The authors explained that successful online students tend to be abstract learners who are intrinsically motivated and have focus to complete schoolwork. Simonson, Smaldino, Albright and Zvacek further alluded to the importance of building collaboration and group interaction, which is more important than focusing on independent participation. According to Ahn (2011) some cyber schools are able to offer the same educational quality as the traditional brick-and-mortar schools but can serve individuals who require a more flexible schedule. Furthermore, Shelly, Gunter, and Gunter (2012) reported that during online learning, students will complete assignments, engage with teachers/peers and check grades. Online learning encompasses everything a student will encounter in a traditional classroom except there are no desks or

walls. Although cyber schools continue to expand, Ahn indicated that there is very little scholarly research on how educational policy can best regulate and govern cyber schools.

Draves (2000) explained that learning through cyber school is quite different than the traditional classroom method. Learning online involves a different set of expectations, skills and behavior. Draves also proclaimed that online students must initiate learning in order for the process to work. A cyber student must be self-directed, be willing and able to read the material, follow directions, and must define how learning will take place. Cyber students must create a daily schedule for completing schoolwork and stick to it. Brown, Sheppard, Stevens, Boone and Gill (2000) disclosed that in order for cyber students to be successful, they must possess academic abilities, be responsible learners, and have self-discipline in order to stay on task to complete the coursework independently.

A comparative case study analysis conducted by Ahn (2011) found that cyber schools are a needed alternative to traditional schooling. The author investigated a school district-run cyber academy in Minnesota and found that 71% of the students enrolled because of bullying, teen pregnancy, mental health issues, truancy issues, credit deficiencies, social issues, or distractions. The author also noted that students who have school phobia, anxiety and depression are not good candidates for online learning but enroll because this model of schooling is convenient.

Ahn (2011) explained that a school district-run cyber academy in Nevada had a significant portion of its students enrolled comprised of actors, models, and competitive athletes all with unique training schedules. Other factors for enrolling include: flexibility of scheduling, employment and accelerated pace. Ahn concluded that cyber schooling may not work for children if they are left at home alone during the day completing assignments while parents are working. Student engagement can be problematic because students are learning unsupervised. Additional factors for why cyber learning may not work include: lack of motivation, shortage of focus, inability to search for and utilize online resources, and problems with technology.

Simonson et al. (2009) determined that children have many responsibilities as cyber learners. In order to have a positive experience, cyber students must understand the nuances of the various resources available to them while learning online such as how to get help, how to network with peers and how to request tutoring services. Cyber kids must also learn to balance personal life with online learning responsibilities. The authors further pointed out that completing and uploading assignments in a timely manner is crucial to the success of any online learner. Failure to submit schoolwork on time will result in a delay of receiving grades and critical feedback.

Wicks (2010) indicated that communication in cyber school brings students together from different backgrounds because gender, ethnicity, and disabilities that often shape the views of individuals conversing in close proximity are not immediately apparent in most forms of online communication. In his book, Draves (2000) reported that the heart and soul of online learning is not the lecture, delivery or video; rather, it's the interaction between the participants and teacher. Simonson et al. (2009) discussed the importance of communication and concluded that it requires an active audience, especially when learning online. Wicks (2010) insisted that quality online education requires extensive teacher-student communication and is the most salient factor of success in a cyber school environment. The author further explained that communication must happen regularly and frequently in order for students to be successful. The advantages of continuous communication include increased comfort level and better understanding of content. The drawbacks of online communication include impersonal dialogue and the tone may be misinterpreted.

According to Wicks (2010), assessment and grading in cyber school is just as important as it is in brick-and-mortar. During course matriculation, students will encounter a variety of quizzes, exams, assignments, projects, essays and the like, which online teachers will use to

determine the progress of the learner. Furthermore, the author reinforced the notion that cyber students must take the required state assessments.

Socialization in cyber school is in the crosshairs of critics. Wicks (2010) explained that social interaction in cyber school occurs while learning through a variety of communication mechanisms such as peer collaboration, threaded discussions, chat rooms, blogs, wikis, sharing of documents and journaling. The author suggested that these types of communications mirror that of the modern workplace and are preparing 21st Century learners for the workforce.

Shelly, Gunter and Gunter (2012) reported that an online learning environment is convenient, flexible and accessible anywhere an Internet connection is available. Wicks (2010) stated that cyber programs must provide appropriate support for academics as well as timely, efficient and quick technical support services when needed. Technical support services include accessing the learning management system, hardware troubleshooting, software updates and technical glitches. Academic support will include issues like course content, grading issues, tutoring and counseling services. Cyber programs also provide an orientation program for parents and students to guide first-time individuals through the basics and navigation of the learning management system.

Cyber school programs must follow state and federal laws regarding students with disabilities. According to Carnahan and Fulton (2013), there is very little research available surrounding students with special needs and online learning in K-12 education. The research that is available on cyber schooling focuses on policies rather than outcomes (Cavanaugh, Barbour & Clark, 2009). The authors bring forth the point that online learning can be difficult for students without disabilities let alone students with learning disabilities. The point of inclusion is to integrate students with disabilities into the general education classroom. However, cyber school may not provide the same level of interaction and support opportunities as found in the traditional classroom. Thus, distance learning may not be appropriate or the best fit for students with certain learning profiles. However, a study by Beck, Maranto and Juo Lo (2013) found that cyber learning does match the needs of some individuals with special needs and were considerably more satisfied with the cyber program than students without a learning disability.

Methodology

Data for this study were gathered from an online questionnaire sent to all Granite Rock cyber school participants during June of 2014. The Granite Rock Cyber Academy provided the names of the children who were enrolled as full-time students within the program at that time. The participants ranged from age 11 through 19 years and included grades five through 12. The questionnaire was disseminated three times. First, since each student was provided an electronic mail account when enrolled into the academy, the survey was sent out on June 3rd via email and 43 questionnaires were returned in usable format. Second, on June 4th the cyber school homeroom teacher requested those students who did not complete the survey to do so prior to logging out for the day and an additional 31 surveys were returned. Third, between June 6 and 9 as school concluded for the year and cyber resources were being returned, those who did not submit a completed survey were asked to fill out a hard copy version and an additional 18 surveys were completed. During the next few weeks, these surveys were entered into the online survey system. As noted by Rea and Parker (1992), surveys are a widely-used research method because they are perceived as a reflection of attitudes, preferences and opinions.

The questionnaire for this study was developed based on a limited amount of literature available on cyber schooling and was specifically created for this quantitative investigation. A preliminary instrument was developed during the summer of 2013. This process was accomplished in order to determine if the initial questions were clearly understood and to gain relevant feedback regarding its content. Gail, Borg, and Gail (1996) explained that a pilot questionnaire should be conducted prior to distributing the final survey instrument. Six high

school-aged cyber students were randomly selected and agreed to participate in a one-on-one interview and completed the survey orally. The relevant feedback allowed the researchers to develop a strategy for the statistical analysis utilized within this research project. Isaac and Michael (1981) reported that questionnaires must be carefully field tested in order to eliminate ambiguous or biased items.

The final survey document consisted of 29 questions of a varied format including identification of the most current choice from the selection provided as well as opened-ended questions. Of the 130 students surveyed, 92 participants returned the questionnaire in usable format representing a 70.8% participation rate. Jackson (2012) reported that a high response rate is important in order to maintain a representative sample and that online and traditional mail surveys tend to yield a 10% to 20% response rate. No additional attempt was made to follow-up with non-responders.

Results

As shown in Table 1, there were 92 students from grades five through 12 who participated in this research endeavor with 41.3% being juniors and seniors. The results in Table 2 indicate that females account for 64.1% of the sample. In addition, 34.7% of the learners have an Individualized Education Plan (IEP) and more than half or 21.7% of that category were female students.

Table 1: Grade

Grade	N	%
5	1	1.1
6	6	6.5
7	12	13.0
8	13	14.1
9	9	9.8
10	13	14.1
11	16	17.4
12	22	23.9
Total	92	100.0

Table 2: Participants distribution by gender and IEP

Gender	No IEP		IEP		Total	
	N	%	N	%	N	%
Male	21	22.8	12	13.0	33	35.9
Female	39	42.4	20	21.7	59	64.1
Total	60	65.2	32	34.7	92	100.0

In Table 3, 68.9% of the students surveyed reported spending between two to four hours a day on schoolwork. The number of classes assigned by the school guidance counselor was not part of this research investigation. In Table 4, a student spent on average 3.96 hours per day with a large standard deviation (1.73 hours). Female students averaged 0.71 hours more per day than male students. The mean difference between female mean hours and male mean hours was statistically significant different from zero with p-value 0.032. This means that female students spend more time on schoolwork per day than male counterparts. There was no significant difference for those students with or without an IEP.

Table 3: About how much time during the day do you spend on schoolwork?

Time (hours per day)	N	%
1	1	1.1
2	29	32.2
4	33	36.7
5	5	5.6
6	18	20.0
7	1	1.1
8	2	2.2
9	1	1.1
Total	90	100.0

Table 4: Means and standard deviations for hours per day spent on schoolwork by gender and IEP

Gender	No IEP		IEP		All	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Male	3.05	1.90	4.36	1.96	3.50	1.68
Female	4.34	1.83	3.95	1.50	4.21	1.72
All	3.88	1.78	4.10	1.66	3.96	1.73

As explained in Table 5, 60.9% of the respondents reported working ahead on assignments, while Table 6 reveals that 66.3% complete schoolwork on weekends.

Table 5: Do you work ahead on assignments?

Work Ahead	N	%
Yes	56	60.9
No	36	39.1
Total	92	100.0

Table 6: Do you complete schoolwork on weekends?

Work Weekends	N	%
Yes	61	66.3
No	31	33.7
Total	92	100.0

Attending office hours in the virtual classroom either in the morning or afternoon is one way cyber learners can receive help from a teacher when needed to complete coursework. However, 61.9% of the students reported never attending office hours as illustrated in Tables 7 and 7.1. The mean hours spent attending office hours was less than an hour per week with no significant difference between male and female students. Also, there was no statistical difference between office hour attendance of students with an IEP and those who do not. In Tables 8 and 8.1, 76.1% of the respondents reported taking two to three breaks from coursework during the day. Students averaged two breaks per day with female students taking more breaks than male students but the difference is not statistically significant.

Table 7: On a given week, how often do you attend office hours?

Attendance	N	%
1	15	16.3
2	16	17.4
3	1	1.1
4 or more	3	3.3
Never (0)	57	61.9
Total	92	100.0

Table 8: On average, how many breaks from schoolwork do you take during the day?

Breaks	N	%
1	15	17.0
2	33	37.5
3	34	38.6
4	1	1.1
None (0)	5	5.7
Total	88	100.0

Table 7.1: Means and standard deviations for hours spent per week attending office hours by gender and IEP

Gender	No IEP		IEP		All	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Male	0.48	1.08	0.50	0.67	0.48	0.94
Female	0.69	1.10	0.95	0.94	0.78	1.05
All	0.62	1.09	0.78	0.87	0.67	1.02

Table 8.1: Means and standard deviations for number of breaks from schoolwork by gender and IEP

Gender	No IEP		IEP		All	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Male	1.90	0.91	1.92	1.00	1.91	0.93
Female	2.11	0.89	2.50	0.83	2.25	0.88
All	2.04	0.89	2.28	0.92	2.13	0.91

The top four activities students do when taking breaks include: watch television (1), eat lunch/snack (2), exercise (3), and play video games (3). A breakdown of all activities can be found in Table 9.

Table 9: When you take breaks from schoolwork, what do you do?

Activity	N	%
Childcare/babysit	3	3.3
Chores/clean	5	5.6
Eat lunch/snack	16	17.8
Exercise	12	13.3
Hobby	3	3.3
Listen to music	3	3.3
Play games/toys	2	2.2
Play video games	12	13.3
Read	8	8.9
Relax	3	3.3
Watch television	19	21.1
Employment	4	4.4
Total	90	100.0

As shown in Table 10, 44.6% of the survey takers upload assignments to be graded as they are completed and almost half, 45.7% identified the afternoon hours as the best time to complete schoolwork as explained in Table 11.

Table 10: On a given week, how often do you submit assignments?

Submission	N	%
1-2 times	30	32.6
3-4 times	11	12.0
5 or more	10	10.9
As completed	41	44.6
Total	92	100.0

Table 11: What time of day works best for you when completing schoolwork?

Time of Day	N	%
Morning	27	29.3
Afternoon	42	45.7
Evening	23	25.0
Total	92	100.0

In Table 12, only 2.2% of the students surveyed use the webcam when communicating with teachers and 14.1% use the online tutoring program, tutor.com, for assistance with coursework as illustrated in Table 13.

Table 12: Do you use the webcam when communicating with teachers?

Webcam	N	%
Yes	2	2.2
No	90	97.8
Total	92	100.0

Table 13: Do you use tutor.com, a tutorial program offered through cyber school?

Tutor.com	N	%
Yes	13	14.1
No	79	85.9
Total	92	100.0

In addition to communicating with online teachers during the school day, students have the ability to attend face-to-face afterschool tutoring sessions in language arts and mathematics at both the high and middle schools. As shown in Table 14, only 7.6% of students take advantage of this opportunity. As far as parental oversight, 52.1% of parents checkup on the progress of their cyber learner from one to four times during the week as indicated in Table 15. This research project did not explore additional parental interventions.

Table 14: Do you participate in either mathematics or language arts tutoring laboratories after school hours?

Tutoring	N	%
Yes	7	7.6
No	85	92.4
Total	92	100.0

Table 15: On a given week, how much does a parent or guardian checkup on your school progress?

Check (times)	N	%
1-2	27	29.3
3-4	21	22.8
5 or more	30	32.6
Not at all (0)	14	15.2
Total	92	100.0

Students were asked to report the course that gives them the most difficulty. In Table 16, the learners explained that mathematics was the most problematic followed by history, English and science, respectively.

Table 16: What course do you find most difficult?

Most Difficult	N	%
Math	70	76.1
History	12	13.0
Science	3	3.3
English	7	7.6
Total	92	100.0

As a follow-up to the most difficult course in Table 16, students were asked in question 17 to elaborate on what can be done to help alleviate the difficulty. Although 14% of the survey takers would like to have less coursework, 28.1% would like to have course concepts better explained. Almost half or 40.4% of the students did not know of a solution that would eliminate or reduce any difficulties as explained in Table 17.

Table 17: For the course that is causing you the most difficulty, what can we do to help you?

Help	N	%
Additional live instruction/more lecture	10	17.5
Better explain the concepts	16	28.1
Don't know	23	40.4
Less coursework	8	14.0
Total	57	100.0

In Table 18, students reported that science (35.9%) and English (34.8%) were the easiest courses to complete in cyber school.

Table 18: What subject do you find the easiest?

Easiest Subject	N	%
Math	5	5.4
History	22	23.9
Science	33	35.9
English	32	34.8
Total	92	100.0

In question 19 of the survey, students were asked why cyber school was appealing to them and 28.3% indicated flexibility of scheduling as the number one factor. Health issues came in second at 21.7%, and issues with other students (20.7%) round out the top three, respectively. The entire list can be found in Table 19.

Table 19: Why did you decide on cyber school?

Decision	N	%
Do not like school	9	9.8
Family issues	11	12.0
Flexibility of scheduling	26	28.3
Focus problems	3	3.3
Health issues	20	21.7
Student issues	19	20.7
Personal goal	4	4.3
Total	92	100.0

Of the students surveyed, 29.4% explained that science was their favorite subject in cyber school followed by English at 23.5% and finally history at 20%. A complete listing can be found in Table 20.

Table 20: What is your favorite subject?

Favorite Subject	N	%
Accounting	1	1.2
Biology	3	3.5
Ecology	2	2.4
English	20	23.5
Geometry	1	1.2
German	1	1.2

History	17	20.0
Law (business)	1	1.2
Math	5	5.9
Parenting	1	1.2
Science	25	29.4
Undecided	8	9.4
Total	85	100.0

In question 21, survey takers were asked to identify what they disliked most about cyber school. Table 21 shows that 26.8% of the students said the amount of coursework provided during the week was their greatest dislike. However, it must be noted that 23.2% proclaimed that they had no dislikes about learning online.

Table 21: What do you dislike most about cyber school?

Dislike	N	%
Amount of work given	22	26.8
School process/procedures	11	13.4
Lack of motivation	12	14.6
Nothing – no dislikes	19	23.2
Socialization	11	13.4
Technology problems	7	8.5
Total	82	100.0

Survey respondents were asked in question 22 to identify what they liked best about cyber school. In Table 22, 68.2% indicated that flexibility of time was the number one factor.

Table 22: What do you like best about cyber school?

Like Best	N	%
Flexibility of time	58	68.2
Less distractions, pressure and stress	24	28.3
Nothing	3	3.5
Total	85	100.0

In Table 23, 42.4% of the students reported that socializing with friends happens 6 hours or more throughout the week. Moreover, Table 23.1 summarizes student socialization by gender and IEP. A student on average spends over three and one half hours socializing with male students averaging close to three hours and forty-five minutes. The mean difference of hours socializing was not statistically significant for both gender and IEP.

Table 23: About how often do you socialize with friends during the week?

Socialization (hours)	N	%
0	14	15.2
1	7	7.6
2-3	17	18.5
4-5	15	16.3
6 or more	39	42.4
Total	92	100.0

Table 23.1: Means and standard deviations of hours per week socializing by gender and IEP

Gender	No IEP		IEP		All	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Male	3.71	1.15	3.75	1.29	3.73	1.18
Female	3.36	1.14	2.90	1.12	3.20	1.14
All	3.48	1.14	3.22	1.24	3.39	1.18

In survey question 24, students were asked if they participated in sports at the school district while enrolled in cyber school. Table 24 reports that 13% do participate. Respondents were also asked in question 25 if they are involved in sports outside the school district and 39.1% said yes as explained in Table 25.

Table 24: Do you participate in sports at the school district?

School Sports	N	%
Yes	12	13.0
No	80	87.0
Total	92	100.0

Table 25: Do you participate in sports outside the school district?

Outside Sports	N	%
Yes	36	39.1
No	56	60.9
Total	92	100.0

Table 26 indicates that 30.4% of the students attend school district-sponsored dances and 15.2% participate in school clubs and activities as illustrated in Table 27.

Table 26: Do you participate in school dances?

School Dances	N	%
Yes	28	30.4
No	64	69.6
Total	92	100.0

Table 27: Do you participate in school clubs/activities?

Clubs/Activities	N	%
Yes	14	15.2
No	78	84.8
Total	92	100.0

In survey question 28, students were asked to provide feedback regarding the cyber program at Granite Rock and how it can be improved. Of the 92 respondents, 70 individuals provided usable information. Just over 14% suggested that less work should be provided. Another 15.7% reported that cyber school is good and that no changes are necessary. Twenty percent

of the respondents explained that they had no recommendation on how to improve the program as reported in Table 28.

Table 28: How can we improve?

Improve	N	%
No change is needed	11	15.7
Don't know	14	20.0
Additional academic offerings	19	27.1
Provide less work	10	14.3
Program enhancements	16	22.9
Total	70	100.0

Question 29 of the questionnaire was open-ended and asked respondents to provide comments and/or reactions to the survey or cyber schooling in general. Of the 92 school-aged children who participated in this research endeavor 31 or 33.7s% submitted additional information regarding their experiences. The data were categorized, summarized and analyzed qualitatively for patterns, differences, and commonalities and three major themes repeatedly emerged: flexibility, responsibility and frustration.

Flexibility

Cyber school provides the learner with a vast array of flexibility. A junior male with an IEP indicated, "I feel like this experience was great, considering the alternative. It taught me to complete work and hand it in within a reasonable timeframe, which is much like that of a professional office in the real world. It also taught me to work independently and not having a teacher holding my hand and spoon-feeding me all the information I need, only to forget it the next day."

A female in grade 12 who spent a minimum of 6 hours a day on schoolwork proclaimed, "I had a goal to graduate early and cyber school helped me along the way. It makes it easier to balance out life; I could work, do school, and even hang out with friends a lot more. I had so much more time, and I loved it."

An eighth grader who finds math the most difficult but enjoys science indicated, "I like cyber school, I learn at my own pace. When in regular school I use to get embarrassed when they would pull me out of class for help. I don't have to worry about that with cyber school."

Responsibility

In addition to flexibility, cyber schooling also develops responsibility in those students who take it seriously. For instance, a female in 11th grade with an IEP stated, "I believe cyber helped me be more independent." A female senior whose parents check up on her cyber progress at least one to two times a week explained, "This was a great experience for me. I graduated with straight A's! It's important to stay organized and not to fall behind."

Frustration

Although cyber school is a great fit for some individuals, it is not a perfect match for all students. An eighth grade female who has never contacted her teachers online for assistance explained, "I have difficulties with math because I am used to being taught in a classroom and it's kind of hard not being taught in person." An 11th grade female documented, "It's not easy to learn from the book." A sophomore reported, "I really appreciate the program, but in many ways it does make things more difficult. I do realize that it is school, and I will gladly do the schoolwork and learn. However, the busywork is extremely angering and frustrating. I am very thankful for the flexibility involved."

Limitations

The Cronbach alpha was employed using the data in this research project and the value was found to be below an acceptable level. The data were recoded and calculated a second time with similar results. The low value may be caused by students not answering all the questions or not being truthful in all of the responses. The age of the participants could have also been a contributing factor. To this end, inferential statistics was not a consideration and no further analysis was completed for this research report.

Conclusion and Recommendations

The student plays a vital role in whether or not he or she will be successful in cyber school. No doubt cyber teachers have no control whether a student logs into homeroom, completes assignments on time, or submits work on schedule. This can be very frustrating for educators alike. However, parents also play a pivotal role in the successfulness of the child. Nevertheless, parents need to be routinely involved, check completed work regularly and ensure assignments are submitted on time. The partnership between the parent and student is critical for successful academic achievement. There must be participation from the student to complete the assignments and the parent to check the work. In Table 15, 15.2% of the respondents indicated having no parental oversight during online learning activities. Ahn (2011) concluded that cyber school may not work for unsupervised learners. The lack of supervision can be problematic for obvious reasons. In order for students to be successful in cyber school the parent must be an active participant.

Because the student is learning at a distance, communication must be continuous, planned and systematic, and involve the parent, student and teacher. In Table 7, students identified how often they attend office hours for help with coursework and 61.9% indicated “never”. Clearly, this is a problem. Cyber students must dialogue with others and learn to ask questions when help is needed. Cyber school may be a palatable alternative to traditional schooling for those individuals who are motivated to communicate and complete the curriculum, however, for those who are not, cyber school simply will not work.

Online learners need to prepare in advance for due dates, assessments, and even the possibility of technology or Internet problems. In Table 5, more than 60% of the students in this research study explained they do work ahead on assignments. Working ahead on academics may also elevate undue stress. As Brown et al. (2000) suggested, cyber students need to be self-motivated. Online learners need to initiate learning and be responsible students in order to be successful in a cyber school environment.

In Table 19, students reported choosing an online environment because of scheduling flexibility, student issues, and health related problems as the top three factors. These findings concur with Ahn (2011). For students who have a hard time focusing or have trouble with drama or stress in a brick-and-mortar environment, cyber school may be a great alternative.

The curriculum utilized at Granted RockCyber Academy closely mirrors that which is taught in the school district’s brick-and-mortar classrooms. In Table 21, more than 26% of the students surveyed indicated they do not like the amount of work given in cyber school. Since the curriculum taught in cyber school mirrors brick-and-mortar, the amount of work students need to complete is the same in both programs. However, cyber learning may require additional time to complete assignments or to clearly understand the concepts because of learning in an online environment. As reported by Simonson et al. (2009), students need to be intrinsically motivated in order for cyber school to be a successful experience.

Acknowledgement

This research was partially financed by a grant from the Pennsylvania Association of School Retirees (PASR) - Monroe Chapter. The goal of this organization is to recognize and support educators who exhibit creativity, initiative, and productivity relevant to the teaching and

learning process and growth of students. The authors thank PASR for their generosity and dedication to K-12 education.

References

- [1] J. Ahn, Policy, technology and practice in cyber charter schools: Framing the issues, *Teachers College Record*, 113(1) (2011), 1-26.
- [2] D.E. Beck, R. Maranto and W.J. Lo, Determinants of student and parent satisfaction at a cyber charter school, *The Journal of Educational Research*, 107(3) (December) (2013), 209-216.
- [3] J. Brown, B. Sheppard, K. Stevens, W. Boone and L. Gill, Effective schooling in a telelearning environment, *Centre for Tele Learning and Rural Education*, (2000), Faculty of Education, Memorial University of Newfoundland, St Johns, Newfoundland, Canada.
- [4] C. Carnahan and L. Fulton, Virtually forgotten: Special education students in cyber schools, *Techtrends*, 57(4) (July/August) (2013), 46-52.
- [5] C. Cavanaugh, M.K. Barbour and T. Clark, Research and practice in k-12 online learning: A review of open access literature, *International Review of Research in Open and Distance Learning*, 10(1) (February) (2009), 1-22.
- [6] W.A. Draves, *Teaching Online*, (2000), River Falls, WI: Learning Resources Network.
- [7] M. Gail, W. Borg and J. Gail, *Educational Research: An Introduction (6th ed.)*, (1996), White Plains, NY: Longman Publishers.
- [8] S. Isaac and W.B. Michael, *Handbook in Research and Evaluation (2nd ed.)*, (1981), San Diego: EdITS Publishers.
- [9] S.L. Jackson, *Research Methods and Statistics: A Critical Thinking Approach (4th ed.)*, (2012), Belmont, CA: Wadsworth Cengage Learning.
- [10] M.L. Rea and A.R. Parker, *Designing and Conducting Survey Research: A Comprehensive Guide*, (1992), San Francisco: Jossey-Bass Incorporated.
- [11] G.B. Shelly, G.A. Gunter and R.E. Gunter, *Teacher's Discovering Computers: Integrating Technology in a Connected World (7th ed.)*, (2012), Boston, MA: Course Technology Cengage Learning.
- [12] G.B. Shelly, H.A. Napier and O. Rivers, *Discovering the Internet: Complete Concepts and Techniques (3rd ed.)*, (2010), Boston, MA: Course Technology Cengage Learning.
- [13] M. Simonson, S. Smaldino, M. Albright and S. Zvacek, *Teaching and Learning at a Distance: Foundations of Distance Education (4th ed.)*, (2009), Boston, MA: Pearson.
- [14] M. Wicks, A national primer on K-12 online learning, International association for online learning, (2010), Retrieved from http://www.inacol.org/wp-content/uploads/2015/02/iNCL_NationalPrimerv22010-web1.pdf.

Cyber School Definition. A student signs up for online courses through an accredited school. A cyber school teacher instructs through a camera connected to the computer and can consult with the student after class via secure email. Completed classes can usually be transferred to a brick-and-mortar college or another online school. The significance of easier access to education is huge to those who wouldn't otherwise be able to continue their education toward a degree. K-12 schools are constantly under budget constraints and must try to do more with less. With Umbrella's cloud-based service, K-12 schools receive a powerful internet security solution that helps them achieve CIPA compliance at a fraction of the total cost of ownership of on-premises solutions. Deployment across an entire school district takes less than 30 minutes and all management is done through the web-based dashboard, reducing the amount of effort needed by IT staff. Protect students and school computers from the latest internet security threats. Internet usage in the classroom continues to grow as security threats increase in sophistication and prevalence. K-12 schools and districts are increasingly moving their data and operations to cloud applications like G Suite. A cyber-flipped course was conducted with the flipped classroom pedagogy by using a wholly online approach for all learning activities in asynchronous and. Engaging online learners: The impact of Web-based learning technology on college student engagement. *Computers & Education*, 54(4), 1222-1232. Article Google Scholar. Chen, Y., Wang, Y., & Chen, N.-S. (2014). Is FLIP enough? Or should we use the FLIPPED model instead? *Computers & Education*, 79, 16-27. School districts have their own distinct challenges as they strive to protect themselves against digital threats. It only makes sense that they have an ISAC of their own. Check out this @remstacenter to learn more about cybersecurity for schools. https://rems.ed.gov/docs/Cybersecurity_K-12_Fact_Sheet_508C.PDF. About This Site. Maintained by EdTech Strategies, LLC as a free, independent service to the K-12 community. Is Your School District on the K-12 Cyber Incident Map? Use the district lookup tool to find out. What Supporters are Saying.