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Fostering Student Success and Engagement in a K-12 Online School

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Although questions exist about the effectiveness of online education, it is a growing part of the pantheon of educational choices available to students in America today. Online education first gained popularity for advanced learners, but at-risk populations are increasingly enrolling in online learning environments. This study explored student achievement in a K-12, full-time, online learning environment and the effect parents had on student success. Themes from semi-structured interviews found that parents of current or former students in a full-time, online school perceived multiple facets of student success in the online environment. Online K-12 schools can provide support to families by communicating, being transparent with tools, and individualizing instruction. Students must be self-motivated, engaged and participating, and accountable for their own learning. Parents should be available to monitor, mentor, and motivate students.

Online K-12 education is one of the fastest growing educational reforms in American education today (Watson, Pape, Murin, Gemin, & Vashaw, 2014). Online learning is often difficult to define as it is not a one-size-fits-all model. One of the difficulties facing educators is defining online learning environments and providing an adequate research base in the professional literature (Barbour, Archambault, & DiPietro, 2013). There are multiple variations in program and delivery, ranging from full-time schools where students earn a diploma, to statewide programs providing single-course enrollments, to a student in a rural area taking an advanced course not offered in his or her district, and more (Cavanaugh, Barbour, & Clark, 2009; Clark, 2001; Rice, 2009; Watson et al., 2014).

In the annual report, *Keeping Pace with K-12 Online Learning*, Watson et al. (2014) stated that full-time enrollment, in schools where students did their coursework completely in an online environment, continues to grow. Enrollment increased in 2013-14 by 6.2% to approximately 315,000 students who go to fully-online schools. Additionally, between 2010 and 2014, three more states opened full-time virtual schools bringing the total number of U.S. states with this educational choice to 30 (Watson et al., 2014).

While the volume of research in the online school population increases, not all research is comparable as not all online programs have the same scope (Barbour, 2009; Clark, 2001; Cavanaugh et al., 2009; Watson et al., 2014). An often-cited study conducted by Clark (2001) defined early online educational programs. A virtual school is defined as, "an educational organization that offers K-12 courses taught through Internet- or Web-based methods" (Clark, 2001, p. 1). Barbour (2009) further defined the differences between virtual schools and what he termed cyber schools. Virtual schools can be state-wide, multiple school district, or province consortia, and provide courses to students on an individual basis, whereas cyber schools are full-time programs in which students participate for their entire school experience (Barbour, 2009). Clark (2001) termed the course providers or consortia Virtual Charter Schools while the full-time schools he termed Local Education Agency-Based Schools.

In addition, subsequent research has been conducted with older participants from post-secondary institutions and is sometimes used by policy makers and/or educators to make generalizations regarding K-12 education (Dixson, 2010; Hung & Zhang, 2008). Neither of those segments of the population learning in online environments encompasses the group of learners who attend school in full-time, K-12 online environments.

Research demonstrates that most students require a caring community to be successful in online learning environments (Archambault et al., 2010; Kerr, 2009; Repetto, Cavanaugh, Wayer, & Feng, 2010). Online education is not fully asynchronous any longer as stakeholder interaction becomes

more mainstream through blended learning and synchronous opportunities for students. Teachers find opportunities for students to participate with each other in the online environment using a variety of strategies including micro blogs such as Twitter™, blogs, peer feedback, and student mentors (Cavanaugh et al., 2009; Dixson, 2010; Nykvist, 2012, Zhao, Lei, Yan, Lai, & Tan, 2009).

Although policy makers and those responsible for school budgets may want to believe this is not the case, students who attend online schools still need teachers (Dawley, Rice, & Hinck, 2010; Zhao et al., 2009). In a survey of 220 school superintendents, assistant superintendents, and curriculum coordinators commissioned by K12, Inc., America's largest provider of curriculum and online education programs, 88% responded that it was extremely important to have teachers available to help students with individual needs when taking online courses (K12, Inc., 2012). In that same survey, 97% of respondents indicated if students were engaged in full-time, online schooling, teachers were extremely important (K12, Inc., 2012). Teachers have the potential to reach out to students in new ways using project-based learning and technology to decrease the distance between teacher and student with YouTube™, flipping the classroom, text messaging, and virtual role playing (Boling & Beatty, 2010; Rosa & Lerman, 2011).

Parents are one group of stakeholders virtually absent from literature related to K-12 online learning environments. Full-time, online schools often partner with parents to oversee and support students who are completing their education in an online environment. Parents play a significant role in educating students who attend school online, and research has been conducted on their roles. Borup, West, Graham, and Davies (2014) described the Adolescent Community Engagement (ACE) framework which addressed the characteristics of adolescents in the online learning environment. Four main constructs constitute the ACE framework: student engagement, teacher engagement, peer engagement, and parent engagement. Borup et al. (2014) suggested that students are more likely to display increased engagement when parents, teachers, and peers become engaged. For the purposes of this research, the larger issue of parental involvement, and how it related to the online environment, was explored.

RESEARCH QUESTIONS AND PURPOSE

The goal of every educator is to find solutions to help students be more successful. With that end in mind, this study focused on one primary question: What factors affected student achievement in a K-12 online school? This study provided a glimpse into perceptions of parents whose children attended or are currently enrolled in a full-time, online school, and may

better generalize to that growing school population. Many policy makers look to technology to help solve the problem of teacher shortages or budget shortfalls. If online education is to be used for this purpose, it needs to be effective and systematic so students may find success. To that end, practitioners in the field must find methods to reach all students who walk through the door.

With a few notable exceptions, research pertaining to parental involvement in K-12 online schools of any configuration is nearly absent from the discussion (Black, 2009; Liu, Black, Algina, Cavanaugh, & Dawson, 2010; Rice, 2009). Most American parents send their children to the local brick and mortar school to be mentored by a teacher at least 180 days each year. Even in the best online environments, teachers are not in front of students daily in the same way they are in a brick and mortar school. Black (2009) maintained that parents who have students in an online school environment have a strong influence on the achievement of their students, but encouraged further study using qualitative methods to determine perceptions and the roles of parents of students in virtual schools.

METHODS

Setting

Online High School (OHS) is a full-time virtual school in the Western United States. Ninety-five percent of the students at Online High School were full-time students, with the other 5% attending OHS part time and also taking classes at a brick and mortar high school part time. OHS was a public, charter high school and demographically similar to the brick and mortar high schools in the state where it existed. Special populations included students with special needs (> 10% of the overall population), free and reduced lunch (> 60%), a growing number of homeless students (< 1%), and at-risk or emancipated youth (> 20%). Populations that were not attracted to OHS were students who are Limited English Proficient or students interested in activities that a virtual school has a difficult time providing, such as team sports or musical performance groups. OHS is a large virtual school with students in every county of the state where it is chartered.

Data Collection

An effective way to determine the perceptions of parents of full-time, online school students is through the use of a series of semi-structured, one-on-one interviews. Semi-structured interviews allowed the researcher to collect data efficiently, giving participants a chance to voice their opinions (Creswell, 2014; Marshall & Rossman, 2016). Prior to collecting data,

interviews were piloted with parents of four students who had experience in online education. Changes were made to the interview protocol based on the pilot study. An electronic notice was sent to current and former parents of OHS students from the public directory information provided by OHS. This notice explained the research project and solicited volunteers for a follow-up phone call.

During the follow-up phone call, parents were asked a series of questions to determine the amount of time students were enrolled at OHS, the approximate grade point average of students, and if the students were on track to graduate while they were enrolled. Based on the conversations in the follow up phone call and lived experiences, parents selected whether or not their child had been successful or unsuccessful in the online school.

After participants were recruited, a schedule was established for the first of two semi-structured interviews, either face-to-face or electronically, using Blackboard Collaborate™ or Audacity™. The first interviews lasted 70-105 minutes each. All participants consented to a follow-up interview which lasted 35-55 minutes.

DATA ANALYSIS

Two interviews were conducted with each of the eight participants for a total of 16 interviews. During the interviews, field notes, observing participants, setting, and nuances were collected to aid in uncovering themes during data analysis (Marshall & Rossman, 2016). Immediately following each interview, observations and initial thoughts were recorded at the conclusion of the field notes to ensure detailed aspects of the experience were documented. Each of the 16 interviews was transcribed by a professional transcriptionist. After the transcription process, interviews were reviewed multiple times to look for common themes (Creswell, Hanson, Plano Clark, & Morales, 2007; Marshall & Rossman, 2016). Reading the transcripts while listening to the audio allowed the researcher to come to a better understanding of the content of the interview as well as the nuance behind the words of participants. After reviewing transcripts, themes were developed using thematic codes as outlined by Creswell et al. (2007) and Marshall and Rossman (2016). Initially, theory generated coding began with codes that were anticipated to emerge based upon a lengthy review of the literature, such as technology issues, parental encouragement, and communication with school. Analytic memos were used to make interpretations while coding took place as new or unexpected themes emerged (Marshall & Rossman, 2016). As transcripts were reviewed, highlighting, underlining, and writing in the margins were personally effective methods of open coding. Educational phrases were often used, such as self-motivated or one-size-fits-all, to capture the thoughts of the participants through in vivo codes (Creswell, 2008). After reading the transcripts multiple times, Microsoft

Excel was utilized to organize the participants' answers and to collapse codes toward themes. The final time transcripts were read, Excel was utilized to tally responses from the participants and manipulate the data to see any similarities and differences in the responses of those who identified their students as successful and those who identified students as unsuccessful in the online environment. In this way, themes were easily identified by question and participant.

Qualitative research methods provided the flexibility to allow themes to be identified from the transcripts. At the end of the research process, a member checking email was sent to each participant sharing with them the emergent themes and including paraphrases and direct quotes to ensure their voices were represented effectively.

RESULTS

Using a group of eight volunteer participants, 16 semi-structured interviews were conducted, transcribed, and coded for themes to determine the perceptions of parents concerning their roles in the achievement of their child. These participants were a varied group with diverse journeys to having their children participate in online education. It is difficult to determine the perceptions of parents concerning their involvement in their students' education without spending some time describing the personal experiences that brought these families to online education. A greater understanding of the participants allowed the reader to establish a paradigm for the parents' roles and the success factors of their students. Pseudonyms were provided to increase anonymity of all participants and their children. Table 1 describes the demographics of the parent participants in the order they were interviewed.

Participant Summary

All of the parent participants attended college at some point in their educational journey. The mean online learning experience of the students in this group of families was 2.13 years. Half of the families qualified for an internet subsidy while their children were enrolled at OHS, which is indicative of having a lower socioeconomic status or qualifying for free or reduced lunch. Within these eight families, 11 students were represented, with varying degrees of success in the online environment. Diversity in experience was evident within some families, as one student was often more successful or participated more fully than a sibling. Of the 11 students, six had negative experiences and the remaining five succeeded as online learners. Two of the students dropped out of OHS as their last school, passed the GED test, and are currently employed. Two left OHS to attend other online schools and three attended other brick and mortar high schools. Three students remained at OHS and graduated with their cohort.

The setting, structure, or culture of the prior school attended by the children influenced many of the parent participants to select OHS for their children. Three participants removed their children from brick and mortar schools, enrolling them in OHS, to help their children deal with social pressures.

Table 1
Participant Synopsis

Parent	Student	Family Status	Education	Free and Reduced Lunch
Hillary	Phoebe	Same-sex relationship	Graduate school	Yes
		2 children		
		1 learned online (F)		
Michael	Gabe	Married	College	Not sure
		4 children		
		1 learned online (M)		
Melody	Matthew	Single parent	Graduate school	Yes
		4 children		
		1 learned online (M)		
Maria	Brock	Married	College	Yes
	Aria	4 children		
		2 learned online (M/F)		
Cari	Christian	Married	College	No
		3 children		
		1 learned online (M)		
Nathaniel	Brian	Married	Graduate school	Yes
		4 children		
		1 learned online (M)		
Elizabeth	Lori	Married	College	No
	Skylar	2 children		
		2 learned online (M/F)		
Shelli	Porter	Married	Some college	No
	Preston	2 children		
		2 learned online (M)		

Perceptions of Online Learning

Phoebe came to online learning in middle school and stayed through her first two years of high school. She was driven, very focused on her studies, and hoped that she would find a culture in an online school conducive to excellence. Her mother shared that the middle school she had attended was a negative environment for Phoebe, and Phoebe "hoped that everybody would be there [OHS] because they were really super focused on academics and wanting to work hard and learn a lot." She found a wide variety of students in the online school. She successfully attended online schools for four years and graduated with honors from her brick and mortar high school.

Michael's son, Gabe, came to OHS to flee from social pressures that caused him to try to take his own life more than once. Originally, Michael's wife responded to the notice for follow up interviews. When the phone call was made to ask if Michael's wife would participate in a longer interview, she responded that it was too painful a time for her to discuss. Later, Michael responded to the email request volunteering to participate. Remembering those high school years when Gabe was suffering, he recalled:

> *I guess he felt like he was picked on at times, and sometimes bullied, although he's a big kid. He's probably six-two or six-three, 230 pounds…He's a pretty sensitive kid, and he's really nice. He's just really a gentle giant type of thing, so I think he did feel intimidated by some of the kids at school.*

Aside from bullying, other students came to OHS because they had debilitating social anxiety. Shelli's son, Porter, resisted going to school for years. After a successful year in kindergarten, Shelli and her husband noticed that Porter was struggling socially in first grade. Their older son, Preston, would wave to his parents, jump out of the car and go on the playground, but Porter would refuse to get out of the car or go into the school building. Shelli noted during one of the interviews:

> *…we literally had to drag him into school every day. After years of going through this with him, I mean, this went on through fifth grade, and after fighting him every day, every step of the way and him, you know, he would pretend that he was sick, and we didn't know if he was sick. I mean, this went on like I said, through fifth grade…It was just an emotional drain on us.*

Porter and his family sought and found some relief with the online educational setting.

Multiple participants noted their students lacked motivation. While there was some communication between school and home in the brick and mortar school, by the time the parents were made aware that students were falling behind it was too late for them to catch up. Maria shared that both of her students would come home telling her they had no homework, and because she could not see exactly what they were doing in class all the time, she did not realize they were struggling. As Maria explained, "They always came home and said they never had homework, and then I would find out midterm that they were failing and they haven't been doing their homework."

Other participants sought the flexibility of the online setting. Three of the participants had sons with disabilities. Cari's son, Christian, and Elizabeth's son, Skylar, had Attention Deficit Hyperactivity Disorder (ADHD). Skylar also was diagnosed with Oppositional Defiant Disorder shortly after starting at OHS. Shelli's son, Porter, took medicine for his social anxiety that flipped his day. He sometimes slept late into the afternoon, and virtual school gave him the opportunity to do his schoolwork in the evenings or late into the night.

Physical illness drove Nathaniel to choose an online school for his son Brian. During the first semester of Brian's sophomore year in high school, he contracted Swine Flu and was never able to go back to a traditional high school. He attempted to go back several times. During the interview, the family noted:

> *He had a fever most days. He had several strep infections; I think he had six of them in a matter of two months. He had two years where he was feeling really sick, too sick to do anything on a daily basis. In fact, he still feels some of the effects from it today.*

Similar Perceptions from Differing Paradigms

Often, the participants had conflicting thoughts whether they had identified their student as successful or not successful (see Table 2). For example, the parents of successful students described students making their own schedules, setting a daily plan, and doing much of the work independently. Hillary shared:

> *One of the things that made me think from the beginning that an online school would work for [Phoebe] is that she is a person who can really just get up in the morning and get to work, doesn't need to have much direction, is able to stay focused and accomplish a lot. So, very much a self-starter and somebody who is intrinsically motivated rather than extrinsically motivated.*

Parents of students who were unsuccessful online learners often responded that students could be more successful if they kept to a schedule or a daily plan and were self-motivated (Table 2). Figures 1 and 2 illustrate a visual representation of the top 10 frequent codes from the interviews. For example, Michael shared that Gabe was capable of high level work: "…if you can get him to do the work and apply himself. And that's the real challenge with Gabe is the motivation and discipline to keep at it." Both Hillary and Michael shared the same attribute of self-motivation, but from different paradigms.

Table 2

Top 10 Frequent Codes from Interviews

Successful Students	% of Responses	Unsuccessful Students	% of Responses
Parent Monitoring	14	Students need to be self-motivated	12
Students need to be self-motivated	13	Parent available to support, encourage, coach	12
Time with student (positive)	11	Education cannot be one size fits all	11
Immediate feedback for students	11	Students see relevance of education	11
Parent available to support, encourage, coach	11	Daily schedule/lack of schedule	10
Being there makes a difference	10	Parent question and monitor	9
Flexible = preferred activity	9	Student needs increased accountability	9
Students see relevance of education	8	Student lack of participation	9
Student responsibility/ accountability	7	Parent time requirement	9
Communication with school	6	Communication with school	8

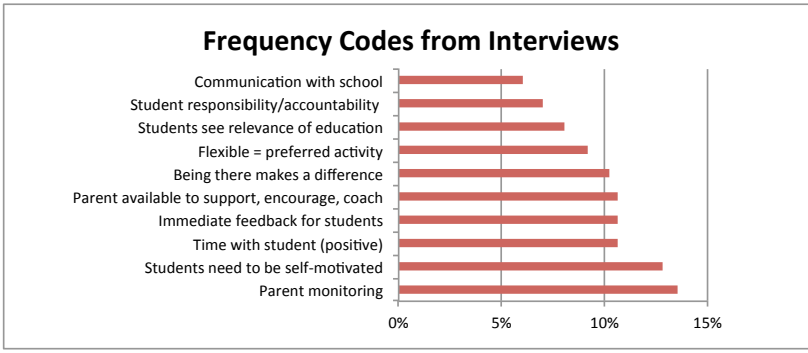

Figure 1. Successful Students – Frequent Codes from Interviews.

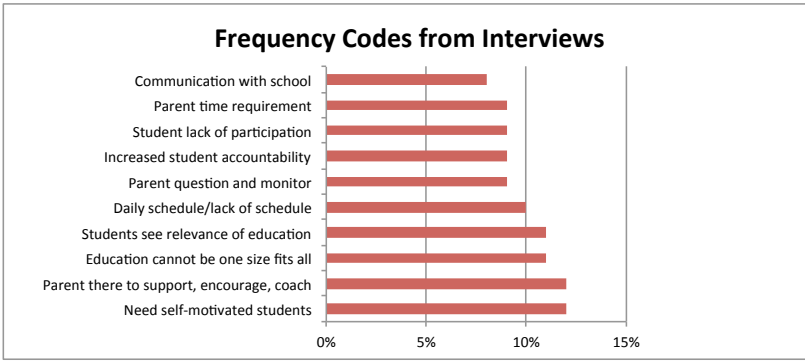

Figure 2. Unsuccessful Students – Frequent Codes from Interviews.

While interviewing the participants in this study, three main stakeholders emerged as present: parents, school, and students. Though the focus of this study was primarily on parental guidance and student success in the online environment, the full-time virtual school also played a critical role in facilitating parent and student success.

Communication: A Two-Way Street

Participants report communication with the school affected student success in an online school (n = 45). Parents also discussed the effect that not communicating with the school had on the achievement of their children. When asked specifically about the frequency of communication with instructors or administrators, answers from the eight participants varied. Two participants communicated with staff as needed, three indicated communication occurred about once a week, one said there was communication with

staff up to three times each week, and the last two noted the frequency of communication was once per month. Electronic communication was more frequent, ranging from daily (n = 2) to once or twice per week (n = 4) to every time email was received (n = 1). One participant was unsure about the number or frequency of email communication with the school.

The most successful students in the current study were those who had parents who communicated with the school regularly. Many parents reported checking electronic mail daily and calling teachers or school personnel regularly. Parents also spoke about communication coming from the school as positive, especially as they realized that student-teacher ratios at OHS were high and teacher time was valuable.

Just like in brick and mortar schools, relationships with school personnel are important in online schools. While parents had mainly positive experiences with teachers at OHS, all of them indicated the students would have connected with teachers more deeply had they been face to face. One parent relayed a very negative experience with a teacher that he felt was part of the reason his student dropped out of school. Another participant admitted that when her children were enrolled in a full-time online school, she did not reach out to the teachers for help or resources and her children were behind in credits as a result.

Regarding communication, participants also suggested the school communicate more fully about the resources provided to parents with the goal of helping students be more successful. Multiple participants recommended that, in the first stages of learning online, the school provide connections and resources to parents, including partnering them with veteran, successful parents, for assistance. Experiences with training were varied as Michael, Maria, and Melody all indicated training information from the school was sufficient. Cari advocated for on-demand parent training to increase knowledge of how to operate the Learning Management System (LMS). She mentioned by the time the first days of school arrived she needed to fully understand how to navigate the LMS in order to help her son be more successful, and on-demand parent training could have improved that experience. Participants in this study added that parents needed to understand how to use the LMS so they could assist their children and indicated the necessity of the school communicating LMS training for families. Elizabeth cautioned online schools that too much parent information can be overwhelming and to provide information in usable chunks.

Transparency: Coming Up vs. Catching Up

Whether parents were relating past school experiences, speaking about current practice, or advocating for an increase, transparency in online education was indicated as an important way for schools to help students

be more successful when learning online. Parents often spoke of the transparency the school provided in terms of electronic tools making it possible for them to help students be more successful. The experience Michael shared about his son, Gabe, is illustrative of multiple participants in this study. He noted:

> *In a traditional school, we were kind of behind the curve of knowing what was done and what wasn't done. Because he would tell us everything was fine, paint a pretty rosy picture until we found out that wasn't the case, and it was too late. It was a little different with the online school because we were closer to the real time of when he wasn't getting his work done.*

Multiple parents shared similar experiences regarding students who were academically successful in the online environment and those who were not. Maria, Elizabeth, and Cari chose to send their students to OHS hoping increased transparency would allow them to help their students be more successful.

OHS had an extensive set of tools available for student and parent purview inside the LMS. Students and parents have continuous access to student grades, time spent in each unit or lesson within a class, and on demand recordings of live class sessions. Maria shared that having this transparency was the best part about having her students in an online school. Maria shared:

> *Knowing what your kids are doing and knowing their grades and how they're doing in school and seeing, you know, that's the best part. Knowing exactly what they're doing and being able to see their grades and their schoolwork, and they can't just say, 'Oh yeah, I did it' when they didn't. I like that part.*

Participants in this study consistently pointed to the transparency of the virtual school technology system as a contributing factor in parents' ability to help students be successful. The experiences of the participants indicate that technology was a barrier for students who are unsuccessful in the online environment. For parents who identified children as being less successful learning online, technology challenges were listed as a barrier to learning in 22 instances during the interviews. Parents reported that when students could not log in to school, it was a readily available excuse to stop participating; parents needed technology to work so that students would persist. In only two instances did parents of more successful students cite technology as a concern for their children.

Parents of online learners added to the literature when they advocated for full transparency in systems so they could monitor the progress of students. Participants with experience having students in both traditional and online school settings pointed to the tools available in the fully online setting, such as OHS provides, being superior and more transparent than experienced in the brick and mortar school.

Individualization: Learning is Not One-Size-Fits-All

For the participants in this study, individualized instruction proved far more important to parents who identified their students as being less successful than those whose students had been successful in the online environment. Thirty-six times in the five interviews conducted with parents of less successful students, participants mentioned the need for individualized instruction for students versus being cited five times in the other three interviews.

Multiple participants in this study expressed the need to increase awareness of student strengths and weaknesses, designing an educational experience that suited individualized learning. Hilary, a university administrator, noted the difficulty of providing individualized education for students:

> *It's one of the challenges of public school administration, of any kind, you know, whether it's online or bricks and mortar, that you're trying to meet the needs of so many different kinds of students with a fairly limited set of resources.*

Hilary revealed the reality that the lack of resources was a barrier to individualized instruction in all educational settings. The administration and faculty at OHS struggled to meet these challenges daily, and parents recognized those challenges, but are still looking for solutions for their own children.

Parents enrolling students in an online school were hoping technology could fill this need to individualize instruction for students. For some, online learning and the transparency a virtual school provided did make a difference and allowed them to tailor education to their students. For others, the current online education system was not individual enough. Michael gave some suggestions for future course designers:

> *Nothing is impossible. In fact with technology, I suspect you could probably do it [tailor curriculum to each student]…. How would you determine which one works for that person? So if you have a curriculum that was divided into different styles of teaching, and then even within that you're going*

> *to have students that want to move really fast, students who grasp it really quickly, students who move a lot slower, students who like interactive things, other students just say 'let me read it,' and other students will want to have a lecture or video, they're better at video than they are at audio. I don't know, but I think you'd have to have a variation of that entire [curriculum] put together, and then the students can maybe pick what helps them best out of that.*

Responses from participants in this study indicated a desire for individualized technology to improve education for their particular students.

Self-Motivation

Participants in this study indicated parental involvement encouraged students to increase self-motivation or self-reliance. The necessity of students being self-motivated to achieve success in the online school was the top concern for parents of non-successful students. Self-motivation was also in the top two responses for parents of successful students, being mentioned 35 times during the interviews. One hundred percent of the students who were identified as successful going to school online were also identified by parents as being self-motivated or self-directed. Additionally, all parents who identified their children as being unsuccessful indicated that self-motivation would have increased success for their own children.

Parents of children who showed academic success and exhibit self-motivation indicated they were able to allow students to set their own schedules (n = 11) and have choice in preferred activities (n = 25). They also suggested students who were self-motivated did not need as much monitoring as others (n = 13). One parent said once her child demonstrated she was going to be successful learning online, she just had to add water and watch her grow.

Not all of the participants in this study would agree with the idea that increased freedom equated to increased success. Online learning is full of freedom and independence, yet over half of the participants in this study had children who failed. Most parents indicated too much freedom was detrimental to student success. One parent pointed to flexibility and freedoms in learning as the reason her children were lacking the credits to graduate with their cohort group. Many students thrived with the freedom to make decisions about their own education, as is noted in the literature. The question remained, however, of whether the choice and/or control created the success, or if successful, self-motivated students are inherently ready for freedom and control. It is not clear from the literature which is the case. Parents of students in this study indicated additional choice or freedom without consistent involvement by parents could result in increased failure rather than increased success.

Participants also encouraged other parents considering enrollment in an online learning environment to examine the level of self-motivation or self-direction exhibited by the student to determine if online learning would be the best placement. Michael clearly stated that if the student is "unsure about what you want to do, or you're hesitant or don't really care for school, I think online school is a disaster." Nathaniel echoed the thought that students must be motivated to go to school online:

> *Ask them [other parents] if their child is highly motivated. If they are, I would say by all means, online school is a very good option. And if they were struggling to pay attention or to do their work in a brick-and-mortar school, I'd tell them to be very wary of it.*

Participants in this study echoed the finding that self-motivation or self-efficacy does affect student achievement. Parents report that parental roles and level of involvement changed with the level of self-motivation for the student. Participants also advocated assessing the level of self-direction of the student prior to enrolling in an online school.

Student Participation and Accountability

In a full-time virtual school, when school and family are so interrelated, it is important not to forget that participating students are vital to the equation. Participants in this study indicated students must be full participants in their education in order for online learning to be successful ($n = 49$).

Parents of students at OHS noted that online learning does not work effectively if students are not involved or engaged. Nathaniel and Cari shared they had to sit with their children to get any participation from them. Cari related her experience with Christian going to OHS as a "full-time job"; if he was in class or working on an assignment, so was she. However, Christian would not participate and was not successful, even with that level of parent support.

Michael mentioned if students are not independent or accountable, the online school was not going to "light a fire under them." Maria found just the opposite to be true for her children. Both Brock and Aria had attended regular, public and brick and mortar charter schools prior to enrolling at OHS. In Maria's opinion, they were academically unsuccessful in their former schools, but this changed, especially for Aria, upon enrolling at OHS.

Experiences related by parents of less successful children denoted when students were not accountable or participatory in their own education, the benefits of increased self-motivation or the hope for added independence

went unrealized. Multiple parents, who had difficulty eliciting participation from their children, thought it might be easier to do the work for their children than to fight them to participate; however, all noted even that would not have been effective. According to the parents in this study, no amount of parental involvement will be able to overcome an unwilling student.

Parents — Monitor, Mentor, and Motivate

In all cases during interviews, parents reported their roles to be that of monitoring, mentoring, and motivating. Many parents in this study indicated regardless of the school setting in which their children were engaged, involvement would be part of their responsibility as parents. Melody, a single mom, stated this emphatically:

> *…Whether you choose public school, the standard public school, or an alternative form of homeschool, or any other thing, I think parental involvement is huge and really impacts a child's education no matter what direction you choose. And I worry that as a society parents have gotten away from that a little. Probably also because of the need for everyone to go off to work and earn a living, and it's hard to deal with. But I think that part of what we've seen in the break down in education is not just a breakdown in the education system, it's a breakdown in what is happening at home and the parents drifting away from that concept.*

Individuals who participated in this study were all actively engaged in the education of their children. All indicated they communicated with teachers multiple times each month, checked their students LMS several times each week, asked their children about their school work every day, and helped with assignments many times each week. Those who indicated their students were not successful in an online school, as evidenced by failing courses, dropping out, or being credit deficient, reported that they were diligent in their roles, but were unable to get their students to participate.

When asked about time commitments of parents with students at an online school, parents reported they spent much more time engaged in learning with their students while they were in an online school than they spent when students were enrolled in a traditional school. If a student was spending 30 hours per week engaged in school activities, parents reported a mean of 13.8 hours spent engaged in learning with the students. The range was from two hours through 29 hours for the parent for every 30 hours the student spent. Parents of successful students reported spending less time with their students once routines were established. In sixteen instances, it was noted students who were more successful did not need as much monitoring as other students.

Beyond the time commitment, parent participants noted they felt that monitoring children included monitoring assignment completion (n = 68), setting a schedule for/with the student (n = 44), and advanced preparation of student materials (n = 22). Several studies have found negative correlations between parental involvement and student achievement at brick and mortar schools. Chen and Gregory (2009) and Fan and Williams (2010) both indicate parent communication with the school has a negative relationship according to student perceptions. Both sets of authors postulate that a reason for this negative relationship may be that by the time parents communicate with the school students are already in trouble due to a lag in academic performance or because of disciplinary issues. Only parents of less successful students related perceptions indicating monitoring causes conflict (n = 12). Nathaniel remembers many nights, after working all day, coming home to sit with Brian to ensure he was completing some work. He shared about half of the time this level of monitoring caused discord, and Brian's work would remain unfinished.

The type of daily monitoring required for parents of children in a full-time, online school is more like the teacher in the classroom. Participants in this study noted their roles being like a teacher many times (n = 18) as well as providing advanced preparation of materials and/or schedules for students (n = 55).

Even with conflict or the possibility of negative relationships between parental involvement and student perceptions, the participants were clear that monitoring was important to student success in the online learning environment and a lack of parental involvement could result in failure. Shelli shares that both of her students were behind their graduation cohorts because of lack of monitoring in the later years that the boys attended online school. In the early years, when the boys were in elementary and middle school, Shelli's husband was able to be home with them during the day to monitor their education, but a job change meant that both boys were home alone. Shelli shared:

> *This last couple of years, the boys were kind of a little more on their own. So that's kind of where we started to flounder, is because we weren't here to…what do you call it? Keep an eye on them. And so basically, the older they got, the more we trusted them that they did their work, and they were doing what they were supposed to be doing, and they were doing the work while we were gone at work…I hate to admit, because they've got the whole house to themselves and they've got, you know, access to TV's and video games and computers, and you know, so it was easy for them to want to slack off because they had nobody at home to monitor them.*

Along with monitoring progress at school, parents interviewed for this study indicated student mentoring was important when going to school online. One way parents mentored students was by being available for them for immediate feedback. This theme of immediate feedback was discussed by participants 38 times. Parents encouraged students to reach out to teachers but knew that being available to help students when needed or requested made a difference in achievement for students. Being careful not to over generalize, parents of both successful and unsuccessful students discussed that part of their roles when students were in a full-time online school was that of teacher (n = 13). If parents were taking the teacher role, then more immediate feedback received from present parents could increase achievement.

Coupled with being available to answer questions or increase student understanding, parents reported that a very positive element of their roles included spending time with students and engaging in learning with their children. All of the parents in this study were engaged in the home environment with their students. They all reported positive rapport with students and pointed to experiences in the online learning environment as enhancing parent/child relationships. Because all learning happened in the home setting, often with parents present, all parents reported enjoying learning about student academic strengths and weaknesses (n = 26). A benefit of children attending school in a full-time online school was that the parents could try to motivate their students as the parents had an intimate knowledge of their children and their needs. Many parents pointed to motivating students as important to their success. Cari talked about her increased understanding of her son, Christian, and his ADHD. She shared:

> *I learned a lot about Christian. About how he thinks and how he learns. I actually recognized more of the struggle he has to put thoughts together with the ADHD. I mean, that challenge, [I] understand a little bit more about how that makes things harder for him to put things together. Not that it's impossible, but I can see the hurdles that he has to go through to do that. I did think it was a positive thing to get to know him better and do spend that time with him.*

A unique aspect of full-time online schools in this regard was parents can, and often do, attend class with their children. Multiple parents noted working through assignments and projects with students regularly. On occasion, a second time through the course for the parent helped their own attitude toward a difficult subject. Parents indicated 44 times during the interviews that time with their student, whether it was struggling through a proof in geometry or just being able to eat lunch together, was a positive

outcome of being part of a full-time online school. Parents of students interviewed for this study suggested an important parental role in an online school is motivating their children to strive to attain a better future. All of the parents in this study shared specific hopes and dreams for their children, taking opportunities to impart those expectations and dreams to children directly through conversations and by example. When a student struggled to succeed in school, parents sometimes had to re-evaluate their aspirations for that particular student. Nathaniel discussed this experience when his son, Brian, dropped out of school and took the GED test rather than earning a high school diploma:

> *When your child is born, you have certain expectations and hopes. And as they get older, you discover that they have a mind of their own and interests of their own. And as a parent, you try and adjust your dreams and aspirations and try to help them succeed. I guess that's how we've dealt with it. It's been a very painful process though.*

Parents continued to share aspirations with their students through school and beyond, hoping to affect the future for their students.

The participants in this study all explicitly shared their hopes, expectations, and dreams with their students, yet, over half of them failed. They were involved in student activities from booting up the computer through checking grades on the assignments, yet sometimes they could not rouse students from their beds. Parental involvement and parental aspirations did not improve student achievement for the two students who dropped out of OHS and never earned a high school diploma. In this way, the shared experience of parents does not match some of the current literature regarding parental aspirations affecting student achievement.

In 57 instances during the 16 interviews, parents determined helping students discover the relevance or importance in their own education as a factor to increase success. In this study, parents repeatedly related their experiences with children acknowledging the importance of education as a factor in their success. Maria's experience with Aria illustrated student awareness of the relevance of an education in their lives making a difference in performance. She stated:

> *I think she [Aria] has finally learned the importance of school and an education. I don't think she cared before. It was all about boys and socialization. And she's come to realize that school is important; it's something you need. You need an education to go on. And I don't have to make her, and I used to nag her all the time.*

Michael, whose son Gabe struggled to find relevance in school, encouraged parents to be supportive of students and to guide them toward understanding the importance of planning for the future. Michael stated:

> *Every child is different and so you just have to find what their skills are and try to build upon those skills and try to keep them vested in their future, recognizing the fact that I think the hardest thing with teenagers is to get them out of the here and now. That they will actually have a future and they should probably do something now to prepare for that.*

Students like Gabe and Aria had different educational experiences and outcomes, but their parents had the same desire for them. Parents recognized education is the key to a better future and a more productive life for their children. Even if children did not understand educational relevance currently, parents hoped they would someday grasp those ideals to create a better future. It was because of this hope that parents made the sacrifice of time and energy to monitor, mentor, and motivate children while they were enrolled at OHS. The experiences of parents in an online school indicated that in a full-time online school, the primary roles of the parent were to monitor, mentor, and motivate.

LIMITATIONS

There are limitations to every research study. The ethnic distribution of the sample in this study did mirror that of the entire population at OHS. This is a limitation as the ethnic distribution is predominantly Caucasian, and generalizations should not be made about underrepresented populations based on this data set.

Another limitation to this study was that it was required by Family Educational Rights and Privacy Act, 20 U. S. C. § 1232g; 34 CFR Part 99 to gather volunteers from the opt-in parent directory as participants. Searching the OHS database for participants based on a set criterion was not permitted, so volunteers were sought. Volunteers for a research study may have other motivations for participating which could be a limiting factor.

Participants in this study were limited to parents of students who had experience in a full-time online school. Research did not include directly speaking to students. There is also the limitation of some response bias. All parents who volunteered to be participants may have difficulty admitting their role in the success or failure of students, and some very uninvolved parents may not have answered the electronic notice.

Additionally, parents self-selected whether their children were successful or unsuccessful based on the experiences they had at OHS. Criteria were not given by the researchers providing a variance in the definition of successful or unsuccessful depending on the parent. While it also could be a strength, some parents had differing experiences from child to child in the online school. There were instances where one child was more successful than another within the same family.

RECOMMENDATIONS FOR FURTHER RESEARCH

It is important to continue studying the phenomenon of full-time online education as it is growing in popularity and scope in the United States (Cavanaugh et al., 2009; Watson et al., 2011). While this study focused on perceptions of parents in a full-time online setting, further research is vital in the field of online education to increase student achievement.

Due to the nature of a volunteer sample, parents who participated in this study were well-educated and actively engaged in the education of their children, regardless of the students' success or failure in the online environment. This was identified as a limitation of this study, and it would be enlightening to determine if sampling a population of parents who were less engaged would alter the conclusions. A more purposeful sample may highlight additional methods to assist students in this situation to be more successful at learning online. Catsambis (2001) describes how most of the research in parental involvement is conducted in the elementary setting, highlighting the need for additional research in the secondary setting. Students are more independent as they grow older, therefore, additional research in the high school setting with less engaged parents could yield additional results.

This study did not examine the perceptions of teachers in a full-time online high school. Moore's theory of Transactional Distance (1993) could be explored with both academically successful students and those who were less successful. With initiatives such as blended learning, synchronous class sessions, and flipping the classroom, it would be informative to determine if the distance between teacher and student could be mitigated. Qualitative research exploring the perceptions of teachers in a full-time online school might alter teacher training and professional development for teachers in this modality.

Students who have selected to participate in a full-time online school are another stakeholder group that should be examined. Students have a great deal of responsibility and accountability in this setting. This study echoes the findings of other scholars who agree that students who are self-motivated are more successful in the online environment (Artino, 2008; Rice, 2006; Roblyer & Marshall, 2002; Ronsisvalle & Watkins, 2005). Qualitative

research is recommended to further determine how students become self-motivated, if self-motivation can be taught or enhanced, and what encourages students to work independently in an online environment.

CONCLUSIONS

Barbour et al. (2013) suggest that a rising challenge in the K-12 online distance learning arena is a gap in the professional literature. Most of the research conducted in the area of online education is conducted in other settings (post-secondary or virtual course providers) and generalized to the K-12 setting (Black, 2009; Dixson, 2010; Feng & Cavanaugh, 2011; Liu & Cavanaugh, 2011, US Department of Education, 2009). However, Hasler-Waters, Menchaca, and Borup (2014) have written on the roles of parents in the achievement of students enrolled in a full-time online school.

Researchers in this study found that no single factor affects student achievement in a full-time online high school. The shared perceptions of participants demonstrated that achievement for students is affected by the performance of school, students, and parents. Scholars and parents agreed the online school should communicate effectively in multiple ways with both parents and students (Archambault et al., 2010; Black, 2009; Díaz & Entonado, 2009; Hawkins, Barbour, & Graham, 2011; Mandernach, 2009; Thomson, 2010). Parents assert full communication about resources would encourage families to engage in school more effectively. The experiences of parents add to the literature when they advocate for parent training on demand and partnerships with veteran parents during school start-up. Parents also illuminated the fact that when parents do not utilize the resources provided by the school or communicate with school personnel, students can fail.

Participants in this study overwhelmingly appreciated the transparency provided for them in the LMS. Parents had full and continuous access to student grades, progress, time spent on lessons and units, and on-demand recordings of live class sessions. Parents indicated that knowledge of student progress gave them the tools they needed to assist their children. Scholars do indicate that time on the LMS is a significant variable related to increased academic achievement (Liu & Cavanaugh, 2011; Roblyer, Davis, Mills, Marshall, & Pape, 2008). The school must provide transparency to families through tools in the LMS and information about student growth to parents. Parents of students who were not as successful were grateful for the tools provided by OHS, but transparency alone did not motivate or inspire increased success when learning online.

Finally, schools must also seek to individualize the student learning experience. Parents of students who were already struggling in school sought out a different experience for their children at a full-time online school (Morabito, 2011). In some instances, the flexibility and control students had online was helpful and motivated students to be more successful as the literature indicated (Cavanaugh, Repetto, Wayer, & Spitler, 2013; Kerr, 2009; Rosa & Lerman, 2011; Thomson, 2010; US Department of Education, 2009). In other cases, that freedom increased failure. Utilizing emerging technology to individualize student experiences can be helpful in increasing personalized instruction for students, making education less one-size-fits-all.

With the increased emphasis being placed on student learning as opposed to merely covering academic content, many educators are exploring the impact of technology in building an environment that is more personalized and interactive. Mobile technology, such as smart phones and tablets, are frequently the means used to reach the goal of a more interactive, engaging classroom. A study by Banister and Reinhart (2014) with over 650 K-12 principals indicates that active learning can be more effectively integrated into the classroom environment and used to prepare students for the type of learning that will be expected of them in the future using mobile technology. The ability of mobile devices to be used for formative assessments that are seamlessly integrated into lessons also enhances the way this material is personalized for each student's learning needs (Manderson, 2012). Such changes, while promising and increasingly in demand, are not necessarily easy to initiate. Particularly when a district moves from a one-size-fits-all mentality to personalized learning, paradigms regarding the responsibilities of all members of the learning community and the processes from teaching to assessment must evolve (Tanenbaum, Le Flock, Boyle, Laine, & Newberger, 2013).

Findings in this particular study suggest parents of children who were unsuccessful in the online learning environment admitted their children had been unsuccessful in multiple school settings, but indicate again they were looking for education to adapt to fit the particular needs of their student. It is in this way that they believed their children would experience success. Students must be self-motivated, engaged in curriculum as a full participant in their own education, and held accountable. Research in online education supports the need for students to be motivated to participate and complete courses (Archambault et al., 2010; Artino, 2008; Picciano & Seaman, 2010; Roblyer & Marshall, 2002).

Parents of children who were self-motivated, fully participating, and accountable found the transition to a full-time, online school to be pleasant and rewarding. They not only watched their children achieving and thriving in the online environment but also could participate in learning. Parents who identified students as not being successful were very involved, sometimes sitting with students for every lesson. Yet, they struggled to get students out of bed some days, and half of the children failed. Their experiences validate the notion that students who are unwilling participants will not successfully learn online. While there is limited literature regarding the consequences of not being motivated to participate, the experiences of parents adds to the body of knowledge noting when students are not accountable or participatory in their own education, any benefit of increased independence or self-motivation provided by going to school online are unrealized.

Parents are critical to the success of their children by being available to monitor, mentor, and motivate on a daily basis. Parents perceived their role as vital to children being successful. The parental roles varied based on the motivation level of the child, with self-motivated students needing reduced involvement from parents than less motivated students. Unfortunately, there are occasions when parents are unable to inspire their children to be active participants in their own education. In those instances, students are unsuccessful and often fail. If students are unwilling to be involved in their own education and parents are unable to motivate them, it is rare that an outside force, such as the school, would be able to either.

The question regarding the factors affecting student achievement in an online school is as complex as the students who enroll. Students are not widgets, and cannot be expected or predicted to always act a certain way. That is what makes education of all types so complicated. Students are influenced by continuous involvement by their parents when they are going to a full-time online school. As was evidenced by the experiences of the parents in this study, many variables influence success or failure of students, but unfortunately, no one variable is the solution for all students.

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