Abstract of Thesis

This study was designed to examine adolescents’ attitudes towards virtual schooling. Virtual schooling may be defined as any public or private organization that delivers instruction via the Internet. The rationale for this study is based on the increased number of adolescents opting to complete some or all of their secondary education through a virtual school. In eight years, approximately half of all adolescents in the United States will earn some or all of their high school credit in a virtual classroom (LaPrade, Marks, Gilpatrick, Smith, & Beazley, 2011). In each case, the student’s motivation for completing one or more virtual courses is different. Regardless of their reason, it is clear that virtual schooling has become a popular pathway for students enrolled in K-12 education. Participants included eight high school adolescents who were enrolled either full or part-time at the Rolling Green Hills Virtual School. Each adolescent completed both an open ended questionnaire and an interview to determine adolescent attitudes towards virtual schooling.

The research revealed that adolescents believe there are four benefits to virtual learning: flexibility with place & time/time of day, access to schooling when brick & mortar is not possible, access to courses when/if desired, and individualized pacing/coursework. Additionally, adolescents believed there are three disadvantages to virtual learning: teacher access & willingness, difficulty with collaboration, and the requirement for more self-motivation.

Key words: virtual school, alternative pathways, flexible learning environment, adolescents, brick and mortar school
Acknowledgements

There are several people who have supported me in this remarkable endeavor. Without their love, guidance, and support, this work would not have been possible. These advisors, colleagues, mentors, friends, and family have played an instrumental role in one or more of the following areas: encouraging me to continue pursuing my personal and professional goals, critiquing my plethora of drafts and outlines, offering me advice that allowed me to maintain my focus, and continuously modeling what it means to be a lifelong learner.

First and foremost, I must offer my heartfelt thanks to my parents, Mr. & Mrs. Alan A. Pleau, Sr., who have been my biggest cheerleaders for over thirty-three years. Your love and support mean more to me than any degree that I could ever attain. You continue to model what it means to grow as a person and as a learner. It is because of you that I know I can achieve anything I set my mind to, regardless of whether it is a personal or professional goal. Thank you for always believing in me.

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Fourthly, I must offer my gratitude to Amanda M. Grundel, a colleague and friend for whom I have the utmost respect. Your professional advice has been so valuable, and the same holds true of your friendship. You are always there to edit, critique, or just simply listen, and for that I am eternally grateful. Thank you for being there for me during this tremendous journey.

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Finally, I would like to dedicate this doctoral thesis to my late aunt and godmother, Carol M. Gibney, who passed away nearly a year after I began this endeavor. As was the case with any of my successes in life, she would have been ecstatic over my completion of this degree.
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Chapter One: Introduction

Problem of Practice

Online, or virtual learning, emerged in the late 1990s in K-12 education as an alternative to traditional public schooling. “The virtual schools movement, in which K-12 school course and diplomas are offered either mostly or completely using distance technologies, is expanding rapidly” (Davis & Roblyer, 2005, p. 399). The term “virtual school” may be defined as any public or private institution that delivers instruction using the Internet; there are seven classifications of virtual schools (see Table 1) (Cavanaugh, Barbour, & Clark, 2009). Presently, K–12 online education is an acceptable form of schooling across the United States (Archambault & Crippen, 2009).

Table 1: Clark’s Seven Categories of Virtual Schools

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>State-sanctioned, state level</td>
<td>Virtual schools operating on a state-wide level, such as the Florida Virtual School.</td>
</tr>
<tr>
<td>College and university-based</td>
<td>Independent university high schools or university-sponsored delivery of courses to K-12 students, such as the University of California College Prep Online (UCCP).</td>
</tr>
<tr>
<td>Consortium and regionally-based</td>
<td>Virtual schools operated by a group of schools or school districts, such as the Virtual High School (VHS).</td>
</tr>
<tr>
<td>Local education agency-based</td>
<td>Virtual schools operated by a single school or school district, such as the Gwinnett County Online Campus.</td>
</tr>
<tr>
<td>Virtual charter schools</td>
<td>Virtual schools created under the charter school legislation in many states, such as Connections Academy, also commonly known as cyber schools.</td>
</tr>
<tr>
<td>Private virtual schools</td>
<td>Virtual schools that are operated in the same manner as a brick and mortar private school, such as the Christa McAuliffe Academy.</td>
</tr>
<tr>
<td>For profit providers of curricula, content, tools, and infrastructure</td>
<td>Companies that act as vendors for the delivery of courses or the use of course materials, such as APEX Learning.</td>
</tr>
</tbody>
</table>


The problem of practice that I sought to investigate is the variety of reasons for the increased numbers of adolescents opting to complete some or all of their secondary education
through a virtual school, as opposed to a brick and mortar school. Online schools are becoming viable options for many teens. As Archambault and Crippen (2009) note, “the 21st century educational landscape has been altered. One of these changes has been the addition of online distance education, specifically the proliferation of virtual schools in K–12 settings” (p. 363). The escalation in enrollment for American virtual schools represents a growing population of middle and high school students who seek another path to earn a high school diploma.

In 2009, I expanded my own teaching to include a part-time position with a virtual school. Over the past three years, I have had numerous informal conversations with students who are in the midst of completing some or all of their secondary education, virtually. In each case, they told me that they were trying to accomplish one of the following goals: graduate early, earn credit for a previously failed brick and mortar course, complete the course with a teacher other than the one they would have had at their brick and mortar school, finish high school while raising a child, or obtain a high school diploma while pursuing a hobby or passion that may require travel or an extensive time commitment. This study intends to provide a more structured and formalized process to support, confirm and expand upon these anecdotal comments.

I proposed to address this problem of practice through a research project that investigates how high school students perceive virtual schooling. I explored students’ attitudes towards virtual learning by surveying students who are currently engaged in virtual schooling or have recently completed one or more virtual courses. I sought to discover students’ views on the advantages and disadvantages of enrolling in a virtual rather than a brick and mortar school.

Significance

This problem is significant as virtual schools are expanding rapidly across the country (LaPrade, Marks, Gilpatrick, Smith, & Beazley, 2011). In the broader context, this problem
relates to several discussions noted in existing pieces of literature. The rise in the number of virtual schools providing an online education for American adolescents has been documented (Davis & Roblyer, 2005). The existing bodies of literature regarding virtual schooling reveal either the prospective advantages of K-12 online learning (Feng & Cavanaugh, 2011) (Repetto, Cavanaugh, Wayer, & Feng, 2010) (Thomson, 2010) or the challenges facing K-12 online learning from an administrative perspective (Rice, 2009) (Gustke, 2010) (Huett, Moller, Foshay, & Coleman, 2008) (Huerta, González, & D'Entremont, 2006). However, little information regarding the K-12 students’ perspectives on the benefits and challenges of virtual schooling has been uncovered (Barbour, 2008).

Given the growing numbers of American students who are opting for virtual schooling, it can be assumed that certain characteristics of the virtual learning environment are enticing for all stakeholders. From a school district’s point of view, virtual schooling has benefits. While there are retention issues to contend with (Hawkins & Barbour, 2010) (Boston, Díaz, Gibson, Ice, Richardson, & Swan, 2010), “e-learning can provide both accelerated and required courses, leading to increased graduation rates and reduced dropout rates” (Blomeyer & North Central Regional Educational Lab., N. L., 2002, p. 3). Additionally, the cost of educating a student via a virtual school is cheaper than doing so in a public school (Brady, Umpstead, & Eckes, 2010). Virtual schools can also serve as an alternative pathway for gifted students, students who do not thrive in a regular public school classroom, or for those who are very involved in a hobby or sport that requires flexible hours for practice and/or performance (Butler, 2010).

**Conclusion**

The existing research is clear in identifying that growing numbers of adolescents are
opting for virtual schooling, suggesting benefits to this format. Acknowledging that there are benefits and difficulties when it comes to traditional brick and mortar schooling, it would follow that the same is true of virtual schooling. Given that adolescents have opinions about a variety of topics, I contended that adolescents enrolled in virtual schooling have their own beliefs about the benefits and difficulties of virtual schooling. My goal was to uncover and analyze these beliefs through the completion of my research.

**Research Questions and Goals**

The primary question of my research was as follows: *What are students’ perceptions of virtual schooling?* My two sub questions were: *What do adolescents view as the benefits of virtual schooling? What do adolescents view as the disadvantages of virtual schooling?* Through this primary question and sub questions, I was able to investigate what adolescents perceived as either benefits or drawbacks of virtual schooling, as well as any other issues that emerged.

What I hoped to contribute to the field through my project is a documentation of reasons for the continued increase in the number of American secondary students who choose to enroll in part-time or full time virtual schools. I was intrigued by the growing trend in America wherein students opt to complete some or all of their secondary education via a virtual school. I hoped to discover the reasons behind this progression. The intellectual goals of my project were to understand adolescents’ views on the specific benefits and challenges of virtual schooling, as well as common themes in the attitudes of adolescents towards virtual education.
Organization of this Document

The remainder of this chapter includes three sections: theoretical framework, literature review and research design. In the following section, I present the theoretical framework that informs my investigation. This framework centers on a single component: the virtual school theoretical model. In the next section, I review five strands of literature that place my research in a broader context. First, I analyze literature on the pedagogy in virtual schooling. Second, I review literature on students’ engagement in their own learning. Third, I investigate a strand pertaining to the legitimacy and viability of K-12 virtual schooling. The fourth thread is an inquiry into student, teacher, and administrator attitudes towards virtual schooling. The fifth and final strand takes into consideration the nature of brick and mortar pedagogy. Due to the fact that my research focuses on a group of high school students who are or have been engaged in virtual schooling, I gave particular attention to instructional methods in this setting. Following this literature review, I proposed a research design, which takes a qualitative approach to exploring the attitudes of adolescents towards virtual learning. After explaining my intended data collection and analysis procedures, I discussed how I intended to protect the validity and credibility of my study and how I have acknowledged the ethical implications of the study for the participants. I concluded by reflecting upon how the preceding sections inform one another. In the fourth chapter, I presented a report of the research results, including codes and themes that emerged. Finally, I discussed a summary of my findings and recommendations for practice.

Section Two: Theoretical Framework

The purpose of my research was to investigate high school students’ view of virtual
learning. In order to better understand adolescent beliefs regarding virtual schooling, the theoretical framework for my exploration consisted of the virtual school model. The theoretical components of virtual schooling (Proserpio & Gioia, 2007) form the groundwork for understanding the unique aspects of this anomalous educational environment. There are specific elements which present themselves within the virtual learning environment.

The Virtual School Theoretical Model

“Virtual schools represent one attempt at fostering greater decentralization of school management” (Rodney, 2010, p 222). The components of virtual schooling (Proserpio & Gioia, 2007) are such that they allow instructors to mesh their teaching style with today’s adolescents’ learning styles. This approach works well as virtual technologies utilized in virtual schooling programs have already been successfully integrated into the lives of many students who are known as the virtual generation, or “V-Gen” (p. 69). Students’ learning style incorporate a variety of virtual tools, many of which are web-based. In fact, “effective learning occurs when students’ learning styles align with in-class teaching styles” (p. 71). Table 2 (see below) provides a visual representation of this phenomenon. Proserpio & Gioia (2007) acknowledge that “the virtual environment can actually create different and perhaps better opportunities for learning, so long as we recognize and account for the fact that the nature of the virtual teaching and learning experience is different” (p. 72).
The conditions of virtual schooling are such that they facilitate constructivist learning (Kim 2005). The structure and function of any virtual learning program is such that it provides an interactive environment for the student.

“Firstly, knowledge is constructed out of sensual and perceptive experiences of the learner in which learning is internalized through the learner's constructive process in nature. Secondly, knowledge is the personal understanding of the outside world through personal experience rather than the experiences of others. Thirdly, this internally represented knowledge becomes the basis of other structures of knowledge and a new cognitive structure of the person” (Kim, 2005, p. 9).

Constructivist learning is clearly embedded in the virtual school theoretical model as technology is utilized for learner/learner and learner/teacher interaction. “Through planning it is especially determined at what point of time learners or groups of learners interact between each other and when this interaction can be enhanced by mobile telecommunications” (Nummi,
In the virtual school model, students learn more by working with one another in an educational setting; higher level students gain more from the co-operative experience than their weaker counterparts (Terwell, Gillies, van den Eeden, & Hoek, 2001). Moreover, virtual schooling provides a learning environment wherein individuals are provided with simulations and scenarios in which they are engaged in concrete learning experiences for the acquisition of knowledge; the specific content area is irrelevant; it is the process that is key (Blum and Bergsch, 2009).

The virtual school model encompasses an open and flexible learning environment (Hill, 2006). The individual learner has choice in accordance with “the teacher’s framework, where he or she wants to engage in learning, and when he or she wants to learn” (p. 189). Thus, the virtual schooling employs both a “learner centered” and “teacher supported” approach (See Table 3) (Hill, 2006).

<table>
<thead>
<tr>
<th>Underlying Principles</th>
<th>Support Mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learner-centered instruction</td>
<td>Provide an orientation</td>
</tr>
<tr>
<td>Facilitation of learning</td>
<td>Guidance in learning</td>
</tr>
<tr>
<td>Negotiation</td>
<td>Mentoring for learners and instructors</td>
</tr>
<tr>
<td></td>
<td>Multiple resources</td>
</tr>
</tbody>
</table>

(Hill, 2006)

**Implications for My Inquiry**

In summary, the component of my theoretical framework— the virtual school model— informed my inquiry in multiple ways. First, understanding the nature of learning that occurs in the virtual classroom helped highlight the structure and function of this particular learning environment. Moreover, it points to a potential benefit for the individual learner. My theoretical framework informed my choice of virtual learning as the focus of my research as it reaffirmed
my perception that this form of schooling allows for an environment wherein students are involved in concrete learning experiences that allow them to gain knowledge via a learner-centered approach. Thus, the more likely they are to see the relevancy of their own learning. This framework supported my contention that virtual schooling gives an individual student choices concerning his or her own learning. This also indicated a potential benefit for students enrolled in a virtual classroom. I intended to make use of this framework as I examined the characteristics of virtual schooling which are most beneficial to students.

**Chapter Two: Literature Review**

Every classroom, or every learning environment in secondary education, exists within a larger context and also has a place within the larger field of K-12 education. Referencing Archambault and Crippen’s (2009) notion of the existing educational landscape, my project seeks to investigate why increasing numbers of adolescents in the K-12 realm are opting to complete some or all of their secondary education through a virtual school as opposed to a brick and mortar school. I proposed to develop an open-ended questionnaire to determine why this shift is occurring in my specific, small population and uncover topics for further large scale research that may answer this question on a large scale.

My project provided perspectives on adolescents’ views of virtual schooling. The purpose of this literature review was to place this project within several larger contexts. The first is an ongoing discussion about pedagogy in virtual schooling. The second is a discussion about students’ engagement in their own learning. The third is a discussion regarding the legitimacy and viability of K-12 virtual schooling. The fourth is an inquiry into student, teacher, and
administrator attitudes towards virtual schooling. In order to make sense of these discussions and place them within the context of broader conversations on virtual schooling, it is useful to consider the nature of brick and mortar pedagogy. Therefore, a section of the literature review was devoted to this strand.

“One of the reasons given for the growth of virtual schooling is that there are a number of perceived benefits to both schools and individual students” (Barbour, & Reeves, 2009, p. 407). Virtual school teachers and administrators perceive multiple benefits of virtual schooling. The first benefit is an increased access to the curriculum; virtual schools offer courses that would not otherwise be available to the student (Clark & Berge, 2005). The second benefit is equal access for all students regardless of location or socio-economic background. The third benefit is flexibility in both time and place; students can work anywhere as long as they have an Internet connection. The fourth benefit is the flexibility in pacing; students tailor the course to fit their needs. The fifth benefit of virtual schooling is that it provides families with more school choice (Clark & Berge, 2005).

The challenges of virtual learning have also been identified by teachers and administrators. The first challenge is that some students are unable to handle the flexibility of “any-time learning” (Clark & Berge, 2005, p. 2). This would suggest “readiness and retention issues” (Barbour, & Reeves, 2009, p. 411). The second challenge is the ability to “assess the quality of online instruction and student outcomes” (p. 4). The third challenge is suitable technology to handle virtual schooling. The fourth challenge is maintaining the proper supports for students, including “library and instructional resources” (p.4). The fifth challenge is hiring
and training a sufficient number of faculty and staff (Clark & Berge, 2005).

“At the recent iNacol Virtual Schools Symposium, participants had the opportunity to hear directly from a panel of students who explained why they preferred learning online” (Nielsen, 2011, p.12). Table 4 (See Below) contains ten responses given by the students.

| Reason 1 | I can sleep in. |
| Reason 2 | I can pursue my passions. |
| Reason 3 | I can focus on my work without distractions from my classmates. |
| Reason 4 | I can move at my own pace. |
| Reason 5 | I don’t have to compete to share my thoughts and ideas. |
| Reason 6 | I can take classes that are more interesting. |
| Reason 7 | I can learn with a schedule that meets my needs. |
| Reason 8 | I can learn despite health problems that might get in the way of a traditional class setting. |
| Reason 9 | I can easily communicate with my teacher when I have to. |
| Reason 10 | I can easily communicate with my classmates when I want to. |

(Nielsen, 2011, p. 12).

**Part I: Pedagogy in Virtual Schooling**

The pedagogy involved in virtual schooling as discussed by Barrett (2010) suggests that virtual “educators have had to ‘unlearn’ their old way of thinking in terms of teaching methodologies” (p. 20). As I sought to answer the question of “what is virtual school pedagogy?”, my focus shifted towards the work of DiPietro, Ferdig, Black, & Preston (2010). In doing so, I was able to draw a foundation for my inquiry. DiPietro, Ferdig, Black, & Preston identify five elements of virtual school pedagogy: assessment, engaging students with content, making the course meaningful for students, providing support, and communication & community. The first, assessment, addresses the fact that virtual school pedagogy incorporates “alternative assessment strategies that allow students the opportunity to represent their knowledge in ways that are personally meaningful”(p. 21) and reflect an array of learning styles.
The second, engaging students with content, indicates the virtual school courses are designed in an organized and structured fashion; they include “course components to reflect the interests of the students” (p. 21-22). The third, making the course meaningful for students, connects to the fact that virtual school teachers implement ways in which they can make personal connections so as to form a strong student-teacher relationship. Furthermore, virtual school teachers encourage peer-to-peer communication and utilize additional support tools to meet the needs of all students enrolled in their courses. The fourth, providing support, refers to close progress monitoring to determine students’ individual needs for the reteaching of skills and/or content. The fifth, communication & community, equates with the use of multiple methods (phone, email, IM, etc.) to maintain regular communication to facilitating learning and supporting students’ growth. Additionally, the virtual school teacher provides feedback expeditiously, which then serves as a motivating factor for students (DiPietro, Ferdig, Black, & Preston, 2010).

Virtual school pedagogy takes into consideration “the elements of quality instruction in any arena and adapts them to the virtual environment” (Johnston, 2007, p. 22). With that being said, many of the key components of a virtual course mirror those of a brick and mortar course (See Table 5) (Johnston, 2007).

<table>
<thead>
<tr>
<th>Interaction</th>
<th>Multiple Modalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy Access</td>
<td>Engaging, Robust Curriculum</td>
</tr>
<tr>
<td>Ease of Use</td>
<td>Timely Feedback</td>
</tr>
<tr>
<td>Clear Objectives</td>
<td>Built-In Monitoring</td>
</tr>
<tr>
<td>Course Syllabus</td>
<td>Layered Content</td>
</tr>
<tr>
<td>Measurable Objectives</td>
<td>Academic Integrity</td>
</tr>
<tr>
<td>Quality Evaluation</td>
<td>Student Feedback</td>
</tr>
<tr>
<td>Current and Relevant Content</td>
<td>Choices</td>
</tr>
</tbody>
</table>

(Johnston, 2007, p. 29).
Virtual courses incorporate the following in instruction: “simulations and virtual lab activities, collaboration with other students on a group project, multimedia demonstrations of real-world examples, and live sessions in which the teacher uses screen-sharing technology to facilitate interaction among students” (Watson, Gemin, Coffey, & International Association for K-12 Online, 2010, p. 4). Two-way or three way communication between the instructor, student, and/or parent is another essential element of instructional practice in virtual schooling (Watson, Gemin, Coffey, & International Association for K-12 Online, 2010). Virtual teachers are required to give timely feedback, answer questions, clarify directions, and develop relationships with their students. “Student support, including technical support, is provided as it is a critical component of virtual school success” (p.17).

“Traditional measures, such as attendance and instructional contact hours, do not fit the virtual model” (Dillon & Tucker, 2011, p. 52). However, virtual schooling does embrace frequent teacher to student and student to student interactions; this may occur via phone, text, email, or IM. There exists “a high degree of communication and interaction between teachers and students. In fact, many online teachers report that teaching online is more time consuming than teaching in a classroom because of the amount of individual attention that each online student receives (Watson & North American Council for Online, 2007, p. 17.)

**Pedagogy and virtual teacher competency.** In their research, Davis & Roblyer (2005) found that an individual who has proven to be a competent classroom teacher may not necessarily prove to be a successful virtual teacher. Furthermore, there are specific pedagogical elements that virtual teachers develop and hone over time, including multiple communication skills. “The online instructor's role requires a paradigm shift in perceptions of instructional time
and space, virtual management techniques, and ways of engaging students through virtual communications” (p. 400-401). Subsequently, teacher preparation programs at the post-secondary level have begun pondering the training of the pre-service virtual teacher. As the demand for virtual schools increases, it will be increasingly hard to ignore the need for standard pedagogical training for pre-service virtual teachers. Barrett (2010) expresses a similar belief which encompasses the notion that the virtual teacher must “develop and enhance their teaching strategies and methodologies in order to meet the growing needs of today’s online learning population” (p. 18).

The teacher is a vital part of any virtual classroom. Effective online pedagogy involves the virtual teacher supporting and inspiring his or her students without the use of face-to-face interaction (Watson & North American Council for Online, 2007). The virtual teacher must have multiple essential proficiencies, including advanced written communication skills, stellar time management skills, and an ability to adapt material to meet a variety of student needs (Watson & North American Council for Online, 2007). Additionally, the virtual teachers utilize “Internet, multimedia, hypertext, virtual reality and artificial intelligence …which enables students to explore different content according to their interests, with permanent interaction with the source of knowledge” (Sukic, 2009, p.15). LaPrade, Marks, Gilpatrick, Smith and Beazley contend that best practice in online learning consist of “fostering interaction, providing feedback, facilitating learning and maintaining enthusiasm and organization” (p. 27).

**Implications for my inquiry.** Research on pedagogy in virtual schooling, including training and teachers’ virtual teaching ability, provided a platform for my current inquiry. The
respective experiences of virtual school students are impacted by factors relating to pedagogy and teacher ability. A full awareness of these elements was essential to framing the forthcoming data. The aforementioned literature is considered during the analysis phase.

**Part II: Students’ Engagement in Their Own Learning**

Both brick and mortar and virtual school teachers share a common educational goal---fostering students’ engagement in their own learning. In a unique strand of the literature, Atkinson (2011) indicates that “to secure learners’ engagement with the learning process itself, it is necessary not only for some degree of transparency to be present but also for ownership to be transferred” (p. 7). In the same strand, McBrien, Jones, and Rui (2009) shed light on the fact that “online learning offers students the potential for more self-directed learning opportunities and flexible structures for engagement” (p. 3). The increased levels of student engagement in virtual schooling boost students’ learning autonomy. McBrien, Jones, and Rui (2009) also found that “the synchronous online system created opportunities for more advanced conversation and learning opportunities than might occur in a traditional classroom” (p. 10).

Student engagement is an important factor in learning *at any level*. Hornik and Thornburg (2010), whose research focused on the subject of post-secondary accounting, advocate that student engagement may be enhanced through the use of technology, including virtual environments such as *Second Life*. Moreover, “lack of engagement may not be a student problem but an instructor or instructional design problem” (p. 362). In the case of instructional design, the platform through which the course content is delivered can significantly impact students’ levels of engagement; “for students to be engaged with course content they will need to
feel as if they are immersed in it, as well as feel connected to other students and the instructor” (p. 373).

While the virtual learning environment can impact the disengaged learner, it is not a “one size fits all” situation; different learning styles call for different learning environments. Another factor to be considered is students’ self-efficacy; regardless of the virtual learning environment, this, too, impacts their engagement (Maltby & Mackie, 2009). Furthermore, virtual learning environments provide “…opportunities for early and frequent formative feedback through online assessment opportunities, and it has been argued that feedback has an impact on the process of engagement...” (p. 52).

The virtual learning environment supports students’ engagement in their own learning as “system goals (student acquisition of standardized content) and the learner goals (course completion)” are united (Halverson & Smith, 2009, p 52). Moreover, the virtual learning environment provides an equitable opportunity for all students to succeed (Halverson & Smith, 2009). However, in the case of gifted students who do not require an adult presence to engage in learning, online learning is a more ideal setting (Thomson, 2010). Other special populations that have been identified as having the potential to benefit from engagement in online learning include individuals with disabilities, English-language learners, and at-risk students (E-Learning for Special Populations, 2011) (Repetto, Cavanaugh, Wayer, & Feng, 2010).

Students indicate that engagement in the virtual learning environment is derived from active learning; this may include “application activities (having to apply the concepts to case studies or problem solving); discussion forums about the concepts, labs and group projects,
research papers, and current events assignments” (Dixson, 2010, p.5). To increase engagement, the virtual teacher should strive for learning assignments that engage students with the academic material and his or her and fellow classmates (Dixson, 2010). Virtual instructors should consider course design elements as this can also impact student engagement, including increasing the quality of participation in class discussion (Sullivan, Hamilton, Allessio, Boit, Deschamps, Sindelar, & ... Zhu, 2011).

**Implications for my inquiry.** This particular analysis of literature relevant to my inquiry suggested that the structure and function of a particular virtual learning environment impacts students’ levels of engagement. It shone a light on the notion that student engagement is critical in any educational setting, including the virtual school classroom. With respect to the virtual learning environment, my investigation centered upon virtual school students who utilize the platform known as Moodle.

**Part III: Legitimacy and Viability of K-12 Virtual Schooling**

In recent years, the increase in the number of virtual schools across the country has stimulated questions amongst members of the K-12 educational community regarding the legitimacy and viability of virtual schooling. This particular thread of literature addresses both aspects, which aides my inquiry as it substantiates virtual schooling as an alternative pathway. “Concerns with the quality of virtual K-12 schooling are many: accreditation status, teacher certification, course quality, and assessment of student work are among the concerns” (Glass, 2009, p. 8). Cavanaugh (2009), however, makes reference to the legitimacy of this pathway, stating that “virtual schools in general tend to attract teachers with strong qualifications” (p. 28).
Ten years ago, virtual schools drew primarily honors students who were college bound. Now, America’s virtual schools are drawing students of varying levels and abilities. Through options such as credit and competency recovery, these institutions are enabling states to close the achievement gap. Cavanaugh concedes, however, that existing literature relating to this thread does not offer an abundance of data on all types of virtual schools and all types of students served (Cavanaugh, 2009).

In recent years, it has become evident that “virtual education presents policy challenges to governments at all levels, from local school boards to the federal government” (Glass, 2009, p.1). This factor, however, has not precluded virtual schools from surviving and thriving across the United States; there continues to be a significant growth in the number of students to opt to take one, some, or all of their courses via a virtual school. Interestingly, “recent data reveals “acceptance of online teaching-learning in small amounts, but an increased skepticism of virtual schooling constituting the bulk of a student’s high school education” (p. 6). In terms of school funding, “...the virtual classroom solves many problems facing public schools today, from teacher-qualification issues brought about by No Child Left Behind to questions of how to offer credit-recovery courses and advanced classes without incurring more personnel costs in the face of tightening budgets” (Beem, 2010, p. 21).

Barbour concedes that the length of existence of virtual schooling at the K-12 level, equivalent to that of most post-secondary virtual programs, speaks to the issue of viability. The growth of virtual schooling, now a practical option, has sharply exceeded the amount of existing research on the subject. A more in-depth judgment regarding the legitimacy of K-12
virtual schooling is difficult to attain given that the limited pool of research that has been done on virtual schooling does not have an adequate, representative sample of participants (Barbour, 2011).

**Implications for my inquiry.** A major theme that emerged from this portion of the literature was stakeholders’ varying views on virtual schooling. The federal government, states, and municipalities have a financial interest in the viability of virtual schools. Governmental agencies, educators, parents, and students have an educational interest in the legitimacy of this pathway. This strand provided an additional lens with which to view my acquired data from students.

**Part IV: Student, Teacher, and Administrator Attitudes**

At this juncture, virtual learning is a legitimate form of K-12 schooling across the United States. Davis and Niederhauser (2007) point out that, in 2006, Michigan administrators’ attitudes regarding virtual schooling were such that it led to the institution of a mandatory virtual learning component for all high school students prior to their graduation. The increased number of virtual school programs being added throughout the nation speaks to adults’ attitudes towards virtual schooling. However, there is little research regarding the students’ perceptions of virtual schooling. This relates directly to my problem of practice and the purpose of my inquiry.

Research that is available regarding secondary students’ views of web-based learning indicates that benefits and challenges exist (Barbour, 2008). Included in the items cited as helpful was the plethora of online tools available to them. Difficulties acknowledged by secondary students centered upon technical issues, personal time constraints, and issues
navigating through the course (Barbour, 2008). Perceptions presented by Journell (2010) assert that adolescents see virtual learning as beneficial insofar as they can complete school work in a shorter timeframe than they would in a traditional classroom. Additionally, the level of rigor is seen as less than that of a traditional brick and mortar class. A negative perception included the lack of ability to sit with peers and participate in a group assignment (Journell, 2010). Moreover, there may be a disconnect between the teacher such that the student views the teacher as “unimportant to their learning” (Journell, 2010, p.76).

Teachers’ perspectives on virtual schooling presented by Barbour (2007) support a belief that the course lessons and units are preferred by adolescents when they encompass variety. Moreover, virtual courses are suitable for students to personalize their learning (Barbour, 2007). Virtual teachers view the online classroom as beneficial to themselves and the students in so far as it gives them an opportunity “to overcome the difficulties of limited time and the level of the students’ background knowledge” (Limniou & Smith, 2010, p. 651).

Implications for my inquiry. This particular thread of the literature provides a basis for understanding existing perceptions amongst students, teachers, and administrators regarding virtual schooling. Stakeholders’ perceptions of this form of K-12 schooling include both benefits and drawbacks. Themes that emerge from these perceptions relate to virtual classroom relationships, particularly those between the teacher and student and the student and their peers. I made note of these particular themes when I proceeded to analyze the data obtained from open-ended questionnaires and interviews. I used the research findings to confirm, contradict, or expand upon the existing data regarding students’ perceptions of virtual schooling.
Part V: Brick and Mortar Pedagogy

Recent literature on brick and mortar pedagogy suggests that “the pedagogical challenges of 21st-century teaching and learning — including the enormous impact of new technologies — have redefined what it means to ‘teach well’” (Berry, 2011, p. 29). In fact, “organizational structure and pedagogy are not factors of absolute differences between virtual and brick-and-mortar schools” (McFarlane, 2011, p. 26). In a brick and mortar school, there are particular components of instructional practice that are commonly held and lead to high performance; these elements include “rigor, innovation, . . . and use of evidence for strategic action” (Wilcox & Angelis, 2011, p. 150).

Engaging in evidence-based practice is another major component of brick and mortar pedagogy. It calls for the teacher to make decisions about their instruction based on that which will have the greatest impact on student outcomes. The data then drives the teacher’s classroom instruction. Upon selecting the appropriate classroom practice, teachers continue by following up with progress monitoring to pinpoint students’ achievement or lack thereof (Kretlow, & Blatz, 2011).

Academic rigor requires that teachers “ensure that all students develop the capacity to master content that is complex and challenging” (Matusevich, Katherine, & Hargett, 2009, p. 46). Increased rigor in a brick and mortar classroom stems from the increased use of critical thinking in instructional practice (McCullister & Sayler, 2010). Teachers’ use of questioning in the content area classroom can also bolster the level of rigor. “Appropriate questioning is an important means of differentiation and infusing critical thinking in academically rigorous learning environments” (p. 43).

In an educational context, the term innovation refers to “different and radical methods of
approach of knowledge and teaching” (Anastasiadou, 2011, p. 61). Best practice in K-12 education calls for the utilization of the newly discovered and varied techniques to reach all types of learners. In the brick and mortar classroom, innovation feeds into differentiated instruction, an approach to teaching used to meet an array of learning styles.

**Implications for my inquiry.** This portion of the literature provided a basis for comparing and contrasting pedagogy in the virtual classroom with that which is considered best practice in the brick and mortar classroom. It highlighted some elements of teacher practice which are essential given the structure and function of each respective type of classroom. Two themes that emerged from this portion of the literature include pedagogical relationships and the concept of data-driven decision-making.

**Literature Review Conclusion**

The multiple strands of literature contained in the literature review provided a solid foundation of knowledge regarding existing bodies of work surrounding virtual schooling. Each of the five bodies of literature helped me situate my project in the midst of several larger contexts. These strands enabled me to make better sense of the existing K-12 educational landscape as I proceeded with my inquiry.

**Chapter Three: Research Design**

**Research Question**

My problem of practice investigated how high school students perceive virtual schooling. I explored students’ attitudes towards virtual learning by questioning and interviewing students who are currently engaged in virtual schooling or have recently completed one or more virtual courses since July 1, 2011. I selected this particular sample as the students’ virtual school experiences would be fresh in their minds. Therefore, they were able to provide thorough
responses to my questionnaire and interview questions. I sought to discover students’ views on the advantages and disadvantages of enrolling in a virtual school rather than a brick and mortar school.

My primary question was as follows: What are students’ perceptions of virtual schooling? I envisioned that this research would document a variety of reasons why adolescents favor virtual schooling. My data analysis of the students’ evaluation of their respective experiences provided several emerging themes which reflected adolescents’ attitudes towards virtual schooling. I proceeded to reducing the data into themes through a process of coding. Once themes were identified, I analyzed the implications of these themes on the current and future status of K-12 virtual schooling in America. I presented the data through tables and a thick discussion. Finally, I extracted students’ rationale for utilizing virtual schooling to meet their individual educational goals and needs, including the perceived benefits (Creswell, 2007).

Methodology

Approach. My primary research question and sub-questions suggested a qualitative approach, due to the fact that they aim to examine the experiences of a number of adolescents who are “key players” within a particular shift in schooling choices. In my inquiry, the problem of practice centered on the increased number of adolescents opting to complete some or all of their secondary education through a virtual school as opposed to a brick and mortar school. This was investigated by soliciting the views adolescents hold towards their virtual school experiences. The decision to conduct a qualitative study was based upon Creswell’s (2007) identification of nine attributes of qualitative research. The most notable of the nine attributes
included inductive data analysis and holistic account. This is true of my inquiry because I constructed categories and themes using data, as well as uncovered the so-called “big picture”.

My research questions elicited an array of responses to a number of aspects of virtual schooling (relevance, convenience, teacher and student interaction, etc.). Responses also centered on the value participants place on their respective virtual schooling experiences.

I opted to utilize a phenomenological methodology in my attempt to understand the experience of adolescents who are, or have recently been, enrolled in virtual schooling. Creswell (2007) puts forth the notion that a “phenomenology is one of five methodologies” (p. 9), the focus of which is researching the lived experiences of the participants. A phenomenological study “describes the meaning for several individuals of their lived experiences of a concept or a phenomenon” (p. 57). I described the phenomenon that the participants have encountered in their virtual schooling. In using the phenomenological method, I was able to encapsulate that which the participants have in common.

The project used a descriptive design utilizing inquiry research with a ten-item open-ended questionnaire and a follow-up interview. My goal was to capture attitudes of participants who can be placed in a somewhat similar context (age group). In order to confine multiple experiences and identify emergent themes, I gathered a purposeful sample that was comprised of individuals who “can inform an understanding of the research problem” (Creswell, 2007, p. 125). Thus, students utilized in the study were either presently or recently enrolled in a minimum of one virtual class.

**Site and participants.** The participants included eight adolescents from the Rolling Green Hills
Virtual School\(^1\). The eight students were randomly selected from grades: nine, ten, eleven, and twelve. Two participants were from each respective grade level. No specifications were made regarding the number of male or female participants.

The type of data collected consisted of descriptive terminology. Therefore, the instruments being used were open-ended questionnaires and interview questions. The questionnaire questions (approximately 10 questions) and the interview questions (approximately 10 questions) were created by the researcher to correlate with past research to gain knowledge about the participants’ attitudes towards virtual learning. The participants completed the open-ended questionnaires first, and then participated in an interview via phone. The researcher recorded all responses to the interviews by hand and audiotape.

I selected to obtain my sampling of participants from this particular virtual school because of my familiarity with its administrative structure, policies, and procedures. Given that I have been employed at this virtual school since 2009, I avoided using participants who may have taken one or more of my social studies courses, as well as siblings residing in the same household. Given the distance between my physical location and that of the participants, the questionnaires were completed by the participants via email and the interviews were conducted via phone.

**Data collection.** The data set was derived from eight open-ended surveys and eight phone interviews administered to eight unique adolescents. The questionnaires were emailed to participants after obtaining both participant and parent/guardian consent. I collected my data set during the month of February 2012.

\(^1\) The school has been given a pseudonym.
Data analysis. This investigation rendered a plethora of data in the form of open-ended questionnaire results and phone interview responses. The data analysis entailed thematic coding of the data set from the questionnaires during phase one, and then coding of the interview data in phase two (Creswell, Hanson, Plano Clark, & Morales, 2007). Table 8 illustrates a schedule for items pertaining to data collection and analysis.

<table>
<thead>
<tr>
<th>Action</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mail consent letter</td>
<td>January 20, 2012</td>
</tr>
<tr>
<td>Email questionnaires</td>
<td>Upon receipt of consent letter</td>
</tr>
<tr>
<td>Code data from questionnaires</td>
<td>February 18, 2012</td>
</tr>
<tr>
<td>Conduct phone interviews</td>
<td>February 19-30, 2012</td>
</tr>
<tr>
<td>Code data from interviews</td>
<td>March 1-10, 2012</td>
</tr>
<tr>
<td>Commence DPR</td>
<td>March 10, 2012</td>
</tr>
</tbody>
</table>

The final report took the form of a narrative with contextual descriptions and direct quotes from participants.

This study took approximately two and a half months. In that time, interviews and open-ended questionnaires with the eight adolescents were completed, interviews and questionnaires were recorded, and the collected data from the open-ended questionnaires and interviews was analyzed. The following tasks were completed with the use of both a computer and Microsoft Office software:

1. Data management – Record responses from open ended questionnaires and interviews.
2. Analyze the data - Identify key phrases and themes; code the data obtained.
3. Classifying / Interpreting the data - Determine what themes emerged.
4. Representing the data – Devise a plan for illustrating my findings (thick descriptions, quotes, tables, etc.).

The outcomes of this qualitative research study provided several phrases and themes that were identified by the researcher after administering open-ended questionnaires and conducting phone interviews. A pattern of positive and negative attitudes towards virtual learning was recognized from the data collected from the participants’ questionnaires and interviews. The results of the analysis allowed me to better understand adolescents’ attitudes towards virtual learning.

**Validity and Credibility**

In the paragraphs below, I discuss concerns relating to my biases, reactivity, and reliability. Additionally, I will speak to the issue of limitations. At the onset of communication with selected participants, I strove to ensure that these individuals trusted me. This was essential as I wished for them to provide accurate and descriptive responses on their surveys. Failure to gain this trust could have resulted in a flawed outcome. In order to establish and maintain trust, I reassured participants of the confidentiality of their participation prior to the questionnaire and interview portions of the study.

**My biases.** There are three biases that I had going into this project. The first is that I am employed as a part-time virtual school teacher. The second is that I maintain a full-time position as a brick and mortar high school teacher. The third is that I attended brick and mortar schools through the attainment of my master’s degree; my doctoral program, however, has involved virtual coursework.

With regard to the first bias stated above, I have been working as a part-time virtual
school teacher long enough to form my own opinions on the strengths and difficulties of this type of schooling. I had to be cognizant of these personal opinions so as to not allow them to cloud my interpretation of the data. The second bias, teaching full-time in a brick and mortar school, comes from the fact that I have formed my own opinions on the strengths and difficulties of this traditional form of schooling. Thirdly, my exposure to virtual learning as a student in the Northeastern University doctoral program altered my perceptions on the individual benefits and difficulties of virtual schooling as well. Again, I needed to avoid letting my own personal experiences taint the data during the analysis phase of the project.

**Reactivity.** Since my participation was limited to obtaining consent and collecting questionnaire and interview data, I did not foresee reactivity as an issue in this study. Participants did not know me other than the fact that I was identified as a Rolling Green Hills Virtual School instructor. Moreover, the participants were not former or current students in any of my social studies classes.

**Reliability.** In order to ensure the reliability of the analysis of the data, I used a single method of open coding throughout (Creswell, Hanson, Plano Clark, & Morales, 2007). The method was replicated in phases one and two. The relevant pieces of data were recorded exactly as they appear in the questionnaire or interview. The participants were required to respond to all items contained within the questionnaire. I used member checking to insure that I interpreted responses correctly.

**Limitations.** The scope of this project was in fact limited in that my participants are from one virtual school located in the United States. Due to the fact that my participants share a
common region, they also share a host of other characteristics. Thus, the adolescent attitudes that I uncovered through analyzing the data may be specific to this region, or even the state in which it is located. In addition, due to the small sample size, transferability to other programs should be cautioned.

Protection of Human Subjects

Participants in this study were not exposed to any real risks as far as I can determine. Adolescents who took part in my investigation were not identified in any way other than gender or grade level. All participants under the age of eighteen provided parent/guardian consent. Participation was voluntary and individuals could withdraw themselves at any time.

In November of 2011, I submitted my research proposal to the Northeastern University Institutional Review Board (IRB) and received approval to implement the research project described in this proposal on November 28, 2011. One request to amendment to my protocol, was approved on January 9, 2012. Consent was obtained using the form contained in Appendix A. In the consent forms, I requested participants’ consent and parent/guardian consent to collect and analyze their adolescents’ questionnaire and interview results.

Conclusion

This doctoral project design illustrates how the investigation – a qualitative study, using a phenomenological approach, regarding adolescent attitudes towards virtual learning – provides a unique perspective to answer to the problem of practice, adds to a field that lacks in literature, and provides insight into the need to provide access to this particular alternative pathway. The results of my inquiry are not intended to be the final word on students’ attitudes
regarding virtual schooling, but rather to stimulate further conversation regarding the matter.

Chapter Four: Report of Research Results

Overview

The focus point of this study was adolescents completing their high school education either partially or completely through virtual schooling. The students who participated in this study came from a single virtual school in the United States that caters primarily to middle and high school students. Any high school student wishing to attend this particular virtual school can gain admission on a rolling basis; it is free of charge to all high school students who live within the state. Students utilize this virtual school to gain credits, to recover credits, and to pursue dual enrollment/college credits. It is also an option for any student who has dropped out of high school and wishes to earn a high school diploma.

The virtual school, which obtains enrollments through both advertising and referrals from local school districts statewide, offers both full and half credit courses. Any resident of the state can enroll on a part-time basis. However, students who wish to be enrolled on a full-time basis must have successfully completed one or more half-credit courses as a part-time student with a 70 percent final average or better. Full-time students take six credits per year; part-time students may take up to four classes (either half credit or full credit) at one time but no more than six credits per year. There are no definitive quarters or semesters; students work in their courses twelve months per year. It is expected, however, that half-credit courses are finished in eighteen weeks and full-credit courses are completed in thirty-six weeks. Definitive course completion dates are catered to the individual student.

Instructors must be certified in the state that the school is located in, though not all instructors live within the state. Course content is purchased from vendors as well as other
virtual schools; instructors are not permitted to edit the course(s) they teach. Instructors and students communicate with each other via email, text, telephone, and instant messenger. At a minimum, instructors speak with students and their parents once per month to convey information about the student’s progress. The school’s web-based course management system allows students and parents to view students’ grades at any time. School policy affords students a second attempt on all submissions with the exception of the final exam. In order to take the final exam, students must achieve a 75 percent or higher on all course competency lessons; these are lessons with essential skills that must be mastered in any given course.

Embedded within each of the virtual courses at this school are at least one collaborative lesson. Students are instructed to use the forum on the course page to attain a partner. Factors that impact this process include the number of students in the class, the pacing of each of the students in the class, and the willingness of students to work with someone they do not know in a virtual space. At times, instructors may intervene if students are unsuccessful in finding a partner. However, it is generally the responsibility of the student to do so. Working together on a collaboration assignment requires that both partners be online simultaneously --- at least at the onset ---when specific tasks are determined and apportioned. The remainder of the collaboration could be done via either email communication or Google docs.

In an attempt to meet the socialization needs of full-time virtual students, the school recently started creating some student activities and clubs. At this point, only a few exist and they meet virtually.

Student Profiles

Introduction

The eight adolescents in this study were Martha, Alexander, Zoey, James, Suzanna,
Juliet, Samuel, and Michelle\(^2\). As mentioned in the overview, they all presently attend, or have recently attended, the same virtual school in the United States. Martha and Alexander are both in grade twelve. Zoey and James are eleventh graders. Suzanna and Juliet are presently in grade ten. Samuel and Michelle are both freshmen.

The eight high school students were selected randomly from the entire student population of a virtual school in the United States. The selection criteria were that the participant would have taken one or more virtual courses and be enrolled in grades nine through twelve. Students (and their siblings) whom I had previously instructed were excluded from the random sampling. This was done to avoid a conflict of interest and to prevent skewed results.

The results are divided as follows: descriptive profiles of the eight adolescents and emergent themes based upon the eight adolescents’ attitudes and perspectives. In the next section, the adolescents’ backgrounds and attitudes towards virtual learning are shared in their own words. Adolescents’ specific experiences and beliefs in the context of their virtual school experience are presented as they emerged from the data. In addition, a synthesis of key results that emerged from the data will be provided. The data demonstrated positive and negative attitudes that adolescents hold towards virtual learning.

The adolescents’ profiles in the study are offered from the oldest grade level to the youngest grade level. No particular attention is paid to age, gender, ethnicity, or race in the presentation of the data.

**Research Questions**

**Introduction**

Eight adolescents in grades nine through twelve were given an open-ended questionnaire

\(^2\) All participants have been given pseudonyms.
and interviewed to gain understanding of their unique perspectives regarding virtual schooling. Each described specific reasons why they have or had taken virtual courses. They identified both benefits and drawbacks regarding their respective virtual schooling experiences. In this section, the key results will be discussed using each adolescent’s unique experience, which will provide insight into the phenomena pertaining to adolescent attitudes regarding virtual schooling.

**Overarching Research Question: What are students’ perceptions of virtual schooling?**

**Students’ rationale for utilizing virtual schooling.** Adolescent participants offered five reasons for taking virtual courses: lack of credits, lack of course availability at their brick and mortar school, inability to physically attend a brick and mortar school, the desire to pursue career interests, and a needed alternative to home schooling. Based upon students’ rationales for taking virtual courses, the perceived benefits of virtual schooling include the following aspects: access, choice, individualization, and convenience.

**Lack of Credits**

Participants revealed that virtual schooling was a means to obtain or make up missing credits needed for graduation. The data revealed that students were able to select a specific required or elective course from the virtual school catalogue and register. The fact that virtual schooling affords this opportunity to adolescents was a clear-cut reason that emerged from the data.

Adolescent number four, James, is a sixteen-year-old male student in grade eleven. James has been enrolled in a brick and mortar school since kindergarten. He currently takes a full load of courses during the day at his local brick and mortar school. Due to the fact that he is missing credits towards his high school diploma, James decided to take virtual classes this year. He noted that “my guidance counselor informed me which credits were missing, and then I went
ahead and registered for those courses online” (interview 4, p. 2). In order to be considered a senior in the fall of 2012, James must pass each of his virtual courses.

Suzanna, a sixteen-year-old female student in grade ten, has been engaged in virtual schooling since the end of her freshman year. After one year in a brick and mortar high school, Suzanna experienced health problems that kept her out of school for a long period of time. As a result, she fell behind in her work and failed to gain needed credits for graduation. In order to make up the credits, she enrolled in virtual schooling. Due to the fact that Suzanna continued to be plagued by illness, she did not return to her brick and mortar school but continued taking virtual courses. Suzanna noted that she “fell behind with schoolwork and did not gain all the needed credits for graduation. In order to make up the credits, I enrolled in virtual schooling” (interview 5, p. 2). Although she is currently only a bit behind in her total credits for graduation, Suzanna acknowledged that it is unlikely she will be physically able to return to her local brick and mortar school next fall.

As a result of Juliet’s chronic health problems, she has been out of her brick and mortar school for a long period of time. Presently, she is missing two semesters worth of credits. She remains physically unable to attend her brick and mortar school. Though she was previously a full-time brick and mortar school student, Juliet has now turned solely to virtual schooling in order to gain credits needed for high school graduation. Juliet offered that “virtual school will let me make up the work and the credits, and I can work through the summer to make up the credits” (interview 6, p.1).

Lack of Course Availability

When participants wanted to, or needed to, take a particular class at their brick and mortar school, it was often unavailable to them. Either the course was full, was not offered at all,
or did not fit into the student’s existing course schedule. Opting to enroll in a virtual class gave adolescents an opportunity to take a course when they desired. Data indicated that virtual schooling eliminated the need for adolescents to hold off on certain desired electives due to lack of access during the semester or school year.

Alexander, an eighteen-year-old male student in grade twelve, has been a full-time student at his local brick and mortar high school for the duration of his high school career. At the beginning of his senior year, Alexander realized he did not have room in his schedule for a desired course. The course was available in the school, but not to him as an individual student due to other courses in his schedule. In order to be able to take this desired course, Alexander turned to virtual schooling. Alexander commented that “I am glad I could take the class online because it was the only way it was available to me this year. If I did not have the virtual school, it would mean I would have had to miss out on this class” (interview 2, p 1).

Zoey, a seventeen-year-old female student in grade eleven, is a full-time virtual student and has been throughout the duration of her high school career. Zoey has taken most of the core requirements to attain a diploma and is now taking some electives to pursue career interests. She enthusiastically noted that being able to take these elective courses has been a wonderful experience for her. Virtual schooling has offered her an array of courses to choose from each semester. Zoey stated that “I’m not sure I would have been able to take these electives if I went to public school. They do not even have all of these classes there” (interview 3, p. 2). Zoey went on to note that she is focused on getting into college. “These electives are courses that will be beneficial in college. Many of the electives are not currently offered at my local public school” (interview 3, p. 2). To date, Zoey has enjoyed taking whichever courses she prefers, and in the order (semester or year) that she chooses. There is never an instance wherein she is dropped or
bumped out of a class she wants. When it comes time to register for classes, Zoey never worries about what the outcome of the scheduling process will be.

**Inability to Physically Attend a Brick and Mortar School**

The data indicated that adolescents suffer from an array of health issues, some of which physically prohibit attendance at a brick and mortar school. While home tutoring was an option through the local public school district, it was often limited. Enrolling in a virtual school enabled adolescents to pick up their full-time academic course load despite being confined to their home. In the case of extended or long-term recovery, adolescents were able to maintain their academic standing at the brick and mortar school by taking virtual courses.

**Desire to Pursue Career Interests**

Adolescents with a particular career interest turned to virtual schooling to engage in courses that would bolster their knowledge base in a particular field. If the brick and mortar school offered just an introductory course (or no course at all), adolescents chose to continue to follow their interests via virtual classes. Data indicated that this was especially desirable when adolescents felt certain of their career choice and/or college major.

**Alternative to Home Schooling**

In situations wherein families utilized home schooling, adolescents and their parents selected virtual schooling as a curricular replacement beginning in grade nine. The complexity of the content, particularly in math and science, required more depth of knowledge on the part of the instructor (ex. the parent). As a result, parents overseeing the homeschool curriculum could not manage the increasing difficulty of the material. Rather than returning to the local brick and mortar school, adolescents turned to virtual schooling. Coursework could still be done at home.
and parents could still monitor adolescents’ progress. However, the instruction fell into the hands of a knowledgeable content-area teacher.

**Perceived Benefit 1: Access**

Data collected indicated that adolescents favored the access that was provided to them via virtual schooling. If and when they needed to take a single course or multiple courses, it was not problematic for them. Time, place, and availability were never an issue. Adolescents were not fearful of whether they would be able to get into and finish a class in advance of their brick and mortar school’s deadline for advancement or graduation. The option to take whatever they needed was always available to them.

At the beginning of his senior year, Alexander realized he did not have room in his schedule for a desired course. In order to be able to take this particular course, Alexander turned to virtual schooling. Even though he has a very full plate, Alexander noted that the flexibility of virtual schooling has enabled him to tackle it all simultaneously.

Zoey commented that virtual schooling enabled her to take courses that would prove beneficial in college. Many of these same courses were not offered at her local brick and mortar school. To date, Zoey has enjoyed taking whichever courses she prefers, and in the order (semester or year) that she chooses. There is never an instance wherein she is dropped or bumped out of a class she wants.

**Access to Schooling When Brick and Mortar Is Not Possible**

In more than one instance, participants cited the access that virtual schooling offers as a key benefit. Suzanna stated “my health issues were bad enough that I ended up in the hospital a number of times…there was no way I could go to school like my classmates did, so I started taking virtual classes” (interview 5, p.2). Juliet confirmed similar sentiments as she noted,
“it has been difficult dealing with a chronic illness…this condition is something that cannot be cured and eventually I will need a transplant…the pain is too severe to actually attend school and I am constantly going to doctors appointments anyway…so I would miss school for that reason too” (interview 6, p. 2).

In Michelle’s case, she could physically get to her brick and mortar school and attend classes. However, the anxiety she deals with crippled her inside the school building. She commented that,

“on most days, as soon as I got to school, I would kind of freeze up…I could not talk to my classmates or my teacher the way other kids could…I did not want to stay in the classroom at all so my grades were bad…and when I was in class it was still hard to get work done because I missed a lot of what the teacher said” (interview 8, p. 2).

In each of these circumstances, virtual schooling provided adolescents access to schooling when brick and mortar schooling was truly a physical impossibility. Without this accessibility, these students would not be able to gain the credits needed to attain a high school diploma.

**Access to Courses When/If Desired**

Adolescents referenced the accessibility of virtual schooling on several occasions. Zoey, who has only had virtual teachers, commented “my teachers are always just an email or IM away…they are on Blackboard and email, or the phone, so it is easy to get in touch with them, and it is not just during the day either” (interview 3, p.2). She added “I know I can always take the class that I want because they are never full” (p.2). In Alexander’s case, he claimed,

“I could not get the course I needed because of my schedule…it did not fit…but with virtual schooling I can get the class to fit my schedule and get it done on my time….some days I need to be able to do my virtual classes right after school, but other days I cannot
sit down to work on them until after dinner or later” (interview 2, p. 2).

Michelle commented that accessing her virtual teachers is easy and that they are always just an email or IM away. She shared that “my instructors are available on Blackboard during their office hours, and sometimes other times too…” (interview 8, p.2). James, who admitted his preference for doing things on the computer, noted that, in the virtual classes, everything gets done online and on the computer…you use the Internet and submit your work on the computer…you do not have to be at school or library…as long as you have the Internet you can get your work done…I can go on at night and submit the work even if my instructor is not online” (interview 4, p. 2).

In each of these cases, the ability to access their courses when and if they desired was viewed as beneficial. Having the control to access was a key factor particularly when students’ schedules varied.

Perceived Benefit 2: Choice

Adolescents favored the ability to choose their course offerings. They also enjoyed having the choice of “where, when, and how” they would complete their coursework. It was beneficial to be able to choose the time of day in which to work, as well as the venue. In separate circumstances, adolescents chose to work at home, during an assigned study period at their brick and mortar school, or on the road.

Martha really liked the option to be at home to complete required coursework on her own terms. Given the fact that Zoey is heavily involved in acting and dancing, the ability to complete her high school diploma online has been a godsend. There are many days were she is traveling to and from lessons, auditions, and rehearsals. James noted that he was glad he had the flexibility to take the online courses because everything is done on the computer. Without the
virtual classes, James probably would not be able to graduate on time with his class next spring. While he acknowledges that it is a lot to balance, James stated that the flexibility has allowed him to even balance a part-time job in addition to his brick and mortar and virtual courses.

Suzanna has spoken with her physicians about her long-term prognosis. Although she is currently only a bit behind in her total credits for graduation, Suzanna acknowledged that it is unlikely she will be physically able to return to her local brick and mortar school next fall. Therefore, she will likely complete the remainder of her high school education through virtual schooling. As such, she is glad to have a flexible alternative such as virtual schooling in order to complete her high school education.

**Flexibility With Pace & Time/Time of Day**

Participants conveyed that they favored being able to dictate the time of day that they worked on their schoolwork. They also relished the opportunity to control the pace at which they completed their own lessons. In some instances, students preferred a morning work schedule; others sought to tackle lessons in the afternoon and evening hours. In the case of students who were balancing virtual courses with their brick and mortar courses, the flexibility was especially important. Alexander noted, “without virtual school, I would not have been able to get it all done….” (interview 2, p. 3). James echoed a similar sentiment as he commented “I can do my virtual lessons when I’m ready…at home…and it does not matter what time I sit down at the computer…” (interview 4, p.3).

Juliet explained that taking virtual courses differs from the experience of taking a course in traditional school because there is a great deal of student choice. The student can determine the schedule, the place, and how much work gets done that day or in that one sitting. She added that “I really enjoy working at my own pace, and working at whatever time of day that I feel like
working” (interview 6, p. 2). Juliet commented that she regularly scheduled her day based upon what else she had planned. In many cases, the other plans involved seeing specialists or going to follow-up appointments at area doctors’ offices.

Samuel favored the option of working on courses in the morning, and then partaking in activities during the afternoon. His regular schedule included schoolwork from 9am until 12 noon. Noting his involvement in Boy Scouts, he stated, “…the troop activities and meetings are all in the afternoon. I go to those after I get my work done in the morning” (interview 7, p. 2). Most of Samuel’s friends are also enrolled in virtual schooling, or they are transitioning to virtual schooling after being home schooled for several years. Samuel gets to socialize with these individuals through Boy Scouts as many of them are in his troop. His friends follow a similar virtual school schedule as well.

In Michelle’s case, her mental health status determines her daily school schedule. Every day is still somewhat of a challenge, even though she is no longer attending her local brick and mortar school; some days are good and some are bad. Based upon on her daily status, she and her parents determine the time of day that is best for her to complete her coursework. This flexibility that comes with virtual schooling has been a gift for Michelle because it accommodates her individual needs. Given this level of flexibility, Michelle quickly noted that “I am doing much better with my virtual schoolwork and I actually enjoy doing it. If I’m having a bad morning, we just push the schoolwork back until a later time…” (interview 8, p 2).

**Perceived Benefit 3: Individualization**

Data revealed that adolescents relished the individualized nature of virtual courses. It was preferable to be able to select the pace at which one worked, complete assignments based on one’s personal schedule, and select the courses that would be taken that particular semester or
school year. Adolescents particularly enjoyed the pacing element of virtual schooling; they did not like having to wait for others, as is often the case in a brick and mortar school.

Twelfth grade student Martha conveyed a strong desire to have control over her own education, particularly when it came to pacing. She stated, “it is important to me that I can do school when I want to do school…that time might be in the afternoon sometimes and in the evening other times…it depends…but at least I know I can do my work when I want to…that was not the case at my brick and mortar school” (interview 1, p.2).

In Suzanna’s case, she enjoyed having the ability to control the pacing aspect of her learning. When I asked her to elaborate, she noted that, “I can read through a lesson and possibly even finish the assignment quickly enough to get in several more…I can finish my courses more quickly than I would if I were at my regular school because I can continue when I am ready to move on and do more”.

(interview 5, p. 2)

In addition, Juliet also pointed out that in the case of virtual schooling, “you can choose the pace that you would like to work at, and the time of day that you prefer to do your work” (interview 6, p.3). In each case, without the flexibility of pace and time/time of day, the adolescents would not be able to gain the credits needed to attain a high school diploma.

Michelle has maintained a set schedule for working in each of her classes; she completes one assignment in each course each weekday. Michelle makes exceptions to this set schedule if and when her anxiety becomes problematic on any given day or week. Moving along at this pace has given her a sense of accomplishment. Michelle feels like she can handle her academics now. Michelle is a determined young lady who admits “I am good at accomplishing goals once I
set them. I always work hard and try again if I do not do well on an assignment the first time around” (interview 8, p 2).

**Individualized attention and responsiveness**

Another element of virtual schooling that participants conveyed as being beneficial is that of individualized attention and responsiveness. Martha contended that “virtual schooling works for me as a learner…and it is not as strict with deadlines and due dates for work” (interview 1, p.3). In Zoey’s case, she offered,

“I take these elective courses that are so interesting…it is great because I can pick what I am interested in and I get to choose…my schedule is made up of what I want to take…I know these courses will be helpful to me in college and this will give me a head start” (interview 3, p. 2).

Samuel made it clear that he liked the option to redo his assignments. He informed me that,

“If I do not do well on a lesson, I can redo that and get a higher grade…sometimes I just want to get the work done so I do not read all of the directions or the rubric…that is where I lose points mostly…the lessons I did not do well have a note written from the instructor telling me what I forgot to do or what I missed” (interview 7, p. 2).

Alexander stated that while he did not have daily interactions with the virtual teacher, there was a continuous flow of communication. In some cases, that interaction took place via Google chat or email. Regardless of the time and place, Alexander stated that he felt like he received individualized attention and feedback when applicable. While he did not state a preference for either virtual or brick and mortar schooling, Alexander made it clear that both became a necessity for him this year. Alexander contended that, “I get one-on-one attention from my virtual teacher because it is just me…it is not like having twenty other students there to
deal with at the same time” (interview 2, p.3). This responsiveness bolstered Alexander’s ability to be successful in his coursework.

Michelle often contacts her instructors individually when she is online doing her coursework. If the instructor is available at that particular time, Michelle can get a personalized response to her question. It will also be possible to work through a problem on a virtual whiteboard using the features built into Blackboard IM. Michelle noted that while there may be a slight wait time, it is nice to get an individual response via email. Michelle is determined to complete high school and move on to the local community college. In fact, she notes “this is one of the goals in my individualized education plan” (interview 8, p 2). While school has never been easy for Michelle, it is no longer a major contributor to, or source of, anxiety. Virtual schooling has allowed her to work in an environment that minimizes the onset of anxiety attacks. The setting allows for individualized attention from the teacher, but in a format that does not contribute to additional anxiety. As a result, she can complete work and continue her education. Michelle recognizes that this probably would not have been possible if she remained in her brick and mortar school.

Samuel enjoys his virtual courses, although he admits that mathematics has been very challenging this year as the concepts have gotten more difficult. His mom is not always able to assist Samuel in this particular subject area. When working on this subject, Samuel has sought out the individualized attention of his math teacher. He noted “if it takes an hour, she (the teacher) will stay on Blackboard with me and help me solve the problem” (interview 7, p 3). Given this 1-on-1 approach, Samuel can work through his math lessons at a speed that works for him. Along the way, he gets an individualized response from his teacher and that enables him to work through the content successfully. Samuel commented that “sometimes I need a long time to
work through my math lessons, and I need to have help from the teacher without any distractions” (interview 7, p 3). Also, because he sometimes rushes through lessons, he needs to redo certain items. In these instances, Samuel requires personalized feedback to “understand what he did wrong”. He then uses that feedback to redo a particular item and get a higher grade.

Martha pointed out that the coursework and required number of courses is similar to that of a regular school. There are a few exceptions, however. Martha also alluded to the fact that virtual schooling does not allow for the same amount of regular contact with teachers; it does not require precise deadlines; and it “does not require work to be done with paper and pencil” (interview 1, p 1). Noting her strengths as a learner, Martha concurred with the notion that the nature of virtual schooling has worked for her as an individual. She prefers her virtual schooling and deems it to be a better learning environment for her.

**Perceived Benefit 4: Convenience**

Adolescents noted a particular preference for the fact that they could work at a time that was suitable for them. While the early morning hours were not preferable, tackling courses in the afternoon or evening regularly occurred. In addition, if the coursework did not get completed on any one particular day, adolescents accomplished these tasks on another day that worked better for them. This did not result in any “lateness” or penalty. In fact, data indicated that adolescents found virtual schooling much more convenient than a brick and mortar school could or would be.

James pointed out that in his brick and mortar school experience, he had a hard time meeting the deadlines that were put in place by his teachers. In the case of his virtual schooling, James felt he had an easier time “getting work done when it was supposed to be done” (interview 4, p. 2). He could get his work done within the weekly timeframe provided to him. James
commented that he was much more successful in getting his virtual assignments completed and submitted due to the extended time in which he had to complete his work.

Suzanna noted that “students are able to do their virtual schoolwork at any time of the day or night; there is also the option to do as many lessons as one wants at one time”. She cited the convenience of completing the work based around her weekly medical appointments. Juliet commented that she regularly scheduled her day based upon “what else she had planned” (interview 6, p 2). In many cases, the other plans involved seeing specialists or going to follow-up appointments at area doctors’ offices.

Since moving to virtual schooling, Michelle has maintained her own set schedule for working in each of her classes; she completes one assignment in each course each weekday. Michelle makes exceptions to this set schedule if and when her anxiety becomes problematic on any given day or week. Having her own schedule gives Michelle a sense of accomplishment. Michelle feels like she can “handle her academics” now (interview 8, p. 2).

Due to the fact that Samuel has not attended a brick and mortar school since pre-K, he does not have a preference for either that or virtual schooling. He did convey a preference, however, for virtual schooling over a home school curriculum. Given the fact that his mother monitors him, Samuel does not have the opportunity to get behind on his work. Also, he knows that his mother regularly communicates with instructors to gauge his progress. In some classes, he does rush through things from time to time, so it is beneficial for him that he has the chance to redo items and get a higher grade; the only exception is the course final exam. Having the option to redo assignments has provided a convenient opportunity that has aided Samuel to keep his grades up in each of his courses this year.

Juliet wishes that she could be back in a brick and mortar school, but acknowledges that
she has “physical limitations” that prevent this from happening. She is, however, “grateful to have virtual schooling as an alternative” (interview 6, p 2). She deals with an extensive amount of persistent physical pain, but can still attend virtual classes and further her education.

**What do adolescents view as the disadvantages of virtual schooling?**

**Negative elements of virtual schooling.** The data analysis uncovered three elements that adolescents deem to be disadvantages of virtual schooling: teacher access & willingness, difficulty with collaboration, and that it requires more self-motivation.

**Teacher Access & Willingness**

Participants cited a lack of teacher access and willingness when it came to their virtual schooling experience. In her interview, Martha stated,

“I feel uncomfortable asking anything with my virtual teachers because in the past some of them did not seem willing to help….It seemed like I was being a bother to one teacher, so I started asking classmates rather than my instructor…I know that it was not the best idea but it was easier for me” (interview 1, p. 3).

She admitted feeling uncomfortable asking questions of her virtual teachers, particularly because some of them gave her the impression they did not want to answer questions. Suzanna indicated that in her experience,

“I have found that there are some flaws (mistakes) in the courses and this makes it difficult for the teachers to be able to answer questions….I have had a couple of virtual teachers who did not know their course very well either” (interview 5, p 2).

Each of the courses has been purchased from a vendor, so the instructors at her virtual school do not do the course design. This factor has made it difficult for all of the teachers to answer specific course questions.
Michelle noted the drawback of access to virtual teachers as she noted that hers are “all online at a different time” (interview 8, p 3). She found it hard to have to wait for them (instructors) to get back with an answer to a question. Michelle noted that it is somewhat frustrating waiting for a response via email; that can take up to 24 hours even if it is a quick question. Samuel echoed similar thoughts when he said “math has been harder and my math teacher is not always on Blackboard when I am working” (interview 7, p. 2). In both math and science class, Samuel relies heavily on clarification and feedback from his instructors. However, there is often lag time that Samuel has become accustomed to in all of his virtual courses. Math has been very challenging this year; the concepts have become more difficult and the math teacher is not always online to explain concepts when Samuel is working on math.

Juliet commented that, on the issue of communication, one does not always get an immediate response from his/her instructor; there may be a delay between when you are working and when the response is received. Juliet found this to be a drawback as it sometimes prohibited her from proceeding to the next step in a particular lesson.

In both math and science class, Samuel relies heavily on clarification and feedback from his instructors. He has found that his social studies and English instructors are both very accommodating in this regard. However, there is often “lag time” that Samuel has become accustomed to in all of his virtual courses. This can result in a wait time of 24 to 48 hours before he “hears back” from the teacher.

In terms of her virtual teachers, Martha conveyed that she did not converse with them very much. This lack of conversation was not conducive to a deep student-teacher relationship. Additionally, she stated “I have not had much background information about my teachers” (interview 1, p 1). She admitted feeling uncomfortable asking questions of her virtual teachers,
particularly because some of them gave her the impression they did not want to answer questions. Martha expressed having a much stronger relationship with her brick and mortar teachers, even in courses she did not enjoy very much.

**Difficulty With Collaboration**

Several participants found that the collaboration aspect of virtual schooling was difficult to deal with. In particular, James was quite troubled by the difficulty of collaborating. He claimed that he did not like the collaboration assignments as he stated that,

“….it made me wait a couple of weeks to get a partner…it kind of wasted my time….I could have been doing other lessons or other stuff while I was waiting to get a partner for the collaboration…I posted to the forum and waited and waited…” (interview 4, p. 2).

James contended that the required collaborative assignments took up a great deal of time because of the need to wait for a partner. Suzanna noted similar feelings of discontent when she stated that she “did not like the emailing back and forth with a partner and completing collaboration assignments…” (interview 5, p 2). Alexander had an experience similar to that of James; he admitted that,

“the collaboration assignments have been tough…it took me months to get a partner and then another couple of weeks to do the work…I had to post a couple of times on the forum and then ask my instructor to help me find a partner because no one wrote back to me” (interview 2, p. 3).

Zoey commented that while she enjoyed “talking to classmates during the collaboration assignments” (interview 3, p. 2), it did tend to be a long process from start to finish. She continued on to note that “once you get a partner, if the other student’s schedule is not like yours, it can take weeks to get it done” (p.2). Based upon these students’ experiences, it is apparent that
the difficulty associated with collaboration assignments is a drawback of virtual schooling.

Citing her ability to get through a couple lessons at a time in each of her classes, Suzanna said that she considers herself a very productive student. Despite this, Suzanna explained that she “disliked the constant email tag” that often accompanied the completion of collaboration assignments (interview 5, p. 2). She attributed this back and forth emailing to the fact that students are not always online at the same time. This makes it difficult for them to work together in an online space simultaneously.

Martha disliked the idea of collaborating altogether with peers. She really liked the option to be at home and complete required coursework “on her own terms”. Martha commented by saying “I do not like to do collaborative assignments because I am working on my own and that works for me” (interview 1, p 2). She went on to suggest that the time it would take to find a partner and actually do the collaborative assignment would hinder her overall progress towards completion of the course.

**Requires More Self-Motivation**

In several cases, adolescents indicated that virtual schooling is in fact more difficult than brick and mortar schooling. Additionally, they revealed that it requires more independence on the part of the individual student. Martha offered that,

“virtual schooling has worked for me because I am determined and ambitious…I’ve always been that way…. eventually I get everything done that needs to be done…I know what I have to do and it (my work) gets completed each week” (interview 1, p 3).

Acknowledging that he is not the most motivated student when it comes to academics, James cited that it was a disadvantage for him that all the motivation rests on his shoulders. As such, he found it difficult that there was no adult standing over him to remind him to get assignments
done. James noted that “all the motivation is up to me…. no one is standing over my shoulder making sure I do my lessons” (interview 4, p. 3). Suzanna strongly cautioned that,

“virtual schooling is great if you are able to discipline yourself and make sure you get a certain amount of work done each week…if you do not get the work done you will fall behind in the course…if you do not submit your work each week you can get suspended or even dropped from the class, and that goes on your transcript” (interview 5, p. 3).

Michelle does not necessarily have to worry about the independence factor because her parents “monitor” and support her. The same is true in Samuel’s case as he has the benefit of his mother. He admitted that “she (Mom) watches me and sees the lessons I am working on at home” (interview 4, p. 3). If there is no parent or guardian directly overseeing the virtual coursework, the student must be able to complete lessons independently throughout the week. As a result of these students’ responses, it can be said that the requirement for more self-motivation is a disadvantage of virtual schooling.

Suzanna cautioned that virtual schooling is not for everyone, as it requires some degree of independence and responsibility on the part of the student. She added, however, “it also gives students the opportunity to feel more responsible for their own education” (interview 5, p. 2). Samuel added that the reason he is able to keep up with his courses is because his mother monitors him. Samuel does not have the opportunity to get behind on his work as a result. He admits, though, that without this support from his mom, he probably “would not be able to stay on track with his courses” (interview 7, p. 2).

Alexander reported that he has been quite successful in the completion of his virtual coursework despite having a plethora of commitments. He added that it is due to his “type A personality and work habits” (interview 2, p. 2). Alexander acknowledged that he is a very
driven individual and tackles a plethora of items at once. Alex commented on his willingness to finish everything he starts, especially when it has to do with his academics. Without these personal attributes, Alexander may not have been as successful in his virtual course. He contends that these aspects gave him the self-motivation needed to complete and submit necessary assignments in a timely fashion.

**Summary of Research Results**

This study examined adolescents’ attitudes towards virtual learning while enrolled either part-time or full time at a virtual school in the United States. The results indicated that adolescents believe there are four benefits to virtual learning: flexibility with place & time/time of day, access to schooling when brick & mortar is not possible, access to courses when/if desired, and individualized pacing/coursework. Additionally, adolescents believe there are three disadvantages to virtual learning: teacher access & willingness, difficulty with collaboration, and requires more self-motivation. Each adolescent shared his or her own perception regarding the phenomena reported. The overarching research question was *what are students’ perceptions of virtual schooling?*

As a result of this study, the findings reveal that virtual schooling is most beneficial for a certain population of adolescents. This group would include homebound adolescents, academically driven adolescents, and adolescents determined to recover credits needed for graduation. This was found to be particularly true in the case of students with chronic illnesses. The data suggests that these populations would be most successful in a virtual school setting. Alternatively, virtual schooling may be the least beneficial avenue for adolescents lacking adult or parental support, adolescents who are unwilling to work with peers in a virtual space or have some level of social anxiety, and adolescents who require constant and
immediate instructor feedback to maintain their efforts in a course. The data suggests that these populations would be least likely to be successful in a virtual school environment. With the proper supports and/or modifications, it may be possible to move perceived difficulties into the category of perceived benefits. Additional teacher support and an enhanced home/school connection may prove beneficial, as well as possible modifications to the structure and process of collaborative assignments.
### Table 7: Overarching Research Question Results

<table>
<thead>
<tr>
<th>Codes</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor atmosphere and educational experience at the brick and mortar</td>
<td>Flexibility with place &amp; time/time of day</td>
</tr>
<tr>
<td>Be at home and “do school”</td>
<td></td>
</tr>
<tr>
<td>Flexibility comes with doing virtual school</td>
<td></td>
</tr>
<tr>
<td>A great deal more flexible than regular school</td>
<td></td>
</tr>
<tr>
<td>I really enjoy working at my own pace</td>
<td></td>
</tr>
<tr>
<td>Work at whatever time of day I feel like working</td>
<td></td>
</tr>
<tr>
<td>Any time, any place</td>
<td></td>
</tr>
<tr>
<td>For convenience sake</td>
<td></td>
</tr>
<tr>
<td>Health problems that kept me out of school for quite a while</td>
<td>Access to schooling when brick &amp; mortar isn't possible</td>
</tr>
<tr>
<td>Significant illness</td>
<td></td>
</tr>
<tr>
<td>Due to my health, later day is better</td>
<td></td>
</tr>
<tr>
<td>Not healthy enough to go to school</td>
<td></td>
</tr>
<tr>
<td>I had a serious health problem</td>
<td></td>
</tr>
<tr>
<td>Recover credits towards graduation</td>
<td></td>
</tr>
<tr>
<td>Everything is done on the computer</td>
<td>Access to courses when/if desired</td>
</tr>
<tr>
<td>These same courses are not offered at the local brick and mortar school</td>
<td></td>
</tr>
<tr>
<td>It gets done on my time</td>
<td></td>
</tr>
<tr>
<td>Never dropped or bumped out of a class because it's too full</td>
<td></td>
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<tr>
<td>Virtual teachers are always just an email or IM away</td>
<td></td>
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<tr>
<td>Access my teachers in the evening hours</td>
<td></td>
</tr>
<tr>
<td>Teachers respond quickly to my questions</td>
<td></td>
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<tr>
<td>Virtual schooling has worked for me as an individual</td>
<td>Individualized attention and responsiveness</td>
</tr>
<tr>
<td>Available electives to pursue career interests</td>
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<tr>
<td>I control my pace in the course</td>
<td></td>
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<tr>
<td>I got the credits I needed</td>
<td></td>
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<tr>
<td>Get through a couple lessons at a time</td>
<td></td>
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<tr>
<td>Access to courses that will help in college</td>
<td></td>
</tr>
<tr>
<td>I prefer to work at my own pace</td>
<td></td>
</tr>
<tr>
<td>Redo an item and get a higher grade</td>
<td></td>
</tr>
</tbody>
</table>
Table 8: *Sub Research Question Results*

<table>
<thead>
<tr>
<th>Codes</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some of them did not seem willing to help</td>
<td>Teacher access &amp; willingness</td>
</tr>
<tr>
<td>Virtual teacher just reread me the same directions</td>
<td></td>
</tr>
<tr>
<td>Feel uncomfortable asking questions</td>
<td></td>
</tr>
<tr>
<td>Distant relationship</td>
<td></td>
</tr>
<tr>
<td>Stronger relationship with brick and mortar teachers</td>
<td></td>
</tr>
<tr>
<td>Virtual teacher did not know the course very well</td>
<td></td>
</tr>
<tr>
<td>Teacher doesn’t clarify when I need it</td>
<td></td>
</tr>
<tr>
<td>They are not always online when you are working</td>
<td></td>
</tr>
<tr>
<td>Frustrating to have to wait for an email response</td>
<td></td>
</tr>
<tr>
<td>Did not like the collaborative assignments</td>
<td>Difficulty with collaboration</td>
</tr>
<tr>
<td>Would have to wait weeks and even months to get a partner</td>
<td></td>
</tr>
<tr>
<td>Wasted a lot of time between assignments waiting for a partner</td>
<td></td>
</tr>
<tr>
<td>Dislike the “emailing back and fourth” and completing collaboration assignments</td>
<td></td>
</tr>
<tr>
<td>Math and science classes are harder in a virtual school setting</td>
<td>Requires more self-motivation</td>
</tr>
<tr>
<td>It enhances my disinterest in Chemistry</td>
<td></td>
</tr>
<tr>
<td>You have to make sure you get a certain amount of work done each week</td>
<td></td>
</tr>
<tr>
<td>You must have self-motivation to get the work done.</td>
<td></td>
</tr>
<tr>
<td>Slackers need not apply</td>
<td></td>
</tr>
<tr>
<td>You have to do the work</td>
<td></td>
</tr>
<tr>
<td>It’s more difficult to teach yourself something like math or science</td>
<td></td>
</tr>
<tr>
<td>You have to be able to discipline yourself</td>
<td></td>
</tr>
<tr>
<td>No opportunity for class discussion to understand material</td>
<td></td>
</tr>
<tr>
<td>All motivation rests on my shoulders</td>
<td></td>
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</tbody>
</table>


Chapter 5: Summary of Findings and Recommendations for Practice

Overview

The goal of this phenomenological study was to determine adolescents’ attitudes towards virtual learning. The purpose was to uncover both the perceived benefits and the challenges associated with virtual schooling. Through open-ended questionnaires, interviews, and analysis it was discovered that adolescents found four specific aspects of virtual schooling beneficial. Additionally, three elements of virtual schooling were perceived as difficulties.

This study explored the problem of practice that an increased number of adolescents are opting to complete some or all of their secondary education through a virtual school, as opposed to a brick and mortar school. Online schools are becoming viable options for many teens. According to Archambault and Crippen (2009), “the 21st century educational landscape has been altered. One of these changes has been the addition of online distance education, specifically the proliferation of virtual schools in K–12 settings” (p. 363). The escalation in enrollment for American virtual schools represents a growing population of middle and high school students who seek another path to earn a high school diploma (Davis & Roblyer, 2005). The research on virtual schooling has not kept pace with the number of adolescents enrolled in virtual courses.

While some aspects of the study results were consistent with previous research on virtual learning, new information also emerged. This section highlights new knowledge gained through this phenomenological study. The findings will be discussed through the lens of the virtual school model, which was the framework for this study. This chapter also discusses the limitations of the study, followed by implications for educators and recommendations for practice. Finally, areas for future research are reviewed.
Theoretical Framework

Proserpio & Gioia’s (2007) notion that the virtual school model allows instructors to mesh their teaching style with today’s adolescents’ learning styles was a key component of the theoretical framework. As virtual technologies continue to emerge, so does the ability of schools to coordinate with the lives of today’s adolescents. Their learning styles encompass a variety of virtual tools. The most effective learning takes place when teaching styles are in line with students’ learning styles (Proserpio & Gioia, 2007). The adolescents in this study reported that they enjoyed utilizing forms of technology in their daily coursework.

The virtual school model describes a format for learning that incorporates an open and flexible learning environment (Hill, 2006). Virtual schooling allows the student to “engage in learning, and when he or she wants to learn” (p. 189). As part of the virtual school learning process, the individual learner is provided with scenarios in which he/she is engaged in concrete learning experiences (Blum and Bergsch, 2009). The adolescents in this study indicated that a flexible learning environment was indeed beneficial. Students favored being able to control when they learned and the pace at which they learned.

The nature of the teaching and learning in a virtual school environment “can actually create different and perhaps better opportunities for learning” (Proserpio & Gioia, 2007, p 72). In particular, the virtual school model facilitates a constructivist learning environment (Kim 2005). Its structure and function is utilized for learner/learner and learner/teacher interaction. In this study, adolescents commented on their interactions with their instructor(s) and their classmates. Students had interactions that were enriched by the use of technology, including
email and instant messenger. The ability to interact with virtual school instructors and classmates at a variety of times during any given day was evident as well.

This theoretical framework allowed for an exploration of how adolescents viewed their virtual school environment. It provided a lens to explore the relationship between the adolescents and their virtual school environment. It allowed for an investigation of the elements within virtual schooling that give individual students choices concerning their own learning. The virtual school model was useful in deciphering the characteristics of virtual schooling which are most beneficial to students.

**Literature**

The literature surrounding the topic of virtual school pedagogy connects to my study of adolescent attitudes towards virtual learning as it provided an understanding of the five key elements of virtual learning: assessment, engaging students with content, making the course meaningful for students, providing support, and communication & community. This strand of the literature illuminated the fact that virtual schooling allows students to “represent their knowledge in ways that are personally meaningful” (DiPietro, Ferdig, Black, & Preston, 2010, p. 21) and reflect their own unique learning styles. Additionally, virtual school pedagogy supports strong student-teacher relationships and encourages peer-to-peer communication and utilizes additional support tools to meet the needs of all students. The study revealed that the individualized attention and responsiveness associated with virtual school pedagogy is viewed as beneficial by adolescents. Three of the students thought that virtual school “worked for them as an individual learner”.

The strand of literature pertaining to the topic of student engagement in their own learning connects to my study of adolescent attitudes towards virtual learning as it underscored the fact that virtual schooling “offers students the potential for more self-directed learning opportunities and flexible structures for engagement” (McBrien, Jones, and Rui, 2009, p. 3). The literature reaffirmed that student engagement is an important factor in learning at any level, including high school. The virtual learning environment can impact the disengaged learner as it offers frequent opportunities for feedback. The virtual learning environment provides an equitable opportunity for all students to succeed (Halverson & Smith, 2009). The study disclosed that adolescents viewed virtual schooling as beneficial as it provided them with a flexible structure to access schooling when brick and mortar schooling was truly a physical impossibility (for whatever medical or social reason). In these instances, virtual schooling afforded adolescents the opportunity to remained engaged in the learning process and gain the credits needed to attain a high school diploma. Five of the students thought that virtual school allowed them the flexibility to “work at whatever time of day they feel like working”.

The literature surrounding the topic of the legitimacy of K-12 virtual schooling connects to my study of adolescent attitudes towards virtual learning as it substantiated virtual schooling as an alternative pathway for adolescents. This strand supports the notion that America’s virtual schools are drawing students of varying levels and abilities. There continues to be a significant growth in the number of students who opt to take one, some, or all of their courses via a virtual school. Through options, such as credit and competency recovery, these institutions are enabling states to close the achievement gap. Adolescents in the study revealed that without virtual
schooling, they may not have been able to graduate high school on time with their classmates. In some instances, virtual schooling was critical for adolescents in terms of gaining credits or credit recovery. Three of the students thought that virtual school provided them with the ability to “attain or recover credits towards graduation”.

The strand of literature pertaining to the topic of teacher and administrator attitudes towards virtual learning connects to my study of adolescent attitudes towards virtual learning as it highlighted the fact that there is little research regarding the students’ perceptions of virtual schooling. The research that does exist on K-12 virtual schooling centers mainly on teacher and administrators’ perspectives. Teachers’ perspectives align with the notion that virtual courses are suitable for students to personalize their learning (Barbour, 2007). The few studies that exist which do incorporate adolescent perspectives reveal three perceived difficulties regarding virtual schooling from the students’ perspective. These difficulties include technical issues, personal time constraints, and issues navigating through the course (Barbour, 2008). My study revealed three specific and somewhat unique difficulties: teacher willingness and access, difficulty with collaboration, and the requirement of more self-motivation. Three students thought that their virtual teachers “were not always there to help, or online when you are working”. Four students did not like the collaborative assignments pertaining to their virtual schooling as it “took a great deal of time to get a partner”. Four students noted that virtual schooling requires that students are “independent and able to discipline themselves”.

Limitations

One limitation of this study is that it had eight participants, which is a small sample size.
While this is justified in a phenomenological study, the results are not generalizable. The results of the study may be transferable to another setting of a comparable size and structure, but not necessarily to any other virtual school environments throughout the region or country (Creswell, 2007).

The context in this study was defined according to the characteristics associated with one virtual school in the United States. Given the structure and function of this particular virtual school, there were multiple characteristics that are unique which set it apart from other virtual schools. One such quality is the distinction of being a virtual charter school. Charter schools are state-chartered and exempted from some rules and regulations. At the time of this study, this virtual charter school had its own employees and teaching staff. These distinctions also limit generalizability.

While the eight participants were selected randomly, no attention was given to the teachers that these individuals had in each of their virtual courses. Therefore, one or more of the adolescents may have had the same teacher. As a result, the experiences of the participants may have been representative of their involvement with only a couple of teachers at this particular virtual school rather than eight or more unique teachers. If this were to be the case, it would limit the generalizability of the results.

One of the factors that served as both a limitation and strength was my existing role as a part-time instructor at this virtual charter school. This may have had some influence on the participants’ decisions as to how they would frame their responses, knowing that I was employed by the same virtual charter school they attended. One of the safeguards against this was that
none of the participants were past or present students in my class. None of the participants’ siblings were past or present students either.

A strength of the study seemed to be that the adolescents were comfortable sharing their own personal experiences with this particular virtual charter school. The relationship that the researcher built with the participants allowed them to be very candid in both the open-ended questionnaires and the interviews. The adolescents were informed on the intentions of the study, and agreed to take part for the purposes of discussing adolescent attitudes towards virtual learning.

Another limitation is the influence of potential biases that accompany the researcher’s professional and personal life experiences. As a part-time virtual social studies teacher and a full-time brick and mortar social studies teacher, the researcher had to maintain awareness of how this could potentially interfere with the study. In taking this into account, the researcher put her personal beliefs about virtual learning aside throughout the duration of the study. She also chose not to emphasize her professional background with the participants.

Findings and Recommendations for Future Research

This study revealed that adolescents viewed four aspects of virtual schooling as beneficial and three aspects as challenging. This study was conducted due to a relative lack of research that examines adolescents’ views on virtual learning. This study specifically investigated what adolescents view as benefits and difficulties with this particular pathway. It would be advantageous to replicate this study with a larger number of participants who come from a variety of locations across the nation. This area of focus will enhance the existing literature by
providing a more comprehensive and demographically diverse understanding of adolescent attitudes towards virtual learning.

The participants in this study provided a thorough account of their perceptions and experiences with virtual schooling. Each of the participants spoke about the impact of virtual schooling on their individual lives. Many of the responses provided would inform the development of future investigations. Several of the themes that resulted from this study could be researched individually, including teacher access & willingness. Further research could also be done with respect to student collaboration in the virtual schooling environment. Studies conducted in these areas will enrich our understanding of adolescent perspectives regarding virtual schooling, as well as ways to enhance the virtual school experience.

The researcher maintains a curiosity as to whether the data would transfer to another region of the United States. In other words, do other adolescents across the nation view the same elements as advantageous and/or difficult? Are the themes presented here particular to only this one virtual school? Similar phenomenological studies in a variety of regions throughout the country would be beneficial to this end. Additionally, the researcher would be interested to investigate whether there is any connection between adolescent attitudes and their previous experiences with brick and mortar teachers.

If given the opportunity to complete a follow-up study, the researcher would be interested in pursuing the attitudes of parents/guardians towards virtual learning. Areas of particular interest include parent/guardian beliefs regarding the following: (1) socialization in virtual schooling, (2) the use of virtual learning as a supplement and/or replacement for brick and mortar
schooling, and (3) the learning outcomes of virtual schooling versus brick and mortar schooling.

**Findings and Recommendations For Practice**

Conducting this research has enhanced the researcher’s teaching—both in the virtual capacity and the brick and mortar school. It has also stimulated a desire on the part of the researcher to move into the ranks of school leadership and continue the conversation about alternative pathways, including virtual learning. Virtual learning has now become a part of the conversation within the researcher’s own brick and mortar school district. As of January 2012, the researcher’s brick and mortar school began implementing virtual learning on a small scale. This was done by utilizing courses offered by the virtual charter school featured in this study. The following section addresses recommendations for future practice on aspects impacting adolescents enrolled in virtual schooling.

The research design resulted in data that revealed four areas of benefit in virtual learning for adolescents. Although the findings cannot be generalized, the data uncovered important elements of virtual schooling. The results can be useful for current and future virtual school teachers. It is important that virtual teachers recognize that adolescents find benefit in flexibility with place & time/time of day, access to schooling when brick & mortar is not possible, access to courses when/if desired, as well as individualized attention and responsiveness. Given these results, virtual teachers should strive to enhance these aspects so that they continue to be perceived as benefits rather than difficulties.

The research design also resulted in data that uncovered three problematic areas of virtual learning for adolescents: teacher access & willingness, student collaboration, and intrinsic motivation. The recommendations for practice specifically target the three areas of difficulty. The ultimate hope is that by implementing the suggested modifications, a shift of an area of
difficulty into the category of benefits will result. Moving areas of difficulty into the realm of areas of benefit may increase students’ overall success in the virtual learning environment. It may also increase the chances that an adolescent continues to take virtual courses in an effort to gain a high school diploma.

Three specific recommendations for practice are discussed in this section. These items include: (1) provide extended professional development for virtual teachers, (2) provide support for students in collaborative learning experiences, and (3) increase student self-motivation through the use of positive feedback. It is the researcher’s position that implementation of these recommendations will enhance students’ experiences in the virtual school setting.

**Provide Extended Professional Development For Virtual Teachers**

One of the difficulties that students revealed in this study is teacher access & willingness. When incorporating new virtual teachers in a virtual school program, it is recommended that extended professional development be provided. Newly hired virtual teachers may not have a thorough understanding of online education. While there are some parallels that may be drawn between teaching in a virtual classroom versus a brick and mortar classroom, clear differences exist. Teaching in an online classroom requires that a teacher knows how to build a strong virtual relationship in addition to knowing content. It also calls for a high level of competency in the latest technological tools, including video and voice chat. Through ongoing professional development, virtual teachers should continue to develop best practices for welcoming students into the course and for personalizing their online classroom. Other aspects that should be included in this ongoing professional development include strategies for communicating via phone and emails, and creating timely, personal, and specific feedback that will motivate students.
In the future, it may be possible for virtual school leaders to partner with teacher preparation programs at the university level. In these instances, pre-service teacher may be afforded the opportunity to familiarize themselves with both virtual school pedagogy and brick and mortar pedagogy. In fact, increased teacher training in virtual school pedagogical methods and technological tools will enhance teacher performance in the virtual classroom. Professional training of this nature will allow teachers to deliver better instruction and meet the individualized needs of all students in the class. Secondarily, it will improve teachers’ confidence in their personal teaching abilities.

**Virtual Teacher Evaluation**

The process of teacher evaluation is intended to provide educators with areas for growth in their professional practice. Evaluation of virtual teachers, just like their brick and mortar counterparts, should take place at regular intervals. The evaluation system itself should be a growth model used for monitoring virtual teachers’ performance, instructional development, improvement of teachers’ home/school relationships, and to enhance individualized student learning. The components of the virtual teacher evaluation should encompass instructor reflection and self-assessment, virtual walkthroughs by an administrator, two way conversations between the administrator and the teacher, and documented strengths and areas for improvement provide by the administrator for use by the teacher.

“Ideally, …evaluations should serve to help teachers identify strengths and areas for development, as they work to improve their practice. Systems that work have the goal of lifting quality across the profession, aiding all teachers to become good and prompting good teachers to become great” (Almy & Education, 2011, p. 1). The ultimate goal is to gauge teachers’ performance fairly, and to aid them in their journey as they hone the skills of their craft. Supporting virtual teachers in this manner will enhance their ability to provide a rigorous,
personalized instruction for all students.

**Data-Driven Decision-Making**

Virtual schools also need to utilize data on a regular basis to drive decision-making within the school community. One key source of data may include student surveys, which can be administered at the end of any half or full credit course. Questions embedded into a student survey should address multiple aspects of the virtual learning environment, including teacher feedback, teacher communication, and the student-teacher learning relationship. Results compiled from these student surveys should be used to drive professional development and teacher growth goals. Data-driven decision-making that is based on student survey results will result in enhanced student outcomes and increased success rates.

Using data to make decisions in a school, either virtual or brick and mortar, will serve to improve the overall quality of the learning experience. Data may “identify meaningful patterns, alert educators to learner challenges, …and suggest exercises that can meet each student’s needs” (Kadel, 2010, p. 21). Educators need to make it a habit to continuously access data that can steer them in the right direction to make adjustments which best suit the needs of the individual learners in their classrooms. Implementation of data-driven decision-making at the building level is also essential for planning and implementing instructional strategies that behoove students.

**Provide Support For Students In Collaborative Learning Experiences**

Another difficulty that students revealed in this study is difficulty with collaboration. Virtual courses provide students with the opportunity to interact not only with their teacher, but with other students; this includes the opportunity to collaborate on individual assignments. For some students, working collaboratively may prove challenging. When working with students in a virtual school setting, it is recommended that teachers facilitate the pairing or grouping of students for collaborative learning experiences. This could entail a conversation with all
students via Blackboard. It may also be achieved through the creation of a “partner forum” with guidelines and instruction for attaining a partner. Encouraging students to form groups early on in the course may also alleviate some of the anxiety and discomfort surrounding collaborative assignments. Professional development may also serve a purpose in this case as well.

**Frequent Teacher Check-Ins Regarding Collaboration**

Regular teacher check-ins may be used as part of a progress monitoring system. Used on a frequent basis, progress monitoring is intended to assess students' academic performance. Assessing students’ performance, including their ability to work with peers on collaborative assignments, can improve students’ motivation and completion success rate. If done on a weekly or monthly basis, the teacher can gauge how the student is learning and to what extent he/she is learning via collaboration with a peer or group. This type of monitoring will indicate students’ success, or lack thereof, in the collaborative learning environment. It will also draw attention to areas that need to be addressed. This approach will allow the teacher to provide needed interventions for students experiencing difficulty or frustration with the collaborative learning assignments.

**Student Approaches to Collaboration**

In some cases, students enroll in virtual classes with the assumption that the work in the course will be done individually. As such, some students resist the paired or group approach to student learning. In these instances, encouraging students to work in a social networking environment (as opposed to sheer email) may prove beneficial. If a meeting space such as Blackboard IM does not prove to be user friendly, virtual teachers should encourage students to utilize a Google Hangout or Skype chat. These tools may be a more integral part of adolescents’ daily technology use, and thus more comfortable or familiar to an adolescent. Providing these options may in fact increase students’ comfort with a paired or group approach.
Increase Student Self-Motivation Through Positive Feedback

“If teachers have a responsibility to motivate students…and to learn, it is important for teachers to understand specifically how to motivate students” (Mart, 2011, p. 2). In fact, the most powerful way to motivate students is through the use of positive feedback. “Teachers’ instructional choices can make a positive impact on student motivation” (p. 1). Reinforcing the positive behaviors of students will increase those specific behaviors. Thus, when virtual teachers provide feedback on assignments, the comments should center upon that which the student did well. He/she should eliminate all negative comments to only focus on the positive attributes of the submission. Positive feedback should accompany other milestones in the course as well, including staying on pace and reaching specific course completion percentages. Therefore, emails, IMs, and/or phone conversations should be scheduled at regular intervals to ensure that regular, positive feedback is delivered. Teacher follow-up regarding assignments that are missing, incomplete, or subpar should happen on a consistent basis.

Increase Student Self-Motivation Through Student Choice

“By offering a greater amount of choices to the students, providing more authentic assessments, and allowing students to take a more active role in their education, intrinsic motivation of secondary school students will improve” (Albrecht, Haapanen, Hall, & Mantonya, 2009, p.1). This is especially true when it comes to the difficulty of low intrinsic motivation for course completion among secondary students enrolled in virtual schooling. In some instances, students may have previously put forth minimal effort in their brick and mortar school, and this lack of effort carries forward to virtual schooling. Among the factors contributing to this is the absence of an active role in his/her own education. When students are motivated by intrinsic factors rather than extrinsic factors, they are motivated to do well and take ownership of their
Increase Student Self-Motivation Through Relationship Building

Teachers can also increase student motivation through relationship building. “Within classroom contexts, relationships between teachers and students are especially significant. The teacher-student relationship has long been acknowledged as a key factor in student success. Despite the preponderant focus on teacher-student relationships (TSR) at the elementary level, TSR are especially important for adolescents” (Gehlbach, Brinkworth, & Harris, 2011, p. 3). In a virtual school setting, establishing a relationship is unique. However, going above and beyond an established relationship will enhance the students’ level of motivation. In terms of “going above and beyond”, that could mean that the virtual teacher goes out of their way to assist the student via Blackboard or email, provides stellar feedback for a recent submission, demonstrates a high level of respect for the student, or gives the student some degree of leeway with respect to their weekly workload. Regardless of the tool utilized, extensive communication is imperative. Each of these tactics would serve to foster a relationship between the student and his/her virtual teacher. When students do not believe that they have a positive TSR, they are more likely to be detached and therefore less productive.

“It is important to be mindful of the fact that how you structure the course and the teaching methodologies you use can greatly affect your students’ motivation to learn” (Mart, 2011, p. 2). Increased teacher competency with respect to his/her course material may also serve to enhance student motivation. If students view their instructor as knowledgeable in a content-area course, that will result in a certain level of respect. When students respect their teacher, it will stimulate an increased level of motivation. In this instance, a student will be driven to perform so as to please their teacher. Thus, gaining students’ respect early on in the course is
essential to student motivation. When the students respect you, they will be more motivated to work in the course.

Conclusions

This study investigated how adolescents view virtual learning. The study discovered a lack of literature regarding adolescents’ attitudes towards virtual learning. It is anticipated that this study will help educators better serve adolescents in the virtual school setting. In addition to the relevance of teacher access & willingness, as well as student collaboration in the virtual school environment, there are other areas of virtual schooling that are worthy of further investigation.

The process of conducting the open-ended questionnaires and interviews was both interesting and informative. The eight students shared their respective beliefs about virtual learning with the researcher. The information they disclosed through the data collection process was meaningful. Ultimately, the benefits of virtual schooling must be maintained or increased in order for adolescents to continue to opt to complete some or all of their high school education through this pathway.

For a student residing in a rural community or an urban city with an underfunded school district, obtaining an elective course via virtual learning may be the only option available. In the instance wherein a full-time student wishes to partake in a variety of extracurricular activities and compete regionally or nationally, virtual courses are an essential and flexible choice. These are just a few of the reasons for the proliferation of K-12 virtual schooling in the United States. While most adolescents take one or two courses online, there are those so encouraged by the nature of online learning that they have deserted their brick and mortar schools entirely.

Virtual learning will continue to impact education in the United States. It is an evolving aspect of K-12 education that stakeholders must continue to grapple with in the twenty-first
century. How virtual school leaders and teachers respond to the recommendations presented here is key. In the grand scheme, it is important to keep in mind that when educators strive to meet the diverse needs of students (in either the virtual or brick and mortar classroom), better outcomes are created for all students.
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Appendix A-Request for Consent

Northeastern University, College of Professional Studies, Department of Education
Name of Investigators: Andrea R. Pleau, Graduate Student, Northeastern University College of Professional Studies, Dr. Francis Connor, Principal Investigator
Title of Project: Adolescent Attitudes Towards Virtual Learning

REQUEST FOR CONSENT TO PARTICIPATE IN RESEARCH STUDY

6 January 2012

Dear Rolling Green Hills Student,

I am preparing to begin my doctoral research project at Northeastern University College of Professional Studies. My research is for Northeastern University graduate work, not professional use. The purpose of my project is adolescents and their attitudes regarding virtual learning; I will not actively seek input from parents/guardians. I have received the support of the Board of Trustees at the Rolling Green Hills Virtual School (RGHVS).

You have been randomly selected to participate in this study because you are, or have been, enrolled in one or more courses at the Rolling Green Hills Virtual School. I invite you, the student, with consent of your parent or guardian, to participate in this research process. If you are eighteen years of age, you do not need a parent or guardian to consent to your participation.

As part of the informed consent process, there are several points I would like to explain:

• Your participation will entail the completion of a ten item email questionnaire (which should take approximately fifteen minutes) and a fifteen minute phone interview. The telephone interview will be audio-recorded (with your permission) for transcription and analysis purposes only.
• I do not foresee participation in the project posing any risks for you.
• Participation will be handled in a confidential manner. All questionnaires, interview notes and audio-recordings will be destroyed following transcription and analysis. Any reports or publications based on this research will use only group data and will not identify you, your school or any individual as being of this project.
• There are no direct benefits to you for participating in the study. However, your responses may help us to learn more about virtual learning.
• Your participation in the research project is entirely voluntary. You can refuse to answer any question and may withdraw at any time. Your decision to participate or not will have no effect on your standing at the Rolling Green Hills Virtual School (RGHVS).
• There is no compensation offered for participation

Please let me know if you have any questions or concerns about participating in this research. You may contact me at: pleau.a@husky.neu.edu or 401-868-0043. You can also contact Dr. Francis Connor, the Principal Investigator, at: f.connor@neu.edu or 508-455-8737.
If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 960 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: irb@neu.edu. You may place a call anonymously if you wish.

Please indicate your consent by signing below and return the signed form in the enclosed pre-paid self-addressed stamped envelope.

___________________________________________________  __________      __________
Signature of the Student who is agreeing to take part        Date       Age

___________________________________________________ ________________
Printed name of Student

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___________________________________________________ _________________
Signature of parent/guardian if student is a minor child under 18

___________________________________________________       Date
Printed name of person above

Date
Appendix B - Participant Questionnaire

Current Grade (Circle One): 9 10 11 12  
Gender (Circle One): Male  Female

1. Why did you decide to take a virtual course or multiple courses?

2. How would you describe your online learning relationship with your current instructor(s)?

3. How does taking a virtual course differ from a course in a traditional brick & mortar school? (This question should be answered if you have attended both.)

4. What factors led to you choosing to complete all of your high school education through virtual schooling? (This question should be answered if you are completing grades 9-12 solely through virtual schooling.)

5. What aspect(s) of virtual schooling do you really enjoy?
6. What are your areas for improvement as a learner?

7. How would you explain your experience with virtual schooling to another student who had never taken a virtual course?

8. How do you schedule your day to include time for your virtual course(s)?

9. What aspect(s) of virtual schooling do you dislike?

10. What are your strengths as a learner?
Appendix C- Participant Telephone Interview

What is your current grade level? __________________________ What is your gender? __________________________

1. Given the reasons why did you decided to take a virtual course or multiple courses, which reason was most important in your decision?

2. Given your online learning relationship with your current instructor(s), which aspects are most beneficial to you as a learner?

3. Given your experiences taking a virtual course and courses in a traditional brick & mortar school, which aspects are most beneficial to you as a learner? (This question should be asked of participants who have attended both.)

4. Given the factors that led to you choosing to complete all of your high school education through virtual schooling, which factor was most important in your decision? (This question should be asked of participants who are completing grades 9-12 solely through virtual schooling.)

5. Given the aspect(s) of virtual schooling that you really enjoy, which aspect is most enjoyable to you as a learner?
6. Given your areas for improvement as a learner, which area do you need the most improvement in currently?

7. Given your explanation of your experience with virtual schooling for a student who had never taken a virtual course, which aspects of your explanation are most important to convey?

8. Given how you schedule your day to include time for your virtual course(s), what benefits or difficulties does this pose to you as a learner?

9. Given the aspect(s) of virtual schooling that you dislike, which aspect(s) are most detrimental to you as a learner?

10. Given your strengths as a learner, which aspect(s) of virtual schooling enhance these strengths?
Appendix D- Text of Email RE: Open-Ended Questionnaire

Dear _________________________,

I have received your consent form via mail with all necessary signatures affixed. You are now officially a participant in my research project.

Attached you will find a word document containing an open-ended questionnaire. Please open the document and respond to each question using approximately two or three sentences. This should take roughly fifteen minutes to complete. After responding to the questionnaire, proceed to save the document on your desktop. Send the completed questionnaire back to me by attaching the file to an email.

Please note that if you do not wish to answer any particular question, you do not have to do so. If at any time you wish to withdraw your participation, you may do so. Your participation or lack thereof has no bearing on your status at the Rolling Green Hills Virtual School.

Thank you,

Ms. Andrea R. Pleau
Dear _______________________,

I have received your completed open-ended questionnaire via email. At this juncture, I would like to schedule a follow-up telephone interview with you.

The interview will take approximately fifteen minutes. You may select the time that is best for you by going to www.tungle.me/andrea.r.pleau and booking an appointment time. I will confirm your choice for an appointment time on Tungle. Then, you will receive a confirmation email from Tungle. I will proceed to call you on the date and time you have selected.

Please note that if at any time you wish to withdraw your participation, you may do so. Your participation or lack thereof has no bearing on your status at the Rolling Green Hills Virtual School.

Thank you,

Ms. Andrea R. Pleau
Appendix F- Text of Script to Be Read to Participant Prior to Conducting Telephone Interview

Dear ________________________,

Thank you for scheduling a time for this follow-up telephone interview. Do you consent to my audio-recording this telephone interview? (Wait for response.)

Before we continue, I would like to remind you that if you do not wish to answer any particular question, you do not have to do so. If at any time you wish to withdraw your participation, you may do so. Your participation or lack thereof has no bearing on your status at the Rolling Green Hills Virtual School.

Are you ready to begin?