## St. John Fisher University Fisher Digital Publications

**Education Masters** 

Ralph C. Wilson, Jr. School of Education

4-2015

# **Online Learning: Revealing the Benefits and Challenges**

Brittany Gilbert St. John Fisher University, blg08333@sjf.edu

Follow this and additional works at: https://fisherpub.sjf.edu/education\_ETD\_masters

Part of the Education Commons

## **Recommended Citation**

Gilbert, Brittany, "Online Learning: Revealing the Benefits and Challenges" (2015). *Education Masters.* Paper 303.

Please note that the Recommended Citation provides general citation information and may not be appropriate for your discipline. To receive help in creating a citation based on your discipline, please visit http://libguides.sjfc.edu/citations.

This document is posted at https://fisherpub.sjf.edu/education\_ETD\_masters/303 and is brought to you for free and open access by Fisher Digital Publications at . For more information, please contact fisherpub@sjf.edu.

## Online Learning: Revealing the Benefits and Challenges

## Abstract

The expansive nature of the Internet and the accessibility of technology have generated a surge in the demand for web based teaching and learning. Online education is quickly infiltrating into school districts and colleges across the nation. This paper explores whether high school students could benefit from online courses and examines the potential challenges and drawbacks of online coursework. This paper raises questions about how to best support high school students enrolled in an online course.

Document Type Thesis

Degree Name MS in Special Education

Department Education

First Supervisor Susan Schultz

Subject Categories Education Online Learning Revealing the Benefits and Challenges

By

Brittany Gilbert

Submitted in partial fulfillment of the requirements for the degree

M.S. Special Education

Supervised by

Dr. Susan M. Schultz

School of Education

St. John Fisher College

April 2015

## Abstract

The expansive nature of the Internet and the accessibility of technology have generated a surge in the demand for web based teaching and learning. Online education is quickly infiltrating into school districts and colleges across the nation. This paper explores whether high school students could benefit from online courses and examines the potential challenges and drawbacks of online coursework. This paper raises questions about how to best support high school students enrolled in an online course.

### Online Learning

#### Revealing the Benefits and Challenges

The expansive nature of the Internet and the accessibility of technology have generated a surge in the demand for web based teaching and learning (Chaney, 2010). Distance learning is a rapidly expanding environment which allows users the flexibility of operating outside of the constraints of time and place (Chaney, 2010). Online learning can be defined as "learning that takes place partially or entirely over the Internet" (U.S. Department of Education, 2010). Online learning is appealing to a range of learners and is becoming more commonplace in settings from elementary schools to high school and into post-secondary education. This paper examines the potential challenges and drawbacks of online coursework. This paper raises questions about how to best support high school students enrolled in an online course.

#### **Literature Review**

Web based teaching and learning environments can appear acutely distinctive from one another. Online learning environments can be categorized into three central groups, fully web based, blended or hybrid format, and traditional courses using web based supplements. Fully web based courses are conducted entirely on the Internet with no face to face interaction, all aspects of the course being conducted in an online learning environment. Hybrid courses consist of both web based and classroom sessions, with a varying degree of time allotted to the online and in class sessions, depending upon the nature of the class and discretion of the instructor. The last programming format uses online technology as a medium for presenting supplemental material for traditional classroom study. It is critical to the understanding of online learning that there is not a single description that would encompass all assets of online learning environments. Web based learning environments are as diverse and complex as traditional classroom settings, with each learning environment functioning slightly different.

The Office of Educational Technology in the U.S. Department of Education conducted the "Distance Education Courses for Public Elementary and Secondary School Students" survey in 2002-03 school year to gain insight into the prevalence of distance learning in public school districts. The study defined distance education as "courses that are credit-granting, technologydelivered, have either the instructor in a different location than the students and/or have the course content developed in, or delivered from, a different location than that of the students" (Institute of Educational Sciences, 2014). The findings revealed that approximately one-third or 5,500 out of a total of 15,040 public school districts had at least one student enrolled in a distance learning course during the 2002-03 school year (Setzer & Lewis, 2005). In 2009-10, the number of public school districts offering distance education courses rose to an estimated 53 percent (Institute of Educational Sciences, 2014). During 2004-05 there were slightly over 300,000 distance learning enrollments which spiked to over 1.3 million high school enrollments in 2009-10, an increase in over 1 million enrollments (Institute of Educational Sciences, 2014). The pervasiveness of the Internet and technology has spurred the infiltration of distance learning into public school districts across the United States.

Distance learning is far more widely used in postsecondary educational settings. In the "2013 Survey of Online Learning," conducted by Babson Survey Research Group, revealed that the number of higher education students enrolled in at least one online course was above 7.1 million, approximately 33 percent of higher education students (Babson Study, 2014). The number of online course enrollments increased by roughly 411,000 students from the fall 2012 term to the fall 2013 term (Babson, 2014). Responses from 2,800 academic leaders where

recorded and ninety percent of the participants "believe that it is likely or very likely that a majority of all higher education students will be taking at least one online course in five years' time" (Babson, 2014, p. 1). The expansion of online courses and enrollment in elementary, high school and higher education continues to rapidly expand with no signs of slowing.

Online learning appeals to diverse populations of students with ranging academic needs that traditional education classes are deficient or incapable of meeting. The demand for online courses is derived from a push "to provide quality education to all students, regardless of location and time" (Chaney, 2010, p.21). The need for flexible learning environments for potential learners who are hospitalized, have phobias linked to school environments, are single parents, have been expelled, are dropouts seeking to gain a diploma and many other specific cases have led to a growth in the amount of distance learning courses and programs that are offered (Chaney, 2010). Online learning has the potential to create educational opportunities for individuals who may have faced unsurpassable barriers prior to the expansion of online educational programs.

## Advantages

Online courses have been found to be conducive to students who favor self-regulated learning (You & Kang, 2014). In a study conducted by Kirtman, a student responded to online coursework by stating, "It is more self-guided so I can spend more time on the concepts that I need help with and less on concepts that I can pick up quickly" (Kirtman, 2009, p. 110). Self-regulated learners have a tendency to use various "cognitive and metacognitive strategies to accomplish their learning goal" (You & Kang, 2014, p. 126). Learners who are able to hone in on their self-regulated learning skills frequently utilized time management, reviewed material

regularly, sought help from professors or peers, meet deadlines, and had the skill of metacognition in order to reflect upon their own learning (You & Kang, 2014).

The benefit of flexibility in online courses cannot be overstated due to its prevalence in reasons why students are attracted to online learning. Online learning allows for students to work at a time and a place that is compatible with their learning needs. A number of instructors and students commented on their ability to focus more of their attention on the content of the course and less on issues such as parking, traffic, and other problems that may arise when attending a traditional class environment (Thomson, 2010). One secondary teacher explained, "I don't miss the huge vistas of wasted time that inevitably become a reality in a face-to-face school context" and further explaining that "No schedule restricts us... We meet and stay as long as needed in the virtual space" (Thomson, 2010, p. 36).

The increased accessibility and interest in distance learning is resulting in a number of public high schools, such as the public school system in state of Michigan, beginning to require students to successfully complete an online course as a prerequisite to graduation (Matuga, 2009). The momentum of high school enrollment in online courses has resulted in universities offering courses for university and secondary school credit. The classes that high school students are enrolled in may be taught by either a professor on campus or the instruction may be delivered by a secondary classroom educator (Matuga, 2009). A study conducted by Dana Thomson during the 2008-2009 academic year produced qualitative findings that emphasized the significance and appeal of flexibility and expanded opportunity for students enrolled in online courses: "I can take classes that my school doesn't offer, and I can work when I have free time or a lighter homework load in my school classes" (Thomson, 2010).

Over the past few years there has been a push for the development of courses that dually provide secondary students with college credit and secondary school credit for enrolling and successfully completing the course. Many colleges and universities are capitalizing on subsidies provided in "the United States to support initiatives serving secondary students with options to take university courses in areas such as mathematics, science, and foreign languages, while still enrolled in secondary schools" (Matuga, 2009, p. 4). The competitive nature of education, particularly higher education or post-secondary education, demands more opportunities for students to explore future options such as courses in various degree programs at a multitude of colleges and universities.

Schools frequently face the challenge of expanding opportunities for students while being faced with a declining budget year after year. Speculative cost simulations have concluded that "a hybrid model of instruction in large introductory courses has the potential to significantly reduce instruction compensation costs in the long run" (Bowen, Chingos, Lack, & Nygren, 2014, p. 1). One type of online environment can be referred to as "interactive learning online" (ILO). ILO refers "to highly sophisticated, interactive online courses in which machine-guided instruction can substitute for some (though not usually all) traditional, face-to-face instruction" (Bowen, et al., 2014, p. 97). ILO collects data from a large number of students and uses the collection of data to provide feedback and guidance that is directed for a particular student. ILO also can provide an instructor with student progress tracking, therefore allowing the instructor to provide the student with "more targeted and effective guidance" (Bowen, et al., 2014, p. 97) in order to successfully interact with new knowledge. Machine guided instruction does not appear to be replacing face-to-face instruction, but it does seem to be a tool that instructors can utilize for rapid feedback and student tracking.

Online courses have the potential to open the pathways for more opportunities for students in "small, rural, or low socioeconomic school districts" (Chaney, 2001, p. 21) to take courses that generally would not be offered. A growing concern that the United States is losing its competitive edge in the overall preparedness of high school graduates in the global market may be able to close the gap and lessen the financial burden by providing more opportunity for a lesser cost (Bowen, et al., 2014). The expansiveness of distance education may be delivering the transformation that education has been waiting for, slowly breaking down the financial and locational barriers that have acted as hurdles and at times, unsurpassable barricades to equal opportunities and quality education for all students.

## **Factors for Success**

A study conducted by Kirtman revealed survey responses from online learners that "were so overwhelmingly positive that the issue of students satisfaction cannot be ignored" (2009, p. 113). Not only are environmental factors such as course structure important to analyze, but it is important to examine intrinsic motivational factors as components for a successful online course and experience for the learner. Self-regulation and motivation have been identified as two critical factors for determining success in online courses (Matuga, 2009). Self-regulation can be defined as the "ability of students to plan, monitor, and evaluate their own behavior, cognition and learning strategies" (Matuga, 2009, p. 5). Self-regulation alone is not enough for success, students must be intrinsically or extrinsically motivated to use self-regulatory strategies effectively in order to succeed in the academic realm of online courses (Matuga, 2009). As noted, self-regulation is a key component to success in online courses. Therefore, non-selfregulated students tended to demonstrate academic procrastination, increased disorganization, and used less cognitive and metacognitive strategies to accomplish their learning goals (You & Kang, 2014).

Online course construction is as diverse as traditional classroom settings. Developing and teaching an online course that benefits students and yields positive learning outcomes is a complex undertaking. Attempting to recreate the traditional classroom in an online setting may not necessarily be the wisest course of action. Thomson advises course creators "to capitalize on the benefits that the online environment can offer" and "to minimize the challenges specific to the environment" (Thomson, 2010, p. 703). Courses should be well organized from the very start, providing the students with detailed instructions and expectations. Instructors should anticipate areas of potential misunderstanding and dismiss unclear directives prior to the start of the course. Misunderstandings can be minimized through a very detailed syllabus, course calendar, useful links, and course information that is chunked into digestible pieces (Thomson, 2010).

Communication is notably one of the most crucial elements to an effective online course. Lehmann states "communication is what separates true online learning from Web-based tutorials" (2004, p. 9). Interaction and communication have been identified as key factors in the success of an online course, leading to enhanced student satisfaction and motivation. Interaction can take place in three central areas, interaction between the learner and the instructor, the learner and other learners, and the learner and the content (Savenye, 2005). Interaction between the learner and the content is the most common type of interaction that occurs in online settings, through lectures and readings. Online instructors can orchestrate the class environment to increase the interaction between the learner and the instructor and the learner and other learners through both synchronous and asynchronous interactions. There are a multitude of options for

students to work collaboratively and cooperatively with other learners and/or the instructor in live debates, reflective journal entries, peer reviews, discussion boards, and video or audio teleconferencing (Savenye, 2005).

## Feedback

The importance of feedback is an area that both instructors and students stressed as being vital to success in an online course. On the topic of communication and providing feedback, one instructor shared, "I conduct my courses as extended individual e-mail conversations between me and each student, and I found that it was a more vital and real process than I had assumed it would be" (Thomson, 2010, p. 33). Many instructors spoke to the benefit of the individualized atmosphere of the online course and how to best capitalize on the one-to-one correspondence. Differentiating instruction in a traditional classroom can be very difficult due to the simultaneous interaction that an instructor must have with the students, "by contrast addressing individual needs of each student is easier to do with online students, since the nature of the system is more geared to individuals" (Thomson, 2010, p. 34). Responding to students promptly is yet another important aspect of communication. Instructors and students alike expressed the importance of prompt and supportive feedback when working to "establish a rapport of trust and level of comfort" (Thomson, 2010). The more personal one-to-one emails were found to be useful when used in conjunction with mass class emails to target reoccurring questions, interact with the quieter students, and to build "a sense of the course as a dynamic shared enterprise" (Thomson, 2010, p. 704).

The impact of peer interaction on community building is a reoccurring theme in the literature discussing online learning environments. While a majority of students stated that there was no real difference in their learning when comparing a class session online vs. an in-class session, some students did acknowledge a difference in terms of community and peer interaction within the two settings (Kirtman, 2009). One student stated, "I believe there is a difference because when in class you get the benefit of learning a lot more from your peers" (Kirtman 2009, p. 110). If there is a difference in peer interaction and community building, how can online course structure bridge the gap and capitalize on social interaction using the tools available?

#### Drawbacks

There are a number of drawbacks and potential issues that students may face while participating in an online course. Academic rigor is an issue that is frequently called into question. When gaging the academic rigor or lack thereof of an online course, it is critically important to recognize the diverse varieties of formats that online education can be delivered in, the multitude of subjects online courses can teach, and the ever-growing population of students. In regard to education, "the online learning marketplace reflects the diversity of American higher education itself" (Bowen, et al., 2014, p. 95).

The 'no significant difference' phenomenon developed by Thomas Russell, determined that the delivery medium, such as technology versus face-to-face classroom settings, does not make a difference in learning outcomes. Proponents of online instruction suggest that learning is impacted by the instruction method embedded within the medium of delivery, therefore asserting that the quality of instruction impacts learning outcomes (Rovai, Wighting & Lui, 2005).

One factor that is frequently examined is the development of community and peer interaction in a traditional classroom setting compared to an online learning environment. Literature suggests that a strong and active social life on campus can be "used to explain both high persistence and learning satisfaction" (Rovai, et al., 2005, p.4) amongst learners, thus leading one to believe that the lower persistence rates of online course are caused by a lack of

community and social connectedness in an online learning environment. A study by Rovai, Wighting, and Lui suggested that "online students feel a weaker sense of connectedness and belonging than on campus students who attend face-to-face classes," (Rovai et al., 2005, p.4). Donlevy strongly states that the absence of peer interaction can negatively affect some aspects of the learning process. Furthermore, explaining that the "social and emotional aspects of learning are as important as the technical information" (Donlevy, 2003, p. 120) taught to students. Proper structuring of courses as blended classes or forming cohorts in the online environment both have the potential to eliminate some of the deficits that can be attributed to online learning and create a sense of community and belonging among the students (Rovai et al., 2005).

Although some literature highlights the lack of community as a deficit in the online learning environment, others have suggested that student-student interaction is much less of a concern than student-instructor and student-content interaction. In a study by Thomson, one instructor observed that many students desire to work independently and at different paces than their peers, therefore eliminating the need for communication amongst their classmates (Thomson, 2010). Another instructor stated "students are taking online courses for content not for social interaction" (Thomson, 2010, p. 37) and then hypothesized that "peer interaction and collaboration is valuable for younger students" (Thomson, 2010, p. 37).

Cultural restrictions are another area that one should be mindful of when designing an online course. Educational technology continues to represent the dominate culture, therefore limiting individuals who are not included in the dominate culture (Oswal & Meloncon, 2014). Another restriction that has been brought to the forefront is the issue of the 'have' versus the 'have-nots'. Technology is an area that can be easily taken for granted when it is intertwined into daily life, but for many, technology is not vastly used due to the lack of monetary means to gain

access. Increasing the ratio of computers and other electronic devices to students will ultimately lead to the disadvantaged gaining access to the global knowledge that is available on the internet. "Familiarity with technology can bridge the gap between the rich and the poor, the experienced and the unworldly" (Chaney, 2001, p. 28).

Maintaining motivation in an online course is yet another challenge that online learners face. Students who lacked independence and self-motivation overall had lower success rates than their counterparts (Savenye, 2005). Learners with a lack of self-regulation tended to not assign enough time to complete assignments, therefore turning in poor quality work or late assignments all together (You and Kang, 2014). Overall, "successful students tend to have stronger beliefs they will succeed, higher self-responsibility, higher self-organization skills, and better technology skills and access" (Savenye, 2005, p. 2). Students must also be capable of evaluating the motivating factors that will contribute to the continuance of momentum for the duration of the course. Students lacking motivation, whether intrinsic or extrinsic, can easily lose sight of their original goal, quickly become lost within the course, and ultimately withdraw (Chaney, 2001). Understanding learning styles and self-behavior is pertinent to determining ones success in the undertaking of an online course.

Online course work tends to be reading and writing intensive, deterring some learners. Students with low reading abilities may find the heavy text and writing curriculum to be cumbersome (Donlevy 2003). Another hurdle that some learners struggle to overcome is the absence of an instructor in a given place and given time throughout the duration of the semester. Some online learners experience a learning curve when first becoming acclimated with asking questions in various forums, instead of in a traditional face-to-face, classroom setting (Thomson, 2010).

#### **Gifted Students**

Online learning has been one option presented for meeting the rate of learning for gifted students. According to the National Institute for Gifted Children, "some gifted children with exceptional aptitude may not demonstrate outstanding levels of achievement due to environment circumstances such as limited opportunities to learn as a result of poverty, discrimination, or cultural barriers" (National Association for Gifted Children). It essential to recognize the diversity amongst gifted students in their interests, learning styles, and personalities, while simultaneously working to maximize on the characteristics of this group of learners (Thomson, 2010). Gifted students tend to share some commonalities such as viewing themselves as committed and responsible for their own learning, preferring to learn through tactile and kinesthetic senses, generally choosing to work independently from others, and needing less structure in their learning setting (Thomson, 2010). "Taken together, these finding suggest that regular classroom instruction, which often emphasizes high-auditory memory skills, structure, fact learning, and peer collaboration, may not be ideal for some gifted learners who are highly tactual, conceptual, open/flexible, and independent learners" (Thomson, 2010, p. 665).

Gifted students could benefit greatly from an online learning environment which provides for more opportunities in areas of interest to the student and provided at a pace that is on track with their rate of learning. Expanding access to students is one asset of online learning. "Offering one or two online courses could benefit a specific segment of students identified as gifted and talented," (Chaney, 2001, p. 28) ultimately providing more opportunities in the competitive realm of education.

#### Disability

Online learning has the capacity to break down barriers that have restricted individuals from an equitable education in the past. In order to establish a learning environment that is conducive for all participants, the students' needs must be put first to establish courses that are accessible for all learners (Oswald & Meloncon, 2014). In education an estimated one in ten students has some form of disability. A study revealed that in 2007-2008, 11 percent of undergraduates and 8 percent of graduate students reported having some form of disability. Online learning may be the only way "that some students can independently access courses and course-materials – something that is a powerful reminder of the need for accessible online distance education" (Oswal & Meloncon, 2014, p. 276).

An increasing percentage of students with disabilities reveals the ever increasing need for alternatives to traditional school settings. Online courses present "workable alternatives to a variety of potential learners, including school-phobics, people in hospitals or at home due to illness and injury, dropouts who want to go back to school, expelled students, single parents, and students in other states or countries" (Chaney, 2001, p. 22) searching for nontraditional educational settings that offer a means around difficult barriers faced by traditional settings. The greater accessibility of education in terms of online courses is paving a path for more equal opportunities for students who do not fit the mold for the traditional classroom setting. As Chaika states, "distance education finally brings democracy to education" and it provides "an equal opportunity to content curriculum and to people with many perspectives... students who learn with each other with learn from each other" (1999). Distance education breaks down the barrier of location, "the single biggest factor influencing the quality of education" (Chaika,

1999). The demand for equality in education is a powerful reminder of the need for accessible online distance learning that extends opportunities beyond school district lines.

Oswald and Meloncon reported on a two studies conducted in 2010 by the Conference on College Composition and Communication (CCCC) Committee for Best Practice in Online Writing Instruction (OWI). One study focused on instructors who taught fully online courses, while the second study looked at instructors who taught hybrid courses. The data highlighted a discrepancy in accessibility and students with disabilities enrollment in the instructors' courses. The report revealed that 54 percent of instructors stated that their course was not accessible. Another issue that was exposed was the common theme among instructors (20 percent) was the belief that the issue of accommodating students with disabilities was not their responsibility. Instructors admitted that they lacked knowledge, experience, and resources to meet the identified needs of the students (Oswal & Meloncon, 2014). One instructor voiced their concerns on the lack of resources, time, and personnel to adequately accommodate students' with identified needs by stating:

It is tough enough to design an online course; to design for accessibility adds another layer of design for which we have not been trained. The challenge is access to resources to make the courses ADA compliant and time and personnel who can help with such issues. (Oswal & Meloncon, 2014, p. 282)

Another professor revealed their apprehension in regards to online instruction by stating, "I cringe at the thought of online education for these students. We don't have the appropriate scaffolding in place for these folds" (Oswal & Meloncon, 2014, p. 283).

In order to create democratic online teaching environments, accessibility needs to be at the forefront of course creation. Burgstahler stated, "Designed correctly, distance education options create learning opportunities for everyone. Designed poorly, they erect barriers to equal participation in academics and careers" (Oswal & Meloncon, 2014, p. 294). Accessibility has a profound effect on student engagement and academic performance, therefore greatly impacting the success of the learner.

The growing number of online courses and programs creates a need for more research in this particular area. More research would open doors to making students more aware of the benefits and potential drawbacks of online coursework as well as characteristics of a successful online student. Instructors and course designers should understand effective course development and design so students have a heightened chance for success.

#### Discussion

Students, particularly in the secondary setting, are progressively gaining access to the far reaching environment of online learning. The initiative to increase technology in public schools across the United States has ultimately led to a heightened accessibility for students to access online courses in a multitude of subjects. Another factor that has contributed to the increase of online courses being offered at the secondary level is the competitive atmosphere of college entry. In order to maintain a competitive edge, students are taking college level courses during their high school years. Many of the college level courses offered to high school students are in an online setting. In this research study, the effects of online learning and strategies to help students in an online learning environment will be discussed. The purpose of analyzing the effects of online learning and of finding strategies to support online learners is to better assist learners in becoming more acclimated in their learning environment so that they can be successful students

In the research study, I observed eight students in two separate online American History II courses. The eight students enrolled in the course to obtain duel credit for both Regent's level United States History and Government and college level American History II. The eight students, who are sixteen and seventeen, are general education students in the spring semester of their junior year of high school. I am the high school history teacher in the classroom, who acts as a course facilitator. I primarily provide extra instruction that is directed at the United States History and Government Regents exam as well as help the students with addressing their needs in the online course.

I received permission from the school administrator to conduct surveys of the general class atmosphere. My role in this study was to find the effectiveness of online learning and the strategies that were employed by the online learners to be successful throughout the duration of the course. I sent each of my eight students an anonymous survey in which they answered questions pertaining to the atmosphere of the class, the strategies that the students found effective to their overall success, and the benefits and drawbacks of online learning. I reviewed the findings to assess the commonalities and outliers amongst the student responses.

The results of this study illustrate that while each student is unique in their approach to online learning, there were commonalities amongst the students' response which leads to common characteristics of effective learners. The data also provided insight to the benefits and drawbacks of the online learning environment. While the results were inconclusive as to what aspects of the course were benefits and what aspects were drawbacks, the data did emphasize the aspects of the course that potential online learners should take into account when determining their individual preference. The data provides information to help support the decision making process of high school students who are deciding if an online learning environment is suitable to

their educational needs. The data should also be shared with parents/guardians and school personnel, so that they can be aware of the benefits and drawbacks of online learning as well as the common characteristics of successful students. It is important for potential online learners to understand the differences between a traditional classroom setting and an online classroom setting, since there are benefits and drawbacks to both environments that can possibly affect their overall performance as a student.

## Context

This study took place in two United States History and Government classrooms in which the students were also enrolled in an online American History II course. The students were enrolled in the course to obtain duel credit, for both college and high school Regents credit. These two classes are in the same school, taught by the same professor through the online course, and facilitated by the same high school social studies teacher.

Time was split evenly between working with and observing the two classes. Each class received the same course work, consisting of discussions, assignments, and quizzes. Both classes of students also worked within the same constraints of due dates.

## **Design and Data Collection**

Utilizing an online surveying software called "Qualtrics," an anonymous survey was sent to the eight students enrolled in the course at a rural K-12 school in western New York; after reception of approval from the Instructional Review Board. Due to wanting to keep students' identities anonymous, "Qualtrics" was ideal to collect responses in a quick and efficient manner. The students were able to submit their responses electronically, via a smartphone, tablet, or a computer at a time that was convenient for them. The accessibility of the online survey provided for all eight recipients of the survey to respond to the questions provided.

#### **Participant Population**

The research was conducted in a small rural school district, after approval from the Instructional Review Board. The school is comprised of pre-k-12 and consists of an enrollment of approximately 230 students. The school offers two sections of an online American History II course that is offered through a local community college. All of the students enrolled in the American History II course were sent an e-mail with an explanation of the research and a request to complete and anonymous survey through "Qualtrics." Out of the eight recipients of the survey, all eight sent back a fully completed survey. The survey closed once all of the recipients had responded. Participants' identities will remain anonymous in this survey and will be referred to as Participant A, Participant B, and so on.

## **Researcher Stance**

My role in this study was an observer and interviewer. I observed the students in my classroom over an eight week period while they were enrolled in an online college level course. I observed student behavior and reaction to the online course as they progressed through the semester. Through these notes, I analyzed areas that caused the students frustration, anxiety, and concern. I also analyzed areas that elicited positive reactions from the students such as calmness, interest, and enthusiasm.

As an interviewer in my study, I interviewed all eight of my students through an anonymous online survey. Through these interviews, I analyzed the benefits and drawbacks to an online course in comparison to a traditional classroom setting. I also analyzed the various strategies that the students used during their online course work that they found beneficial to their overall success. I am currently certified in Adolescent Education and History, grades 5-12. I am currently enrolled in a program working towards earning a Master's of Science in Special Education. I am also employed as the high school social studies teacher, grades 9-12, where I am conducting my study.

## Method

This study was designed to analyze the benefits and drawbacks of online learning and determine if there are strategies that make students more successful in an online learning environment. This study, based on the students being surveyed, focused on eleventh graders who are currently enrolled in an online American History II course and are also receiving high school Regents credit. Data was found in this study through a questionnaire that was distributed to the students enrolled in the course. The students were sent an anonymous survey that asked open ended questions pertaining to the online course work, environment, and structure of the course in terms of benefits, drawbacks and strategies to use when working in an online environment.

#### **Data Analysis**

In this study, open ended questions were asked to participants through an online survey application. In April 2015, an e-mail invitation asking for participation in this study was sent to eight students. All questions asked required a written response. Each question and response was reviewed to determine common themes that arose. Categories were then created by themes and each respondent's answers were tallied into the corresponding thematic group. This data analysis was conducted by the researcher.

#### Results

In the open-ended survey responses, students responded to an array of questions that targeted the overall benefits, challenges, and strategies that best suit an online learning

environment. The participants in the study all have enrolled in at least one online course, all of which were to receive college credit. The participants range being still enrolled in their initial college course to having completed two online courses for college credit.

In response to an open ended question about the overall benefits of online learning, the majority of students reported that the course allows for students to work at their own pace within a given week. The course still placed time restraints on the students, in terms of deadlines for assignments, although the majority of students seemed to be partial to the flexibility of completing work in a time and place that was best suited for their learning. Student H stated, "I like being able to move at my own pace through the course work. If I understand a topic I can move on and if I don't understand the topic I can spend more time on it." The online course creates an environment that students can pace themselves according to their own educational needs.

Several students also explained the benefit of having unlimited access to the internet throughout the course. Compared to traditional classroom settings, online course work requires and promotes the use of online research and resources. Traditional settings may be limited in their technological capacity to meet the needs of all students; therefore the routine use of technology in a traditional classroom may be inhibited by a cost barrier to the school district. In this study, the structure of online learning expanded the students' use of technology and surpassed the technology used in the students' traditional classroom settings.

In addition, several respondents stated the importance of receiving college credit through an online course. Student D explained, "the class gives you a taste of college work, where there's no teacher bothering you about getting things done so you have to be motivated on your own." The majority of students also commented on the overarching themes of "independence"

and "motivation" as important characteristics that the online course brings out in students who wish to be successful. Student A believed that the course not only taught students course material, but also how to be "an independent and responsible student."

Some students, however, noted challenges with the online course. The most frequent challenge respondents noted was the lack of reliable internet at home. Three of the respondents did not have access to the internet at home while enrolled in the online course; therefore they had to complete everything within the constraints of the school day or by attending the public library. Another challenge students expressed having, particularly early on in the course, was the lack of face-to-face help from the instructor. One student noted that "as time went on it got easier to 'help' myself, but at the beginning I didn't know what to do."

In the surveys, students explained the characteristics that they believe to be essential components to a successful online student. "Good work ethic," "time management," "motivated," "independent," "responsible," and the ability to "see the overall objective of school" were some of the reoccurring characteristics thought to be important aspects of a successful student. Time management was the most mentioned characteristic, with seven out of eight students mentioning its importance. Student E noted the difficulties of balancing the benefit of working at one's own pace with still meeting course deadlines by stating, "the benefits are being able to work at your own pace as long as you meet the deadlines." The student continues by stating, "meeting the deadlines takes time management skills and responsibility."

The students were asked to comment on the accessibility of Blackboard, the medium in which the course was delivered. Blackboard is a learning management system used by the college and the professor to deliver instructional material in an online format. Half of the

respondents believed Blackboard to be an accessible and user friendly site, that was relatively easy to navigate through. Student E stated, "the site was very well structured and easy to access," while Student G commented, "the website is very easy to maneuver through." The other half of the student respondents revealed reservations as to the overall accessibility of the site, such as Student F explaining, "there were definitely confusing aspects such as where to go to find resources posted by the professor for certain assignments." Six out of eight respondents, including two respondents who stated that the course was accessible, remarked on the inconvenience of the reconstruction periods in which the site was taken down for maintenance purposes. One student compared the site maintenance periods to having a substitute teacher in a traditional classroom setting, explaining that "delays in instruction are inevitable no matter which setting is being used."

The most common response when analyzing the difference between a traditional classroom versus an online course was the feeling of less interaction and an increased need for independence in the online learning environment. One respondent expressed the feeling of isolation when facing difficulties with the course work stating, "We are mostly set off on our own to read about the subject and learn the content." Another student shared a similar feeling by explaining, "There is no one to help guide you in an online course. In a traditional setting, a teacher assists you and gives you that extra help if needed. Online doesn't provide that."

Student respondents noted another major difference being the lack of "genuine communication," as stated by Student F. Student G explained, "We don't really communicate with our classmates and we never get to meet or talk with our professor." The course includes a discussion board feature that the students are required to post their own response to a question, as well as comment on one of their classmates' initial responses to the question. Overall, students

did not feel as if the discussion board feature replicated or suitably replaced the interaction that would take place in a traditional classroom setting.

One student saw a benefit with the asynchronous discussion board feature as helpful since "you get longer more thought out responses instead of the short bursts in normal classrooms," yet still had reservations due to the "waiting time for the responses can make you lose interest in the discussion." Student H believed the discussion board was helpful stating, "I felt that discussing topics with my peers allowed me to learn about the topic more in depth." While the online discussion board feature allowed for students to engage in conversation, the students expressed a lack of interest and participation.

When asked if there are pieces of the traditional classroom setting that are lost in an online course, the overwhelming response by all recipients was the lack of professor to student and student to student interaction and communication. A common theme of isolation within the class was reflected in Student A's response, "The social aspect of being in a traditional classroom is gone as well as the one on one help by the teacher if needed." Student B explained, "Communication differs because in a traditional setting you can go ask your teacher directly for assistance but online you get assistance indirectly and have to wait for the professor to reply." Student D stated, "It is easier to communicate to an instructor in a traditional setting because they are most likely there, while in an online setting you have to e-mail them and you may not know when they will respond." The lack of a timely response to students' emails by the professor was another major area of concern, causing students frustration throughout the course.

A majority of students acknowledged the use of e-mail as a communication tool available during the class, but explained the hurdle of expressing difficulties in the course or questions

25

about topics through a written medium as opposed to a face-to-face conversation. One student simply stated, "I would rather talk to my teacher than e-mail and have to wait for a response." A majority of the students would have liked more professor to student and student to student interaction and communication.

"Timely feedback," "clear instructions," and "support" for the students were the common pieces of advice the students would give to an instructor who is planning on setting up and instructing an online course. One student commented "be very specific in your instructions since it can be difficult to express things through text." Another student responded that one area online instructors should focus on is to "try to keep the students informed as much as possible as to their grades and things that they can improve on." Over half of the students expressed a desire for more support and encouragement from the instructor.

All respondents unanimously answered that they would take an online course in the future, regardless of the challenges that they may have experienced. Two students expressed that the online course was easier because they were able to focus completely on the work and not on other factors such as social interaction with peers and physically attending class. The respondents overwhelming agreed that online courses are best suited for high school students due to the amount of responsibility that accompanies the course work. Some students stated "stress" and "not being mature enough" as reasons for restricting students below high school from enrolling in an online course.

## **Conclusion and Future Study**

Overall, the research indicates the benefits of online coursework outweighs the challenges that students face. Further research on a larger scale, involving more students,

professors, and online courses is needed to better evaluate the benefits, challenges, and useful strategies of successful students. It could be that student respondents to this survey had a uniquely different experience than their counterparts taking online courses elsewhere. Given the limited number of respondents, this research is based on a very small population, all of whom were enrolled in the same course, under the same instructor. Analyzing various courses may offer a different insight as to the type of content that is more suitable for an online learning environment.

Another limitation of this study is the lack of perspective provided by online instructors. This study does not take into account the distinctive pedagogical and instructional methods of online instructors. This study also uses high school students enrolled in a college level online course as the population under observation. Furthermore, the experience and perspective of a high school student enrolled in an online college level course may be different than a college student's perspective of an online course. Broadening the population under observation would allow for more insight as to the various perspectives of students, based on age and ability.

Online courses offer an excellent way for students to broaden their educational opportunities and stay competitive in the ever demanding realm of education. Students embarking on the path of higher education through online coursework need to be self-motivated, independent, and responsible learners. Understanding one's learning style and skills will allow students to more accurately determine if online learning is suitable for them. Instructors and course designers will also benefit from understanding the aspects of a course that increase students' understanding and participation. Communication in terms of supportive comments, constructive criticism, and prompt feedback from instructors to students is a key component of online courses. Clear directions and an easily navigable course are also elements of a wellstructured course. Overall, online learning environments allow for learning to occur in a setting that is not restricted by place or time. Online learning has the ability to disassemble barriers that have been constructed by poverty, location, disability, as well as other factors.

#### References

- Babson Study: Over 7.1 Million Higher Ed Students Learning Online. (n.d.). Retrieved November 23, 2014, from http://www.babson.edu/news-events/babsonnews/pages/140115-babson-survey-study-of-online-learning.aspx
- Bowen, W.G., Chingos, M.M., Lack, K. A., & Nygren, T.I. (2014). Interactive Learning Online at Public Universities: Evidence from a Six-Campus Randomized Trial. *Journal Of Policy Analysis & Management*, 33(1), 94-111. doi: 10.1002/pam2178
- Chaika, G. 1999. Virtual high schools: The high schools of the future? Retrieved February 16, 2015, from http://www.educationworld.com/a\_curr/curr119.shtml
- Chaney E. G. (2001). Web-based instruction in a Rural High School: A Collaborative Inquiry into Its Effectiveness and Desirability. *NASSP Bulletin*, 85(628), 20-35.
- Di, X., & Jaggars, S. S. (2014). Performance Gaps Between Online and Face-to-Face Courses: Differences Across Types of Students and Academic Subject Areas. *Journal of Higher Education*, 85(5), 633-659.
- Donlevy, J. (2003). Teachers, technology and training: Online learning in virtual high school. *International Journal of Instructional Media*, *30*(2), 117-121. Retrieved from http://search.proquest.com/docview/204262673?accountid=27700

Institute of Educational Sciences. National Center for Educational Statistics. Retrieved December 8, 2014, from http://nces.ed.gov/fastfacts/display.asp?id=79 Kirtman, L. (2009). Online versus in-class courses: An examination of differences in learning outcomes. *Issues in Teacher Education*, 18(2), 103-116. Retrieved from http://search.proquest.com/docview/233320851?accountid=27700.

Lehmann, K. (2004). *How to be a great online teacher*. Lanham, Md: Scarecrow Education.

Matuga, J. M. (2009). Self-regulation, goal orientation, and academic achievement of secondary students in online university courses. *Journal of Educational Technology & Society*, *12*(3), 4-n/a. Retrieved from http://search.proquest.com/docview/1287037464?accountid=27700

- National Association for Gifted Children | Supporting the needs of high potential learners. (n.d.). Retrieved February 17, 2015, from http://www.nagc.org/
- Oswal, S. K., & Meloncon, L. (2014). Paying Attention to Accessibility When Designing Online Courses in Technical and Professional Communication. *Journal of Business and Technical Communication*, 28(3) 271-300. Doi:1050651914524780.
- Rovai, A. P., Wighting, M. J., & Liu, J. (2005). SCHOOL CLIMATE: Sense of classroom and school communities in online and on-campus higher education courses. *Quarterly Review* of Distance Education, 6(4), 361-374. Retrieved from http://search.proquest.com/docview/231071527?accountid=27700
- Ryabov, I. (2012). The effect of time online on grades in online sociology courses. *Journal of Online Learning and Teaching*, 8(1), 13. Retrieved from http://search.proquest.com/docview/1499783903?accountid=27700

- Savenye, W.C. (2005). Improving Online Courses: What is Interaction and Why Use It? (Undetermined). *Distance Learning*, 2(6), 22-28.
- Setzer, J. C., and Lewis, L. (2005). Distance Education Courses for Public Elementary and SecondarySchool Students: 2002–03 (NCES 2005–010). U.S. Department of Education. Washington, DC:National Center for Education Statistics. http://nces.ed.gov/pubs2005/2005010.pdf.
- Thomson, L. D. (2010). Beyond the Classroom Walls: Teachers' and Students' Perspectives on How Online Learning Can Meet the Needs of Gifted Students. *Journal of Advanced Academics*, 21(4), 662-712.

http://joa.sagepub.com.pluma.sjfc.edu/content/21/4/662.full.pdf+html

- U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies, Washington, D.C., 2010. https://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf.
- You, J. W., & Kang, M. (2014) The role of academic emotions in the relationship between perceived academic control and self-regulated learning in online learning. *Computers & Education*, 77, 125-133.

## Appendix A

## Survey Questions

- 1. How many online courses have you enrolled in? How many have you completed?
- 2. What were the benefits of the online class? Pitfalls?
- 3. What hurdles have you faced during this online course?
- 4. What are characteristics of a successful online student?
- 5. Do you believe blackboard was an accessible site (medium)? Were there confusing aspects to the setup of the course?
- 6. How does the online learning community differ from a traditional setting?
- 7. Were there benefits to the discussion board feature? How did the asynchronous setting affect the discussion between you and your peers?
- 8. Are there pieces of the traditional classroom setting that are lost in an online course? Does an online course offer aspects that a traditional classroom setting does not?
- 9. What advice would you give to an instructor who is planning on setting up and instructing an online course?
- 10. How does communication differ between you as a learner and your instructor in a traditional setting vs. an online setting?
- 11. Would you take an online course in the future? Why or why not?
- 12. Do you need face-to-face interaction from your peers and instructors to succeed? Or are you possibly someone who can thrive in an independent study environment? Explain.
- 13. What is the youngest age students should be allowed to participate in online instruction?