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The Phenomenon of the Hybrid Classroom

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The Phenomenon of the Hybrid Classroom

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Abstract

This research study was completed to explore the perceptions of teachers who have experienced online and hybrid teaching platforms in the United States. The purpose of the study focused on the satisfaction and success of students from the viewpoint of the teacher. Social interdependence theory, and social constructivist provided the theoretical framework for the study. The theories guiding the study include the collaborative learning theory and developmental learning theory. The research utilized interviews, focus groups, and questionnaires. Eight certified teachers participated in the study where they shared their experiences and perceptions on student success and satisfaction for online courses. Data gathered from the study were evaluated through NVivo software where it was coded and charted by theme. Information gathered from the interview and focus group process was also organized by theme to be analyzed. Results indicated that teachers who have taught both in the online and hybrid setting believe that hybrid classroom opportunities produce a higher satisfaction and success rate for students. Common themes from the study demonstrated that more accountability, collaboration, and interaction were benefits of the hybrid model over the online only model of education. Future class designers, students, teachers, and administrators can employ the implications from this research to improve student success in online education.

Keywords: hybrid learning, online learning, collaborative education, cooperative learning, teacher perceptions, student success

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Chapter 1: Introduction

Education has undergone major changes in the two decades since the large-scale implementation and popularization of the internet. Traditional classrooms, in which the teacher is 'front and center' and relays information to students, have seen transformation using a wide range of connectivity and multimedia tools. For instance, video streaming technologies have allowed schools to broadcast classroom lectures around the world, thus permitting students to witness and participate in lectures and receive an education, which might be otherwise unobtainable. Students with an internet connection can complete assignments, turn them in, and receive grades for their work from anywhere in the world as fully online college classes have recently emerged as universities have consistently adopted technology into teaching practices (Matthewson, 2015).

While some of these classes have been private and fee-based, free and low-cost varieties of Massive Open Online Courses (MOOC) have also been developed. Online instruction brings significant promise from a financial and institutional standpoint; Educational institutions which implement these programs stand to gain vast benefits with respect to lower school overhead, especially on servicing and maintaining physical spaces, which has the potential to lead to reductions in tuition or increases in aid disbursement. Online education also carries a significant degree of promise with respect to its potential as a student attractor. Students today have grown to college age within the culture of the internet. This 'second home' in the online world, where learning can be performed outside the classroom, at the student's convenience, is one that may well be a great inducement to enrollment. However, this promising future has witnessed dismal results with as many as 97% of students who had registered for MOOC did not complete these classes (Karsenti, 2013).

The use of the hybrid classroom model has shown considerable promise in improving rates of class completion (Gassevic, Kovanovic, Joksimovic, & Siemens, 2014). These are classroom environments where there is a significant online component, typically as an aid to lecture and to classroom instruction, but students maintain a physical classroom presence. Gassevic et al. (2014) examined the phenomenon of the hybrid classroom, through the eyes of an instructor who taught hybrid courses, and found that the social aspect, which is often absent in online-only instruction, was critical to the success of hybrid classrooms. Through a greater understanding of why online classes alone have been less successful than expected or desired, improvements must be made in future classroom methodology. Such improvements stand to benefit both students and educational institutions alike.

Background

The first massive open online course at the college level was officially established in 2008. However, distance education existed for decades prior through mail order and televised delivery methods (Ronkowitz & Ronkowitz, 2015). Such models were viewed as a means by which education could become more *democratized*, that is, made available to members of society outside the ranks of the elite, such as in preindustrial Europe, where formalized programs of higher education were often available only to those with financial means, and who hailed from the "higher levels of society" (AECD, 2016, p. 1). Correspondence study, which employed the mail to deliver both instructional material and the relay of testing and assignment materials between educator and student became popular in the United States and in Europe during the 19th Century. However, distance education faced considerable skepticism from those who believed that it provided an "inferior education" to that which was available in the traditional classroom and university setting (AECD, p. 1).

Distance learning in all forms, whether facilitated by mail, television or radio broadcast, or the internet, has grown out of the "University Extension Movement," and not out of the "university proper" (Berg, 2002, p. 2). This movement came from the primary and original goals of distance learning. It has long sought to cause a shift in the primary goals of higher education, from one that is physically localized and that primarily serves the elite, to one which is available to all members of society at large (National Research Council, 2012).

An early advocate for extension instruction, Cambridge University professor Richard Moulton, stated in 1890, that such teaching must include "less rote instruction and more stimulation," as well as "less logical exposition and more…tangible human drama," in order to 'pique' the interests of the 'popular' masses to which they are intended (National Research Council, 2012, p. 213). Though modern classroom extension is less class focused in its goals, it can be viewed as an extension of these onetime priorities. Expansion of education opportunities and more interest and draw to education stays constant as a priority.

With the proliferation of the internet, extension instruction has entered a new age; Streaming video and communication services have reduced the last effective barriers to distance instruction for interaction between the student and the educator. Appropriately, the first online course mimicked a traditional lecture-based college level class, but it was broadcasted online for students around the world to view. In 2011, Stanford expanded its development of MOOCs and enrollment rose to 160,000 students. Since this time, growth has increased yearly (Ronkowitz & Ronkowitz, 2015). In the years since 2003, there has been a "steady" increase in online enrollment, with an increasing number of college students electing to take "at least one online course" during their traditional university studies, in numbers which "outpace higher education enrollment gains" (Best Colleges, 2016, p. 9). These growth figures, however, have not been

uniform across the board. While there have been significant increases in distance online course enrollment at both two- and four-year public not for profit educational institutions, as well as at for-profit, two-year schools, there has been a decreasing rate of enrollment in online-only courses at for-profit four-year schools (Best Colleges, p. 9). Though recent years have seen a major increase in the number of students enrolling in online courses, the rate of completion shown by these students has been poor. For instance, a study by Ronkowitz and Ronkowitz (2015) revealed that of 160,000 students enrolled at a Stanford University MOOC, only 20,000 successfully completed the course.

Similar completion rates for other online classes and MOOCs soon surfaced. As the concept expanded, educational institutions and businesses invested in MOOCs, but success rates remained poor. Finding the causes of these failure rates and possibilities for improvement is necessary for the future of the MOOC and online education in general.

Problem Statement

Online educational programs offer considerable advantages for both students and the institutions offering the courses. For institutions, the distance that these programs place between student and instructor, while not reducing the access of students to their instructors, translates to a considerable reduction in overhead (Israel, 2015). In addition, when students stand to receive an education from anywhere in the world, their likelihood of considering higher education as an option altogether will improve (Israel, 2015). Moreover, students for whom the cost of higher education serves as an obstacle to their likelihood to pursue such education may find that the lower rates charged for online courses may act as a significant attractor for their likelihood to pursue such courses (Israel, 2015).

In addition, from a broader social and financial perspective, the benefits to be accrued from online instruction are considerable. As presented by Fogle and Elliot (2013), while potential employers may show trepidation with respect to applicants who possess online learning credentials, often a factor of the perceived lower quality and learning benchmarks that these programs offer, the increasing number of online course users has resulted in a greater number of professionals who are educated as a whole, offering companies more applicants with diverse backgrounds to select from (Fogle & Elliot, 2013, p. 12). Over time, as online instruction makes further gains in its legitimacy and value, as well as with respect to the number of online instruction graduates and online degree-holders, the difficulty which employers show with regard to respecting these degrees is likely to fall (Fogle & Eliot, 2013, p. 12). The value of online instruction and of the degrees obtained through distance learning over the internet is likely to increase, both as an asset for prospective employers, as well as a stronger indicator of the strength of prospective job applicants.

Despite these possibilities, the current model is not producing the desired outcome for course completion. Students who enroll in online distance learning programs are not completing these courses and thus obtain credit to make progress on their degrees. The considerable number of incomplete courses speak poorly about the effectiveness of this educational model (Israel, 2015). If these trends continue, institutions, businesses, and students may abandon the idea of online classes as a viable instructional method. Without insight into the challenges facing these courses or suggestions for improving completion rates, online-only education is likely to fall out of favor and many university online instruction programs may end (Hechinger Report, 2015). Such a failure stands to act as a profound detriment to higher education in general as well as to

the potential economic gains to be made based on a highly educated population. It is critical that difficulties in course completion and student satisfaction of online courses be mitigated.

Considering these factors, the core problem which this work seeks to solve is as follows: despite the popularity of online instruction and growth in recent years, students remain unlikely to complete online course instruction once they have enrolled. This study suspected a linkage between such poor completion of online course material and poor student satisfaction with these courses. However, this was not the only variable considered. Due to their unique insights and background on teaching theory, educator participants prove to be a viable resource with respect to evaluating methods for mitigating this problem,

Purpose Statement

The purpose of this research study was to understand how teachers who have experienced online and hybrid teaching platforms in high schools in the United States perceive student satisfaction and completion rates of online courses. It is critical to approach this issue from an educator focused viewpoint. Though students may be aware of the difficulties they face with respect to online course completion, their understanding and usefulness of this inquiry are limited by their individuated points of view. Online educators, by contrast, because of their own education and experience, may possess greater understanding of the purpose and structure of online education as well as with respect to the core challenges which their students face in the course of such instruction. Such insight proved to be valuable toward attaining a greater understanding as to the elements which serve to impede student's likelihood of completing an online course. To this end, the generalized purpose of this work was to evaluate the perceptions which online course instructors hold of their students, as well as to gain a deeper understanding by which these teachers believe that such retention can be improved.

Research Question

How do teachers who have experienced online and hybrid teaching platforms in high schools in the United States perceive student satisfaction and completion rates of online courses?

Rationale for Methodology

Qualitative research methods are of greater use when conducted in an exploratory manner than quantitative research ones. As such, a process of qualitative data collection, as conducted through exploratory research, was necessitated (Yin, 2014a). Such an approach facilitated a descriptive case study through which an understanding of the perceived deficiencies in online instruction was garnered. This was also used as a basis from which to gain a greater understanding of potential obstacles to the success of online programs.

Through qualitative research, the researcher could identify themes and information that cannot be determined from a quantitative study. Qualitative research can explore the how and why of a phenomenon related to human behavior (Creswell, 2013. The current study explored teachers' perceptions of online and hybrid teaching to gain insight into their beliefs regarding satisfaction and completion of online courses. A quantitative study could not explore these perceptions as effectively as a qualitative study, as the terms which define quantitative methodologies are too strict to allow for the necessary degree of exploration which was mandated for this study. Because this work began from a perspective of theory and one could only hypothesize that student satisfaction is the causal factor at work, use of a qualitative methodology was critical.

Qualitative research is ultimately well suited to this work because of its ability in uncovering insights which would not be otherwise revealed by a more specified research design (Creswell, 2013). Qualitative research seeks to establish strong and subjective understanding

regarding issues, problems, or phenomena which form the focus of study. As defined by Lewis and Staehler (2010), the approach which this work employed was one which took into consideration the full breadth of a research subject's life experiences, including their perceptions, reactions, and feelings with respect to a range of concepts.

Research Design

The researcher determined that a case study design was the most appropriate for this study. As presented by Gerring (2004), case studies are "intensive [explorations] of a single unit with an aim to generalize across a larger set of units" (Gerring, 2004, p. 341). Such studies typically involve the exploration of a "contemporary phenomenon," as found in a "real-life context," especially when the "boundaries between [this] phenomenon and [its] context," that is, the causal factors upon which different qualities of the phenomena are predicated, are "not clearly evident" (Schell, 1992, p. 2). Appropriately, then, case studies are of significant use when exploring the specifics of an environment, tool, policy, or strategy (Creswell, 2013).

Because this work contained a strong focus upon contemporary events lacking a controlled element (Schell, 1992, p. 3), a case study was the best choice. The literature review revealed considerable historic studies regarding distance educational programs outside of the traditional classroom, however, they mainly concern the views of students and the limitations of distance learning instruction. This study focused on the understanding of current online distance education using the hybrid model and focused to study this phenomenon from a contemporary perspective rather than through a historical lens as well as to provide insight for improvement in the future.

This study provided a deeper understanding of the efficacy of modern distance learning, especially online instruction, through the exploration of the perceptions held by educators toward

both online-only education and hybrid models of such instruction. As has been shown, a case study model permits a deeper understanding of phenomena considered. Through exploring the perceptions held by teachers within both the online only and hybrid distance learning environments, a relationship with a focus on the classroom experience and other factors could be considered which to base future recommendations.

Definition of Terms

Collaborative Learning. Collaborative learning is a method of instruction and classroom education in which "students team together to explore a significant question or create a meaningful project" (Concept to Classroom, 2004).

Cooperative Learning. Cooperative learning refers to an educational environment in which students interact with each other, participate in activities, and cooperate with one other, and through which such collaboration is used as a resource toward a greater mutual understanding of core lesson concepts or ideas (Concept to Classroom, 2004).

Hybrid Education. Hybrid education combines the qualities of a traditional classroom with an online class. Students receive instructional material and correspond with each other, as well as with their instructors over the internet but they also meet in a traditional classroom environment (Olapiriyakul & Scher, 2006).

Learning Theory. A conceptual framework that defines and dictates means by which knowledge is received, processed, and retained during processes of learning. These factors are often based upon cognitive, environmental, and emotional elements, as well as upon the individual learner's prior experiences, especially in the act of learning (Leonard, 2002).

Massive Open Online Course *(MOOC).* These are internet based classes which are focused on meeting the needs of students whose access to traditional instruction is limited. Often

charging rates which are minimal or free, these classes have been used in a variety of educational institutions (Tracey, 2013).

Online Interaction. The interaction between students and instructors or students and peers in an online setting, often as facilitated by video conferences, chat boards, texting, and e-mail (Beckwith & Cunniff, 2009).

Social Constructivist Theory. This sociological theory of knowledge argues that human development and learning is one that is primarily social in nature and that knowledge is primarily constructed through interaction with other people (Kiraly, 2014).

Social Interdependence Theory. This sociological theory is predicated on the idea that an individual's goal accomplishment is necessarily affected by the actions of others, whether because of positive interdependence, as with cooperation, or as a negativ*e* factor with competition (Johnson & Johnson, 2009).

Traditional Classroom Setting. A classroom with no online component, which will meet in person, and where the teacher is the primary source of information (Kraft, 2014).

Limitations

The following factors serve to limit the accuracy of findings which result from this study.

1. The first limitation of the study concerned the sample size. As shown in the methodology to follow, this study examined the responses from a relatively small sample comprised of eight teachers from organizations which offer hybrid education across the United States. Though a strong qualitative understanding of teacher opinions was gained in the study, the small sample size can be considered a limitation to the accuracy and extent of findings which have resulted from this case study format.

2. The second core limitation of this study pertained to its design. Case studies and the evidence and results that they provide are not as generalizable to the entire population as broader studies or ones that are quantitative in nature. The applicability of the results which a case study provides is reduced and cannot be applied to be the opinions of all online and hybrid teachers. This study employed a case study design.

Assumptions and Delimitations

This case study research work presumed that all participants were honest in their responses, especially with respect to the views they provided which involved their experiences and perceptions of online and hybrid learning. The researcher made best effort to preserve confidentiality throughout the data collection process and informed the participants that they were free to leave the study at any time. In addition, all participants were informed of the study's methodology and purpose before it began. Participants were also informed of the study's results.

The researcher worked to ensure that all assumptions and inferences reflected the statements and perceptions of the participant teachers. Notes which detailed participant discussions were provided to the participants to ensure the accuracy of statements.

Delimitations were limited to conditions under the researcher's control. The researcher chose questions posed during focus groups, discussions, interviews and written questionnaires.

Chapter 2: Review of Literature

Introduction

The first class which was taken for credit outside of a traditional classroom by mail correspondence can be traced to the University of London in the 19th century. It can be linked to Sir Isaac Pittman, who founded a correspondence college in England in the 1840s, following the establishment of free mail delivery in order to deliver course material to a growing body of students (Simonson & Schlosser, 2006). Both were done to educate more people outside of the big cities where universities were housed.

This idea of education through mail correspondence spread to the United States by 1890 (Craig, 2015). Over the course of the 20th century, distance-based learning widely expanded, especially through the use of the mail, but, as technology progressed, it expanded to television and radio methods as well (Berg, 2002). The primary solutions which have been provided by these methods include (1) Greater geographic access, (2) Flexible scheduling, especially to work around employment, (3) Access by specific populations, especially those for whom a traditional education is financially prohibitive, and (4) Expanded curricular offerings, especially by those who lack access to a nearby traditional educational institution (Berg, 2002).

Though the latter decades of the 20th century would witness considerable growth in the community college system which provided greater "geographic access" to higher education, correspondence learning remained of considerable use to Americans who lived in rural areas (Berg, 2002, p. 29). Moreover, the proliferation of these educational modalities resulted in an explosion in the number of courses and educational routes available to American students (p. 29).

In the 1990s, correspondence courses, which had traditionally used mail based delivery alone, moved away from the postal system and began to use the internet to facilitate contact

between instructors and students. By 2010, there were over 3 million students enrolled in online educational programs and classes (Craig, 2015). In 2010, the Sloan Survey of Online Learning stated that three-quarters of higher education institutions reported a high demand for online learning platforms (Aly, 2014). As communication technologies continued to improve, new advancements in distance education came as well. The speed and popularity of the internet have caused schools and universities to increase the number of course and program offerings to students in an online format, thereby improving general access to education. This is true even among the ranks of Americans who would otherwise consider themselves unlikely to seek or gain a traditional four-year college degree.

Some advantages provided to the consumers of online education have included convenience and flexibility. Students are often able to complete coursework on their own schedule and at their own pace in a manner which allows students to balance school work with work and family obligations (UoW, 2013, p. 4). In addition, these courses place students in a superior position where they can review material by being able to re-watch recorded lectures, repeat exercises, re-read peer discussion comments. They are able to take more time in order to master a range of concepts with which they are faced (UoW, 2013, p. 4). In addition, though this is the subject of some controversy, online course instruction has also been linked with greater student motivation, as by students who find "asynchronous online work more engaging," as they are free to interact with the material at times of their own choosing, when they are "freshest and most productive" (UoW, 2013, p. 4). Finally, such courses are of considerable aid to educators as well because online courses provide teachers with an opportunity to engage in assessment measures by which they are able to collect information on student learning, and then extrapolate

from this information in order to “track individual student progress” to “revise and improve [upon] course design” in a meaningful manner (UoW, 2013, p. 4).

Despite the benefits of online education, it has been shown that the success rates for online courses have remained dismal. With an average completion rate for these courses at “less than 7 %” in classes which were “automatically” graded, and for classes which involved “some degree of peer assessment,” the success rate was even lower at “4.8 %” (Parr, 2013, p. 1). The disconnect between availability of these courses and the difficulty that students face in completing and gaining credit for these lessons formed the focus of this study.

Chapter 2 will begin with a background of the problem and the conceptual framework. This section also presents a literature review which provides a history of online education and discusses collaborative learning, Social Interdependence Theory, and Social Constructivist theory. The literature review to follow discusses pertinent studies which show the effects of the hybrid model of education and the value which it provides to the students and educators who employ it. This chapter concludes with a summary of the problem and the need for further research.

Several search methods were employed to find literature for review. Specific university information was gathered from the web pages of institutions which provide online instruction. In addition, the library database ERIC was used to obtain academic studies which proved relevant to the study. Throughout the process, specific search terms were used for the academic inquiry. These included: Online education, MOOCs, hybrid education, education and technology, correspondence learning, rates of completion in online education, collaboration in the classroom, learning theories, and cooperative learning.

Background to the Problem

The term MOOC (Massive Open Online Course) was coined to reference a free online course created by Stephen Downes and George Seimans at the University of Manitoba in 2008 (Watters, 2014). The class was offered online to 2300 students from across the world, as well as to 25 students who took it in a classroom setting (Ronkowitz & Ronkowitz, 2015). The goal of this class was to reach as many students as possible in a manner which forfeited the traditional classroom instruction model (Ronkowitz & Ronkowitz, 2015). This course was offered free of charge allowing its popularity to be due to convenience as well as financial accessibility.

The concept of free online classes was enough of a success that private companies soon began to offer additional services in this manner. Udacity and Coursera, for instance, were established in 2012 and EdX came soon after. These programs offer free online classes worldwide to students (Ronkowitz & Ronkowitz, 2015). Courses and instruction across many academic fields were offered free to students all over the world to anyone with internet access. These course offerings were swiftly adopted across American higher education, with many universities offering course credit for classes taken online (Ronkowitz & Ronkowitz, 2015).

In recent years, online courses have also appeared in elementary and secondary education as well. As typified by one educational company, K-12, many similar organizations have sprouted up to offer elementary and high school courses to students across America. Although these companies are often for-profit in their design and offerings, some states have adopted the structure and used it to replace or to supplement courses being offered brick and mortar public schools (K-12, 2016). Online private schools such as Laurel Springs Academy also offer elementary and secondary classes online.

At first, Massive Open Online Courses (MOOCs) appeared to be an important and necessary change for education. Through their use of these programs, students from all over the world could be provided with an education that they might not otherwise be able to receive. Factors which would traditionally impede these students' access to typical brick and mortar higher education programs include inflexible employment hours, geographic inaccessibility to schools, financial necessity, and physical disability. MOOCs are unique in the way in which they successfully mitigate each of these elements. Through students' participation in these programs, their education could now be completed tuition-free from the comfort of their home, without sacrificing quality.

These programs have not been as successful as anticipated showing low completion rates overall. Siemens, the man who coined the term MOOC and who was a key player in the original design of the first course, has been unimpressed by their outcomes so far (Matthewson, 2015). Elementary and secondary online education has seen similarly low success rates for students. In a study of K-12 classrooms taken in 2014, 30% of students were shown to have failed their classes and an additional 50% failed at least one online class (MEA, 2015). In 2011, similar poor results were found of MOOCs in higher education. Stanford University offered 3 online courses with a worldwide enrollment of 160,000 students. However, only 20,000 of the students who were enrolled in these courses completed them. While many students have enrolled in free MOOC courses, less than 10% of university online students persevere long enough to complete these classes and to receive credit (Israel, 2015). Although completion rates for elementary and secondary education online courses are higher, these remain at a dismal 50% (MEA, 2015).

Some experts believe that students need interaction with instructors and peers for learning. Colak (2015) found that students who were presented material in a cooperative

learning environment fared significantly better than those who were provided with information in an independent manner. The limitations of online instruction are often presented as a factor of their lack of a social element. Students who take courses online, where there is little or no accountability to anyone, may find themselves less satisfied than their counterparts who meet in a traditional classroom (Griffith, 2014).

To explore this concept more thoroughly, an exploration of collaborative learning theory is necessitated. As presented by Lin (2015), learning theory dictates that any understanding of the development of the individual cannot be viewed as only the study of that individual alone. Instead, it is critical to examine the "external social world in which the individual life has developed," and in which the individual remains embedded (Lin, 2015, p. 12). To this end, learning theory states that collaboration enhances learning outcomes for students (Moolenaar, 2012). Teacher manuals and teacher preparation programs all around the world instruct teachers to use collaborative activities and interaction as a path to ensure greater student success. However, in the online education model, this commonly accepted teaching practice is often not used, or hampered by the distance factor which is central to this model.

Incorporating hybrid elements into MOOCs and other online classroom environments may provide students with important collaborative elements. These beneficial elements include community interaction with peers who have a common goal and the opportunity to ask questions, receive clarification, and feel a sense of obligation and belonging which may increase their chances of succeeding in the online classroom. As described by Rimm-Kaufman and Sandilos (2011), students are more drawn to learning and offer greater energy toward their educational attainment when it includes positive interaction and relationships with teachers and other

students. At present, however, online education appears to be reduced in its efficacy by this core lack of a physical social element.

As researchers in higher education study MOOCs and their rates of non-completion, attempts to alter the presentation of course material have been offered. Experimentation involving hybrid classrooms, in which there is some online element, but students also congregate in a physical location, have seen higher completion rates (Gassevic et al., 2014). In the hybrid classroom, teachers present information prior to meetings and give students time for in-depth study during meeting times (Griffiths, 2013). As a result, the hybrid provides students with more easily facilitated and meaningful interactions with their peers and teachers to attain the collaboration that learning theory argues to be essential.

Conceptual Framework

The practice of cooperative learning is one which has been proven in its effectiveness all over the world, and by over 900 studies which have been conducted since 1898 (Le & Lan, 2013). Cooperative learning environments provide students with necessary qualities of interaction, interdependence, and support. Educational psychology supplements this field research by showing that students learn best when their learning takes place in such cooperative environments (Felder & Bent, 2007). The result of a meta-analysis of 67 studies on the effects of cooperative learning environments on achievement learning showed that that 61% found significantly greater achievement in cooperative groups than in control groups comprised of traditional lecture-based classroom instruction (Slavin, 1991). In addition, the positive effects of such cooperative learning based instruction were found across all major subjects, all grade levels, in urban, rural, and suburban schools, and among high, average, and low achievers (Slavin,

1991). The overall success of grouping students in the classroom and encouraging their cooperation has been found in the K-12 as well as adult classroom alike.

Johnson and Johnson (2009) provided significant insight into the use and benefits of cooperative learning in education. While they indicate that small group learning has been used "since the beginning of human existence," the modern use of this methodology can best be traced to 1966, with educational training provided to teachers at the University of Minnesota, which focused upon the "effective instructional use of small groups" (Johnson & Johnson, 2009, p. 365). Historically, people were taught in groups as they grew up in tribes and towns with those who were in similar age and place in life. People gathered to learn skills and concepts that matched their common goal of understanding the topic at hand. Socrates, for instance, questioned his students using dialogue to give them a deeper understanding of subject matter. The classroom environment shifted away from this traditional educational style in the early 1900s with an expansion in the use of classroom lecture. This style emphasized "drill and memorization" (Lapp & Moss, 2012, p. 323). This movement witnessed the rise of the "elemental, objectives-based approach" to lecture and curricular design, as well as to the proliferation of "homogenous instructional experiences" and to "convergent learning expectations" (Silverman & Ennis, 2003, p. 134). Under this structure, all students were given the exact same instruction, independent of their collaborative capacities, as well as expected to achieve at a uniform rate, as by all students reaching "the same page of [a course textbook]" at the same rate. They were also "compared to one another" absent any consideration of their "previous learning and ability or level of understanding" (Silverman & Ennis, 2003, p. 134).

In this context, skills were "demonstrated in isolation, repeated in isolation, and tested in isolation," leading to a system under which students were provided with instruction which

shirked collaboration in favor of curricula which was structured "elementally and linearly," and dictated to students "piece by piece, unit by unit," and "grade by grade" (Silverman & Ennis, 2003, p. 134). This view of education, which was informed primarily by a systems perspective, would eventually be reduced in popularity following the resurgence in the collaborative style, in the 1960s. During these years, the grouping of students for collaborative instruction was a practice for education long before it was studied or had a formal name (Johnson & Johnson, 2009). However, theories of social interdependence and constructivism provided psychological reasoning and background for the successful use of peer interaction in the classroom for collaborative learning.

A group classroom environment leads to variation in student success depending on the group atmosphere. There are two types of social interdependence: positive interdependence, as when the "actions of individuals promote the achievement of joint goals," and negative interdependence, as when individuals' actions serve to "obstruct the achievement of each other's goals" (Johnson & Johnson, 2009, p. 366). Cooperative learning relies on the establishment and fostering of positive relationships between classroom group members to lead to meaningful success in learning objectives. Johnson and Johnson (2009) argued that when situations are structured in an individualistic manner, as in many varieties of online instruction, there is no "correlation among participants' goal attainments" (p. 19). Though such environments place great emphasis on the goals to which individuals can reach, "regardless of whether other individuals attain or do not attain their goals," these environments also result in a host of somewhat negative outcomes which result from this individualistic approach (Johnson & Johnson, 2009, p. 19).

When any success attained is wholly dependent upon the individual's own efforts, though the environment will teach the value of "independent efforts to succeed," the pleasure to be gained from such success is "personal and isolated" as a result (Johnson & Johnson, 2009, p. 19). This modality will teach the individual to view their own success as the only goal which holds any degree of importance. Though this is not an unreasonable path toward success in online education, this path leads to a degree of "self-centeredness" through which other students, who may otherwise prove invaluable toward aiding in success, are viewed as unrelated to personal success (Johnson & Johnson, 2009, p. 19).

However, the simple act of placing an individual in a group with others is not sufficient basis for establishing an environment for positive learning (Johnson & Johnson, 2009). Instead, all members of the group must also have mutual goals for a satisfactory outcome and must have the same educational goal desire to be within the group. If an individual does not wish to be part of the group, the learning experience which results from this process will often be negative for many, if not all members. However, students placed in group settings may become subject to peer pressure, which will help to enforce the mutual success goals, as well as to ensure that all group members feel the same desire to carry their own weight. This is a concept known as positive social interdependence (Johnson & Johnson, 2009). Under this concept, responsibility and accountability are fostered and an environment is created that demands mutual interdependence. Goal completion, and ultimately learning naturally occurs.

Social Constructivist Theory

The theory of constructivism serves as the methodological foundation of cooperative learning. Vygotsky and Cole (1981) determined that people learn through experience and group interaction, and argued that what individual students can accomplish "with the assistance of

others might be…even more indicative of [their] mental development than what they can do alone" (Vygotsky & Cole, 1981, p. 87). To this end, tasks which are often too difficult for children to learn on their own may be mastered in learning environments which provide the assistance of others. This active engagement through collaboration with fellow students, explained by Le and Lan (2013), often helps to foster the development of contextual understanding that cannot be obtained in an isolated environment. Active classroom collaboration between peers helps to ensure that each student is a participant in the learning process, rather than a passive absorber of information (Le & Lan, 2013).

Constructivist theory states that as students learn a new concept, they use prior understanding as a reference point for the new information. Under constructivism learning models, students are often in charge of a given learning process with the instructor taking on the role of a facilitator or a coach (Aly, 2014). As students work together, they can use the previously learned lessons from their peers as well as their own knowledge to gain a deeper understanding of classroom concepts than they would otherwise attain.

Under the constructivist learning theory, students take more of a personal responsibility for learning and are more engaged in the overall process of learning. Such increased engagement may be because students are allowed greater control over classroom processes, in a manner which might be considered a leadership role. Such active control over classroom processes often leads to an increase in knowledge and skills attainment. Constructivist theory strives to acknowledge students' individual skills, attitudes, and previous knowledge. The collaborative classroom environment fosters the degree of student participation which is at the center of constructivist theory (Aly, 2014).

When students work together, they can learn necessary skills, and through implementing this collaborative approach to the educational environment, teachers can transform from a giver of information to a facilitator in their learning process. This active teaching style engages students and corresponds with a higher educational understanding of the material (Hernandez, 2012) Educators worldwide have long accepted the need for collaboration in education, yet collaboration in the online classroom is still lacking.

Incorporating Theory into Online Courses

Historically, the use of cooperative or group learning in the educational system has proven to be beneficial for students (Johnson & Johnson, 2009). Despite this knowledge, the online classroom, by design, contains few opportunities for group learning. Students enrolled in MOOCs are expected to achieve their desired outcomes with little peer, instructor, or group interaction. While many of these classes have been created by well-recognized professors and institutions, many revert to lecture-based classroom styles of the past. They simply make information available and expect students to receive and internalize such information at a relatively-similar pace. However, simply making information available is not enough to generate learning (Levinson, 2013). As much as 93% of communication is through body language, something online arenas lack the ability to use (Tardanico, 2012).

The clearest means by which this obstacle to the online instructional environment can be overcome is through hybridizing online instruction, as with the inclusion of a physical instructional setting. Through the implementation of such a setting, students can receive the best of both worlds. They will retain access to educational material in an online format, and all of the benefits of online instruction, while also benefiting from the group learning classroom experience that has been historically proven to achieve improved learning results through

meaningful interpersonal collaboration. Through the hybrid approach to online education, students are able to have the flexibility and accessibility of an online education while also retaining the benefits of a physical learning environment (LaMartina, 2013).

Pedagogical Issues

The idea of incorporating online classes into a traditional classroom setting does not come without debate. Online and MOOC courses have typically been designed for students to participate in autonomously. Israel (2015) notes that incorporating a hybrid classroom environment for the online learning platform was not intended at the inception of the idea, and thus creates issues. The design had a different intended audience and presentation, which might cause compatibility issues when an online course moves into a classroom.

In addition, incorporating the MOOC into a classroom environment increases the cost of the program significantly because of the cost of hiring an instructor to meet with students, either in a physical or virtual setting (Israel, 2015). Human resource issues around hiring, training, and managing instructors also increases expenses associated with these programs, which may limit their usefulness to institutions from a financial perspective. A hybrid classroom may also incur building and classroom overhead fees. For colleges and universities where online courses have been implemented in order to accommodate more students than they have space, the idea of incorporating a hybrid learning environment may counter the very point of online instruction.

That said, the collaborative benefits associated with the implementation of a hybrid classroom may be significant, and result in greater student success in these programs. Online-only classes have historically seen poor rates of completion, despite the hoped for ability to incur increased graduation rates, as well as a stronger pool of educated employees from which prospective employers may draw (Israel, 2015). However, because students enroll in virtual

classes from all over the world, finding a suitable geographical location might prove to be a difficult task, along with convincing students that a hybrid style is in their best interest.

The hybrid style might be most appropriate to a group of students who are all based in a similar geographic area. Though the traditional online classroom is likely best, and most-suited to a group of students who are truly global in nature, when all students are from the same rough geographic area as a local university, the idea of the hybrid institution becomes more appropriate. However, while the creation of small, local hybrid classrooms can address the needs of students at a particular university or other community, the costs and course changes which result from physical classroom requirement may increase. Adding the classes to university campuses also creates a limitation in the research of success in hybrid MOOCs for prospective students as a whole, because students who are participating have likely already enrolled in a college setting, or have some strong educational backgrounds (Epelboin, 2014).

One study by Kamenetz (2015) found that 39% of students enrolled in MOOCs were teachers or former teachers and 20% were also already teaching the subject that the course topic was focused on. This offers little to the potential of these courses to assist students without an educational background. Moreover, Kamenetz (2015) found that the average person enrolled in a MOOC was someone who was already well educated previously. Alcorn, Christiansen, and Emmanual (2014) produced similar findings. Such a background provided these students with a considerable advantage over students who were taking their very first college level or virtual course from a remote area of the world. These studies show that MOOCs are often poorly addressing the needs for which they were originally intended, namely to educate students from all corners of the earth who otherwise had difficulty in gaining access to a college-level education.

However, the hybrid classroom still serves as the best option through which students can be assisted in their successful completion of MOOC or online courses. Students get the flexibility of the online course, as well as the benefits of close collaboration with their peers and instructors. Schools get lower overhead fees, as a function of less classroom time, and benefit from higher enrollment rates to pair with lower student debt and higher rates of graduation.

Evidence to emphasize the value of the hybrid classroom rests with the idea that students will have the collaborative relationships which are necessary for learning while still being able to participate in the course from anywhere geographically. To this end, even among groups of students who are geographically unable to attend a common meeting point, many online courses have adopted bulletin boards or chatrooms where students can conduct discussions on current class topics. These services necessarily fulfill the need for collaboration and peer interaction, help to keep costs for schools down, and help keep courses from having to adopt major format changes. However, research has shown that this approach to virtual collaboration is not effective in the absence of direct facilitation by an instructor (Onah, Sinclair, & Boyatt, 2014). When there is an active tutor or facilitator in the forum assisting students, more productive conversation occurs than when students were previously expected to discuss topics on their own amongst themselves (Onah et al., 2014).

When virtual collaboration was not adequately monitored, students tended to not use the forum or failed to use it in a productive manner. Onah et al. (2014) provided evidence to indicate that the addition of a moderator would increase the usability of a given forum. A moderator benefits the students but also increases financial overhead to the course. Financially and geographically, this option is still less restricting than traditional physical courses, but the success rates of these types of classes remain very low, and students will still often fail to use

these forums to their complete potential (Hill, 2014). Success rates do not increase even with the addition of virtual classrooms (Hill, 2014).

The combination of online classrooms with forums and a hybrid classroom environment where students and teachers meet in person has also been attempted to improve the low success of online classes. This activity may be helpful to students but has geographical and financial constraints, and the use of a classroom and instructor also incur a significant financial cost. When online forums have been created for online courses along with in-person meetings, the use of the online collaboration program does not produce appreciable benefits, especially important to collaboration. The students have the ability to participate in online collaboration but prefer not to do so. For instance, according to Hill (2014), students will typically wait to ask questions until they are physically in class with other students and a teacher rather than use the online forum that has been provided. Further, the classroom and forum structure has been shown to be costlier than a hybrid classroom without a forum and does not seem to add any benefits for students (Hill, 2014). In other words, online instruction that implements an online discussion forum for students and in-person class meetings shows higher costs without higher completion rates. Though limited by the availability of current research, the hybrid model of an online classroom along with in-person class meetings has shown the highest rates of success (Hill, 2014).

Alternative Educational Theories

The previous research used to determine the effectiveness of the addition of a hybrid classroom to improve online courses demands advancement and further study. Current rationale, which places a strong degree of value upon hybrid instruction, is primarily based upon educational theory. Social Constructivism states that interaction between people increases

learning (Johnson & Johnson, 2009). While this is the most widely accepted idea in educational settings, there are certain disadvantages in the approach.

Clark (2013) pointed out that there are many who do not agree with social constructivism and who would argue that collaborative group learning theory tends to be disrupting to the learning process for some individuals, especially those who are characterized by qualities of introversion. Introverted students may find the classroom setting, and the elevated level of social interaction upon which the social constructivist view is predicated, to be stressful. By contrast, individuals who present with strong qualities of extroversion may also find this style of learning to be detrimental as they seek too much interaction with the group and go off task.

Merrill (1997) suggested that group learning could be a waste of time as it can lead group members to take unnecessary time to discuss concepts that they already understand. Clark (2013) felt that students who have family members who are well-educated and have organized home lives will by nature be more successful in a group structure than those who do not. Lui and Matthews (2005, p. 385) felt that constructivism dismisses the advantages of traditional lecturing methods, and that it would be worthwhile to reexamine the value of the traditional instructional methodologies, such as learning by rote or memorization, in educational settings. Not all students learn in the ways that social constructivists claim (Clark, 2013).

Analysis of Issues and Theories

Online classes can be very helpful to education due to their assistance in reducing debt for higher education students because the courses cost less than traditional classes (Levin, 2017). This factor alone is highly significant because Denhart (2013) listed in Forbes the total student loan debt burden for current and former American college students at over one trillion dollars. Online classes and MOOCs may also assist students in determining their interests, thus allowing

them to avoid taking expensive courses unnecessarily. Such programs may also help students prepare for higher level coursework, thereby eliminating the need for unnecessary coursework and remedial work at the college level. In addition, MOOCs and online courses may help universities and schools raise their graduation and retention rates (Levin, 2017). Marcus (2014) stated that 2/3 of students enrolled in online courses benefit in some way from taking class even if it is not the expected benefit. From a broad perspective, MOOCs and other forms of online instruction carry the potential to be a transforming force within education, but not without further thought into developing the best methods for students and schools. Currently, the success rates of online courses are less than 10% in MOOCs (Parr, 2013) and 30-50% in elementary and secondary settings, meaning that strong consideration of methods is necessary (MEA, 2013). Despite this, Marcus (2014) stated that 2/3 of students enrolled in online courses benefitted in some way from taking the class.

The most widely accepted educational stance is that collaboration and interaction increases student learning potential and success. The limited number of studies which have been performed on online courses with physical components have shown them to result in an improvement in success rates for students (LaMartina, 2013). The arguments against the model address a minority of students and go against the common educational practices. There is ample justification for further research on how to incorporate hybrid classrooms into the online education environment to improve success and satisfaction.

Review of Literature

The concept of a free higher education distance learning course is not a new one. In 1969, the Open University in Britain launched a plan to offer free college-level courses to interested students by radio and the mail. K-12 opened its online doors to elementary and high

school students in 1999 and brought free online education to many states soon after (K-12, 2016). Much of the modern-day MOOC idea, which has advanced considerably with the proliferation of the internet and modern communications technologies, have stemmed from these early efforts (Marques, 2013).

The impact of technology on education. In the 1990s, technological advances allowed for a rapid growth in education. Computers were brought in to the classrooms, and major changes in educational administration also occurred. The student experience changed as well during these years, particularly as reflected in how students researched information, and how they interacted with other students and teachers. Instructors changed the way they gave students information in and out of the classroom (Halverson & Smith, 2010). Because of these advancements, students who have grown up with the internet and modern computing technologies have a different outlook on their role in education than their forebears, due to their growing up in an era typified by instant access to vast amounts of information. As society has grown and changed with these advancements, education has changed with it.

According to Halverson and Smith (2010), the new advancements in technology and the societal changes they brought did not cause an immediate change of educational thought. "Rather than opening up new opportunities to reframe how teachers teach and students learn," they believe that interactionalism, the theory that social processes (including learning) are derived from human interaction, instead "bent technologies to extend existing pedagogical, curriculum delivery, and assessment practices" (Halverson & Smith, 2010, p. 60). Some of the core difficulties posed by the MOOC model, especially those evidenced by poor completion rates, might be shown to originate not from its delivery model of being online, but rather from the

attempt to replicate the core educational methodologies in digital form. A new methodology in education may be necessary.

Technology-aided research. Another area where technology has been of considerable aid has been seen in assisting primary and secondary research. Technology allows students to gain first-hand, raw information from current studies published. They may access works already completed or use technology to create their own research (Mareco, 2017). The idea that educational research in distance learning success was the basis for the advent of the MOOC and other modern-day, online classroom experiences (Marques, 2013). It is because of this that many schools and universities have incorporated computer use into the classroom. However, research also suggests that many educators do not adequately take advantage of technology due to a generational gap; many current professors were raised and educated in an era preceding widespread internet and mobile technology use and have been reluctant to adopt these technologies in an effective manner as a result (Groff & Mouza, 2008). This gap will likely remain temporarily as it will be reduced when older professors retire and younger ones who have grown up with such resources enter the educational workforce.

According to Delzotto (2017), before the late 1990s, student research was considerably different than it is at present, often performed in a physical library by students who checked out physical books to obtain access to information necessary to mount their research. Higher education students searched databases with journal articles and took notes while staring at screens and spending hours away from home in university libraries. This process has shifted considerably in recent years and is now typified by students who have the ability to do research at home or wherever they choose to work without the need to go into a physical library. Students have access to databases of material for study online, and any physical books which are

necessary can be rented or bought over the web and rapidly delivered, often the following day. In this light, it can be argued that internet technologies have rendered academic research far more convenient for the researcher and have also allowed researchers to access texts and sources that would otherwise be unobtainable (Delzotto(2017). This ease of accessibility renders a benefit for research-based, online higher education coursework.

Modern students and attention spans. As digital methods of research gained popularity in the early 2000s, professors did not use them as quickly as their students, and would often be educated by their students as to the utility of online research (Manochehri & Sharif, 2010). Aside from digital instruction, some researchers have begun to investigate whether younger students may have developmental differences from previous generations because of technological advances (Groff & Mouza, 2008). Attention spans may be shorter for this generation of students. In this context, the traditional lecture form, in which students are made to sit for fifty or eighty minutes at a time, has faced criticism for its perceived lack of effectiveness, and indeed, many higher education institutions have reduced their lecture lengths to 15 minutes based upon the consensus that modern students' attention spans will support lectures which are no longer (Bradbury, 2016, p. 509). The earliest evidence provided to support this apparent consensus lies in a study by Johnstone and Percival (1976), which evaluated attention spans of students not through analysis of students' evaluations of their apparent interest in the lectures which they received, but through employing outside observers to watch experimental class sessions to evaluate attention 'drift' during lectures. These researchers reported that attention dropped during the first five minutes of class, and again after a period of 10 to 18 minutes into the lecture, in a manner which supports the generally supported view of attention spans held by students being far less than the traditional lecture format (Johnstone & Percival, 1976).

Therefore, it can be argued that the traditional length of lectures offered to students, and the vast degree of information which they receive during these lectures, is not being retained, in a manner which lends argument to those who would advocate for alternative ways of educating students, including in online formats.

Shortened attention spans may also increase the pressure on teachers to make education more engaging and interesting for students. In this regard, the online classroom has been highly accommodating. Online teachers can assign more reading for students, often under the assumption that their students will simply skim these materials. They can also vary the manner in which they present information using a variety of technological methods opening the doors for more learning in and out of the classroom (Groff & Mouza, 2008).

Presently, the approach toward technology within the classroom no longer asks whether technology should be used, but instead, how it should be used (Schrum & Levin, 2015). The issue lies in the struggle for balance. The traditional classroom without technology is outdated. The fully online classroom shows poor completion and satisfaction ratings. As a result, the primary goal is to foster an effective middle ground where the benefits of technology and the classroom can meet. In this environment, teachers who grew up researching in libraries and students who are growing up today with information readily available can mesh together.

MOOC development and social problems. The first MOOC as currently understood was launched from Stanford University in 2011. Within 3 months, the class had over 160,000 viewers, which prompted professor Sebastian Thrun, to start Udacity, currently one of the largest MOOC platforms available (Hollands & Turtholli, 2014). This led to more classes offered and

more students enrolling. It was believed that the combination of traditional teachers and technology would solve the problem of educational balance and outreach.

Supporters argued that MOOCs would be so successful that they would change the entire way higher education was approached, to the point that many brick-and-mortar universities would no longer exist (Agarwal, 2013). They would provide an education to anyone who desired it without being an expensive luxury. Students would have the opportunity to develop job skills around the globe with minimal financial investment, allowing employment rates and opportunities to soar. Lips (2010) pointed out that MOOCs have great potential in expanding higher-education opportunities to students, improving the quality of education received, and lowering costs for schools and taxpayers. Though these programs have not been as successful as anticipated, there is still considerable value that can be taken from them. The economics of the idea alone has been enough to strike interest.

In 2003, student debt in the United States stood at $200 billion. By 2012, it grew to $1 trillion (Choi, 2014). As noted by Dynarski (2014), student debt has outpaced all other forms of American debt, including consumer credit debt, auto loan, and home mortgage debt, and has remained high despite those other types of debt dropping in the years since the 2008 financialcrisis and recession to follow (Dynarski, 2014, p. 2). The consequences of this explosion in student loan debt have resulted in economic change in the United States. As presented by Mishory and O'Sullivan (2012), individuals with student loans are far less likely than those without education debt to buy a house or to start a business, and as of 2012, "40% of students graduating from a four year [degree] program with debt" have reported being less likely, or to have "delayed" making a major purchase, "such as a home or car" (Mishory & O'Sullivan, 2012, p. 3). The traditional educational model, especially through which students finance their

educations through private loans, has reduced their capacity or willingness to engage in the broader economy once they graduate from school. The rising cost of education and student debt and the stagnating income levels of graduates have spurred interest in free higher education and the acquisition of job skills. However, without the collaborative support that people need to follow through on the courses, students are often unsuccessful in online classes. A balance must be found between online educational benefits and student success.

The purpose of MOOCs and online educational courses was to expand educational opportunities on a global scale. Early predictions indicated a radical change in education with the offering of these courses, "due to their potential to make high-quality teaching accessible to everyone with broadband internet access and motivated to invest their time into concentrated learning" (Grunewald, Meinal, Totsching, & Willems, 2013, p.1). However, despite their good intentions, the completion rates and satisfaction rates of MOOCs overall is very low. A study performed by Harvard and MIT found that fewer than 10% of students who start a MOOC course complete it (Schulz, 2014). An additional study performed by Harvard University in 2013 showed that half of the students examined 11% or less of the course material which they were provided (Harvard Magazine, 2014). This study indicated that students were not only failing to complete the assignments they received, but also failing to use course materials in a manner which their course designer experts predicted or hoped that they would. Based on this evidence, it can be argued MOOCs are not as effective as they were originally intended to be (Stober, 2015).

One of the problems that MOOCs face is that they are indeed massive and open. As a result, they will provide little accountability, collaboration, interaction with peers, and assignments are delivered by instructors who are minimally present if at all (Horn, 2014).

Similar structures can be seen in elementary, middle, and high school courses offered online. Motivation to complete the class is a key element that students need to succeed in a course. However, this intrinsic desire to be successful can be fostered by collaboration with peers, the feeling of group support, and the accountability of a common purpose, all of which are not easily present in the online educational environment (Grunewald et al., 2013). Wang & Baker (2015) suggested further research on the motivation of students to take online courses to better determine how to improve retention and success rates. Knowing what students would like to gain from the course may lead designers to meet the needs of students better.

Socialization and collaboration. Educational research has shown that socialization and collaboration are beneficial to learning. The "Vygotskian approach to learning" will argue that "higher levels of internalization can be achieved through social interaction most effectively. These benefits have been shown to lead to deeper approaches to learning and consequently to higher learning outcome" (Gassevic et al., 2014, p. 27). Thus, the traditional learning environment, which is fundamentally social in nature, allows students, through social interaction, to achieve the benefits of creativity and understanding through active interaction with their peers. Such factors also help to ease the isolation that many students may feel in online education, which contributes to low success rates (Gassevic et al., 2014).

Student and teacher interaction and engagement is essential to the future success of Teachers are the most influential factor in determining student classroom success (Schumacher, Grigsby, & Vesey, 2015). However, simply having a teacher physically present is not enough to maximize learning for students. The Educause Center for Analysis and Research reported that "57.7% of students have said that they learn more in courses with some online component" (Dennis, 2014, p. 1). That is, while physical classrooms and teachers who are 'present' are

critical to student success, there is much value to be accrued from online instruction. A combination of online and classroom teaching is optimal for educational success.

A University of Pennsylvania study determined that a great predictor of online course success was students' prior educational experience. Those who had already been academically successful academically were also successful on the online platform (Watters, 2015). However, such experience does not guarantee success alone. Kop (2011) noted that often online courses do not provide students with the necessary feelings of confidence for success since they often lack access to materials, collaboration with others, and instructor participation. Citing the lack of accountability and interaction with others as a main cause for student failure, many courses have implemented a discussion forum for students. However, as has been shown, these resources are not uniformly utilized by students. When given the choice of using the online forum or waiting to meet with peers in a physical classroom setting, Caulfield (2012) found that students preferred to wait to meet with the group to ask questions and provide feedback rather than post online.

Gassevic et al. (2014) cited a study by Firmin (2014) which showed that students expressed a desire for more personal interactions and assistance from both teachers and classmates. These students clarified that they were more comfortable in a face-to-face classroom environment than they were in an online forum. This falls in line with Onah et al. (2014), who stated that "forums do not support learning as well as might be hoped" (p. 1). Some courses have offered access forum administrators or tutors to encourage involvement by students, but "tutor participation did not prompt an increase in forum activity" (Onah et al., 2014, p. 1). However, the same studies would indicate that the more interaction that students had on the forums, the higher the likelihood of success in the course. Based on these findings, student and teacher interaction was shown to be a key element for achieving critical learning outcomes.

Benefits of the Hybrid Classroom Model. There is a strong body of evidence to indicate the usefulness of the hybrid classroom model. For instance, some schools have introduced pilot programs incorporating a model where the classroom and the online class meet, creating a hybrid environment for learning. In 2012, San Jose State University partnered with EdX to offer a course from MIT. The class had 87 students, who were assigned to watch the MIT lectures and do home assignments before coming to class to engage with a 'live' teacher; 90% of students passed this course (LaMartina, 2013). Massachusetts Bay Community College offered a similar course using a MOOC from MIT and a live teacher. Out of the 17 students enrolled, 16 passed (LaMartina, 2013).

Based on the efficacy of these programs, it comes as little surprise that the trend toward blending online and traditional classrooms has increased with time. As described by Israel (2015), a growing number of "researchers, teachers, colleges, and universities [have begun] to report integrating online classes in traditional classroom settings to support face to face learning experiences in a blended format" (p. 2). Maher, Lipford, and Singh (2014) pointed out that a learning environment of collaboration occurs when students can work together to discuss problems, as well as collaborate on written assignments, and to evaluate concepts together. Through this process, learning becomes more enjoyable and in turn, more successful.

MOOCs and other online-education classes are not producing the hoped-for student performance outcomes. A change in their administration is essential for their sustainability. This change can occur through the incorporation of hybrid classroom environments. One potential solution is for on-campus courses to 'wrap' their content around a MOOC, as a means of sharing resources from the classroom and online, or they may simply meet to engage in deeper

discussion (Alton, 2013). However, changing the online components to meet the needs of students academically and socially can be challenging (Bruff, Fisher, McEwen, & Smith, 2013).

While a handful of case studies and pilot programs have been revealed by this consideration, further research on the topic is necessary. Studies must explore means by which students can obtain a trusting and social engagement with other students in an online classroom, through which deep levels of interaction with concepts and practice group problem solving can be achieved (Gassevic et al., 2014). Following the learning theories of Johnson and Johnson (2009) as well as Vygotsky (1978), social interaction is a prerequisite for learning, yet this factor is lacking in online education. Further research must be performed to address the low retention rate of online classes (Babb et al., 2010).

Summary

Educational systems worldwide have accepted the prevailing evidence which indicates that collaboration between both peers and instructors is essential to most student learning. While a few students in a classroom may not benefit from such activity, Bruff et al. (2013) found that students who were exposed to the online classroom hybrid environment were not harmed by it. Without any negative outcome to those who do not benefit and most students showing a beneficial outcome from cooperative learning, collaboration is revealed as a critical element which must be implemented in courses for online students.

Currently, fewer than 10% of students who start MOOC courses complete them (Parr, 2013). Using mixed learning methods and by the incorporation of a classroom environment alongside the MOOC, completion rates increase (Israel, 2015). The hybrid classroom allows students to spend class time reviewing concepts, asking questions, discussing ideas, and doing projects (Maher et al, 2014). As a result, the hybrid learning model helps students to receive the

necessary level of interaction upon which higher completion and satisfaction are often predicated (Bruff et al., 013). Community groups focused on a MOOC or other online class should be established to meet this need (Alton, 2013). Continuing efforts to increase hybrid environments for MOOC students are necessary for the future success of online education (Alton, 2013).

Online forums have been used to meet this need for student interaction, which has proven helpful for some students. Classes which have implemented online forums have higher completion rates than those that do not, but, according to Onah et al. (2014), students have higher satisfaction ratings when there is a moderated forum instead of one where students may simply discuss topics amongst themselves. More productive conversation occurs when a moderator, teacher, tutor, or other facilitator guides students in their learning (Onah et al., 2014). Students have been shown to prefer organized discussion and correlation between the class itself and the online platform when a classroom environment is unavailable (Grunewald et al., 2013). Further research is necessary to discover innovative ways of engaging students (Gassevic et al., 2014).

Classroom environments which require students to participate in a MOOC at home and attend related physical classes have shown improved completion rates beyond those which employ an online community model alone (Alton, 2013). The incorporation of traditional teaching with modern technological advances have been proven to improve student outcomes. Gassevic et al. (2014) drew on widely accepted learning theories which suggest that the peer interaction gained from blended and flipped classrooms serves to produce more successful outcomes for students. By combining these activities, students who do best in a classroom, those who do best in an online environment, and those who do best in a hybrid environment can all receive the support they require to become successful. Through the creation of local peer groups and classrooms, students may receive the assistance they require to complete online classes

(Alton, 2013). More hybrid classrooms using MOOC curricula should be evaluated to determine whether the success rates seen in the literature can be sustained.

If online education is to be sustainable in the future, improvements must be made to the MOOC and hybrid education models, and more research will be necessary to determine exactly how such successes can be obtained (Wang & Baker, 2015. Wang and Baker (2015) suggested examining student motivation in this research. Epelbein (2014) agrees and states that a greater understanding of MOOCs and their benefits and drawbacks is necessary. Of nearly 840,000 students enrolled in 17 courses, nearly two-thirds of students received some benefit from the experience (Marcus, 2014), so MOOCs do have the potential to be successful in education. As presented by Kamenetz (2015), "The simplest answer to what happens now is this: despite lingering doubts about the power and profitability of MOOCs, companies and universities are still spending significant resources to create and support them for millions of people, in nearly every country, for free. It is an investment, for now, on faith" (Kamenetz, 2015, para. 15). If handled in a manner that better serves student needs, online and hybrid classes may serve to reduce the educational investment which American students must make in order to receive a strong level of education, in the future. Until then, the question remains of how to best balance the investment of online education and educational debt (Kamenetz, 2015).

Due to these factors, the literature presented in this section indicates that there is a need for continued research into means by which completion rates, both for MOOCs, and for online education in general, can be improved. Griffith (2014) showed a higher student satisfaction rate in hybrid classrooms over strictly online classrooms, the advantages of the hybrid educational space are clear. Such studies have examined student opinions, as well as quantitative results of

achievement, but there is little research that focuses on rates of completion and measures of efficacy from the perspective from classroom instructors themselves.

Educational research has indicated the likelihood of students completing online courses. There is also a significant body of evidence which reflects the opinions of the students who have taken the courses themselves. However, relatively little research explores the views and attitudes of online course instructors, even though these educators have the educational background to understand the context of this information. They may be able to provide a deeper insight into their students' success. Further research into online and hybrid education is needed, and a change of perspective may prove important to understanding this phenomenon.

Chapter 3: Methodology

Introduction

The purpose of this qualitative case study was to understand how teachers who have experienced online and hybrid teaching platforms in high schools in the United States perceive student satisfaction and completion rates of online courses. This study aimed to uncover an understanding of the success rates in hybrid and online classroom models, from these educators' points of view. The chapter to follow will discuss the procedure and methodology of the study as well as the participants and the methodologies and sources of data which were employed during data-analysis for this study.

Statement of the Problem

The necessity of exploration of educator-based insights into perspectives regarding the effectiveness of MOOCs and other online-based educational methodologies has been presented in preceding chapters. It has been shown that there is a low success rate for students to complete online courses. Without meaningful information regarding how to improve completion rates, it is a possible conclusion that MOOCs and other online programs may cease to be created and offered, and the educational projects which have been launched at many universities will come to an end (Hechinger Report, 2015).

The University of California system provides a strong example of the problem which this work seeks to help mitigate. In this educational system, less than half of students who enrolled in online courses completed them successfully. As a result, the University of California has reduced their online course options to compensate for this overwhelmingly poor rate of completion (Hechinger Report, 2015). Consequently, fewer schools are now considering the idea of starting MOOCs and online only based classes for their students. In a survey by the University of California, nearly half of the surveyed universities have no plans to implement a

MOOC, a rate of disinterest in the potential of online education which has risen by roughly one-third since 2012 (Hechinger Report, 2015).

Fewer than 10% of all students who enroll in a MOOC complete the course (Kaisenti, 2013). Although there are over 4000 of these online courses available today, and they have maintained growth rates which are currently "faster than Facebook," the courses are not being used to their potential, as reflected in the poor rate (and likelihood) of students to see these courses through to completion, and obtain academic credit for their participation (State of the MOOC, 2016). This means that these courses increasingly represent a poor investment for educational institutions. MOOCs cost, on average, between $155,000 and $244,000 to implement, a significant amount of educational programmatic 'seed money' is being wasted if these courses are unsuccessful, as indicated by their inability to engage with students and ensure that these students progress through to course completion (State of the MOOC, 2016). If the costs outweigh the benefits, schools will often reconsider their involvement with MOOCs and their relationship with online education in general. To this end, the core problem which this work seeks to explore through its case study methodology relates to the low success rate in courses, especially when they are offered in an online-only environment, as is the case with MOOCs. Currently, there is a low completion rate by students. Though this work might explore students' views of these programs, such views are relatively well covered in the literature. As a result, this study will study the perceptions of teachers who teach these classes, as it is anticipated that educators of online classes have a better understanding of the causal factors of students' poor participation and engagement than the students whom they seek to educate through these online-only educational programs.

Research Questions

The primary research question that this study answered is as follows: R1: How do teachers who have experienced online and hybrid teaching platforms in high schools in the United States perceive student satisfaction and completion rates of online courses?

To answer the question the study used information gathered from teachers who have taught in hybrid, online only, and traditional classroom settings. Using questionnaires, focus groups, and interviews, experienced teachers provided their perceptions of the satisfaction and completion rates of students in each of these learning environments.

Research Methodology

Qualitative methods allow the researcher to examine phenomena in context (Baxter & Jack, 2008). To this end, this study examined the phenomenon of online courses, as well as that of hybrid classrooms. Qualitative research is exploratory a fundamentally exploratory process, which seeks to understand issues and phenomena at a deeper level than that which can be offered by more pointed quantitative research (Creswell, 2013, p. 47–48). As a result, qualitative research is an appropriate method for this study because the researcher has sought to discover the fundamentally subjective views of the participant teachers in their natural setting to gain a holistic picture of their viewpoints. This was done to facilitate qualitative, data-driven recommendations for policy that will help to ensure that future generations of online students do not suffer the same poor rates of online-only course completion which have been discovered as to date. This study employed a series of open-ended questions, both in focus groups and in interviews, which permitted participants to give honest and open answers. By seeking the knowledge and experience held by these teachers, the researcher has sought to gain a deeper

understanding of the phenomena in question. A qualitative research design was the appropriate method for this case study.

According to Yin (2014b), a case study should be used when the research questions begin with how or why. When the actions of the participants cannot be manipulated, the boundaries between the phenomenon and the context are unclear. As a result, because the scope of the current study included the discovery of the larger context of the phenomena, namely, the factors which have led to poor completion rates for online students, a qualitative case study was the most appropriate method.

As presented by Eisenhardt (1989), case studies inform a larger research strategy that focus on "understanding the dynamics present within single settings" (Eisenhardt, 1989, p. 534). Such methods can be implemented to examine single or multiple settings for an understanding of the phenomena which are being researched. This is an appropriate method here because this study examined teachers' perspectives on online education in general, as well as with respect to their views of the traditional and hybrid classrooms. Though each teacher whose views were solicited for this study had similar experiences teaching in each of these settings, including in hybrid settings, their specific interactions with students differed.

The goal of this study was to examine the perceptions of teachers who have worked in the online and hybrid classroom, to gain an understanding of the reasons why they believe that their students succeed or fail in the completion of these courses. Teacher participants were also asked to explain their beliefs regarding the believed benefits of online and hybrid classrooms.

Coe, Aliosi, Higgins, and Major (2014) showed that multiple teaching methods are necessary to achieve the goal of improving student learning. This previous work brought an evidence-driven bias to the study for the researcher because the researcher knew that studies had

been done previously that demonstrated that multiple teaching methods improved student learning. The results of this study were anticipated to provide insight for MOOC and online course creators and instructors to use in helping their students to improve success and satisfaction ratings of courses.

Research Design

A case study is used when a researcher wishes to further the understanding of a concept or to reinforce a previously believed outcome. According to Rowley (2002), these types of studies often provide answers to 'how' and 'why' questions, those which are incapable of being looked at through a quantitative study. Such 'how' and 'why' questions, appropriately, are "likely to favor using a case study" (Yin, 2014b, p. 11).

Such questions, as the primary and secondary research questions upon which this study has been based, are appropriate to qualitative case study analysis because they often consider certain "operational links" which need to be properly put into context, as well as "traced over time," in a manner which is largely-unrelated to quantitative factors, such as "mere frequency or incidence" (Yin, 2014b, p. 10). By using the case study method, with the participating teachers provided a deeper understanding of their perceptions regarding their students' success using the greater level of theoretical knowledge held by the educators themselves.

In this study, control over behavioral events is not required. Instead, the focus of the study was a contemporary situation or event, namely the factors and qualities which contribute to student completion of MOOCs and other online-only courses. Yin (2014b) asserted these two factors as a basis for a case study design as the most relevant and useful method for research on this type of research project. This qualitative case study insight on teacher perspectives is

anticipated to result in the betterment of future online course development through the use of information gained by the professionals working in the field.

Population and Sample Selection

Purposeful sampling was utilized in this case study. This method is used when the researcher seeks to gain access to a certain subsection of people whose insight is required for a given study, as well as to reject those who do not meet a specific set of criteria (Palys, 2008). Purposeful sampling allows the researcher to select participants so that specific data regarding a specific concept can be obtained, and is a method which is commonly used in qualitative case studies (Palys, 2008). Purposeful sampling from the target population was used for this study, consisting of eight teachers who have taught in both the hybrid online and online-only classroom environments, because the participating teachers had to have a background in the hybrid, traditional, and online classroom environments in order to provide the necessary information for the study. The participating teachers taught in both an online and a hybrid environment.

Participants were solicited from online programs in the United States. These programs were found through an online search by the researcher. National online and smaller hybrid schools were contacted to recruit teachers for the study via email. It was requested that teachers who were interested in participating in the study contact the researcher. Teachers who responded and met the requirements of having educational experience in online and hybrid classrooms were included in the study. Each selected participant had been formally trained and certified by the state in which they currently practice. All participants currently held jobs requiring them to have state certification to teach.

All educators solicited for this case study had the necessary background in teaching online courses required to provide useful information for this study. This sample size, though

somewhat small was sufficient to provide a strong degree of insight without a large degree of repetition of information. Qualitative sample sizes must be "large enough to assure that most or all of the perceptions that might be important are uncovered, but…[not] too large," or else such samples risk producing data which is "repetitive and, eventually, superfluous" (Mason, 2010, p. 2). The sample size of eight teachers was deemed to be sufficient to provide a strong body of data without producing unnecessary extra data.

Utilizing the perceptions of students for the study was considered, however isolating the participants to teachers was determined to be a better option for this particular study. Teachers were used as participants for this study because they have the most experience with students, as well as a strong body of insight, both in practicality and educational theory. Teachers who have taught in both online and hybrid scenarios have access to a variety of experiences with both models and can, therefore, provide relevant data for the study. This is primarily due to these educators' valuable insight into the specific methods used in these programs, as well as due to their experience with different levels of success and failure across all of the students with whom they have interacted. While students might have a great deal of understanding with regard to the sources of their success or failure, educators' scope of understanding is far greater, as a function of the number of students who they have reached, and by their knowledge of theory.

Sources of Data

Qualitative data tools such as questionnaires, interviews, and focus groups were used to obtain the data which was collected during this case study. This data reflected the emic, or inside, perspectives of the participants. The purpose, procedure, benefits of the study, and confidentiality issues were addressed in writing with the participants in through an informed consent form, which was provided to all participants via email.

In addition to questionnaire and focus group data-collection, this study also used semi-structured interviews. These are typically performed when the researcher seeks to guide the discussion with the participant by using previously-prepared questions, yet also wishes to provide a means by which the respondent can elaborate upon their answers, as well as and diverge into other areas that may yield valuable information unrelated to the scripted questions (Gill, Stewart, Treasure, & Chadwick, 2008).

Though interviews would often diverge from the topics slated by focused research questions, the primary basis for the data collection process was in these questions. They were designed to gain an understanding of the participants' perceptions of the traditional, online only, and hybrid classroom models. In the course of data collection, participants were encouraged to discuss their experiences and opinions in depth. As a result, while the researcher guided the discussions with the scripted questions, the conversations which would result from these questions would typically deviate from these intentional focus areas, in a manner which provided a strong body of secondary data.

The semi-structured interview approach forms the most appropriate method for this study, because its primary goal was to gain insight into teachers' personal experiences. It was done in a manner which was exploratory in nature, and participants often offered more information than was requested. A list of these initial questions, as posed at the start of subject interviews, is available in Appendix B.

The questionnaire provided to each participant (Appendix A) was more focused in its approach to data collection. The goal of this element was to gauge the teacher participants general background and perspectives, especially with respect to their previous experiences with online teaching. While the questionnaire instrument included items about student success as

measured by the teacher based on student feedback, student retention, and final grades in courses, these questions were also open-ended, in a manner which allowed participants to expand upon their answers and draw from their personal experiences. By utilizing the questionnaire prior to the focus group, this researcher was able to more fully understand the participants' individual experiences and views prior to further exploration of such views in the focus group context.

In order to arrive at a consistent, accurate, and clear body of questionnaire prompts, expert pilot testing was employed. Four professional teachers, none of whom were study participants, but each of whom had experience in a variety of educational settings, were solicited to take part in this pilot study. No changes were made based on the pilot testers' review of the questions to be posed to research participants. Each of the pilot testers confirmed in an independent manner that the questions to be posed were clear and that there were no concerns with respect to the potential for subjects to misunderstand these prompts.

Finally, focus group discussions were employed in this study. Participants were engaged as a group in a manner by which they were encouraged to engage and interact with each other in a lively discussion about a range of educational modalities. This included traditional, online only, and hybrid educational models. Use of a focus group method provided the researcher a deeper insight into the topic, as all experiences were shared among participants. The focus groups were conducted via Skype, and a list of all questions posed by the researcher in the focus group setting is included in Appendix C. All participants were contacted via phone or email afterward with the researcher's analysis to ensure that the views they provided accurately reflected the participants' individual viewpoints.

All information gained from individual and group interviews, as well as from questionnaires provided, was analyzed. The information provided from the questionnaires, focus groups discussions, and interviews were organized, coded, and graphed through an extensive sorting of common themes, responses, and perceptions presented by study participants. Nvivo, a qualitative software program, was used for this process. Nine codes were issued for categories of responses, and the categories were placed into a spreadsheet of similar responses. Themes were then plotted on a graph using the qualitative survey software, which used notes taken by the researcher during the focus groups, interviews, and questionnaires. Non-pertinent information was discarded through purposeful sampling. Outlier responses were noted as such in the final study.

Data Collection

Data for the study were collected from teachers with experience teaching in both online and hybrid courses. Teachers were offered the opportunity to participate in the study through a request to the department chairs at their schools. Individuals who wished to participate provided their contact information and were contacted via email and phone to discuss the study in detail.

Questionnaires, interviews, and semi-structured focus groups were conducted. All of which employed open-ended questions, which allowed participants to elaborate on any topics as they saw fit. Appointments were made with the participants to be interviewed by phone. These interviews were at least 40 minutes long, but were conducted with no initial time limit. The researcher guided the conversation with questions relating to the participants' personal past experiences working with students in online-only classrooms, as well as in non-traditional classrooms with hybrid components. All conversations were recorded in order to maintain the

accuracy of information collected. The exact questions that were posed in these conversations are listed in Appendix B.

Accurate information collection, as presented by Creswell (2013), depends upon the researcher first considering direct interpretations of the information received from individual participants without considering the other responses collected. Creswell (2013) also suggested that patterns should be used to relate categories of information from individual participants to one another. These methods were used to determine analytical categories.

Assumptions, Limitations and Delimitations of Research Design

The following factors limit the accuracy of information produced by this data-collection process:

1. The first limitation concerns sample size. This study examined the responses from a relatively small sample comprised of eight teachers from private organizations which offer hybrid education across the United States. Though a strong understanding of teacher opinions was gained, the small sample size can be considered a limitation to the extent of findings which have resulted from this case study format.
2. The second core limitation pertains to its design. As case studies, and the evidence that they provide, are not generalizable, the applicability of the results that it provides is reduced. Though this data collection process gleaned a significant body of data, all data which resulted pertains to the views of the educator participants which it considers, and cannot be generalized to the whole body of educators in the United States.

This case study researcher assumed that all of the participants were honest in responses, especially with respect to the views provided which involved experiences and perceptions of

online and hybrid learning. The basis for this assumption is found in the ethical procedures upon which this work is based, and especially by efforts undertaken to preserve confidentiality throughout the data-collection process. All participants signed an informed consent form and were informed that they were free to leave the study at any time. In addition, all subjects were informed of the study's methodology, and of the study's results. Delimitations concern conditions which were under the researcher's control. The researcher chose questions posed during focus groups, discussions, interviews and written questionnaires.

Efforts were made to limit any biases that might exist as well as to control the limitations and delimitations. Because the researcher selected the participants, created the research questions posed, and conducted the study, effort was taken to ensure that this study was protected from bias, in a manner performed through the confirmation of information with the participants. By ensuring (through triangulation) that all information was accurate, researcher bias was limited.

Data Analysis Procedures

Triangulation was used to compare the data, by which multiple sources of information are evaluated to ensure the accuracy of qualitative findings produced by the research participants. The information provided by each of this study's eight participants was examined to determine whether their contribution was similar to information given by other participants. Information gained that did not correlate with responses from other participants was considered outlier finding. Once data was collected and organized, the information was presented back to the participants on an individual basis to ensure that the researcher did not misinterpret their views as a validity check. Any misunderstandings or misconceptions were addressed with subject participation.

Ethical Issues

This study to discover a deeper understanding of the relationship between the classroom and the online education experience worked to minimize risk and to benefit to all participants. All participants were fully informed as to the purpose, design, and likely outcomes of their voluntary participation, especially with respect to its implications toward driving policy recommendations. All participants' name and contact information remained private. Upon completion, the results were promptly analyzed so that pertinent information therein could be used to benefit the future construction and implementation of more effective online courses.

To avoid any personal or financial conflicts of interest, teachers who work under the researcher in an employee/employer relationship were not used in the study, and participants were not paid for their time or participation. Teachers who knew the researcher in a personal, academic, or workplace relationship were excluded as participants. The possibility of deception was the study's construction, by which no discernible benefit would result from deceptive answers. All participants were provided with an in-depth informed consent form prior to the agreeing to participate. Following the study, a debriefing was given to all participants.

The participants in the study were educators who have received formal teaching training. This typically assumes that mixed educational styles are the most effective means to reach the most students. This may have led to a bias among participants in favor of a hybrid environment. This particular source of bias was minimized by triangulating the data between questionnaires, focus groups, and semi-structured interviews. Triangulation provided the researcher a more in-depth understanding of the data.

As has been considered, this researcher also brought potential bias to this data collection. As a teacher who has seen the benefits of a collaborative and interactive educational setting, this

researcher had preconceived expectations of improved satisfaction and success of the hybrid classroom. Being knowledgeable of this bias allowed this researcher to maintain the integrity of the study as it was important to assemble an unbiased interpretation of information gathered.

Summary

The purpose of this study was to gain insight into the phenomenon of teachers perceptions on completion and satisfaction ratings of MOOCs, as well as those online courses which are taught in a hybrid setting. This type of research is essential to the continued presence of free online education since current data shows minimal satisfaction and completion for classes. This speaks to the considerable necessity of improvements to this model to better ensure completion and student satisfaction. This study showed the importance of hybrid education for the continued development of free online education. This was a qualitative case study. Teachers with experience in hybrid education provided information by questionnaires, interviews, and focus group discussions. Results which have been gleaned from this data-collection are presented in the chapter to follow.

Chapter 4: Data Analysis and Results

Introduction

The success of a given educational program is partially-driven by environmental, psychological, and sociological factors. Thus, in order to facilitate highly effective learning environments and lesson plans, educators must first understand the ideal circumstances in which students are best poised to engage in processes of learning, as well as understand the driving factors that lie behind these learning processes. Understanding the forces behind learning is especially crucial as technology evolves in a manner which brings more classrooms to students regardless of geographical location through the internet. The purpose of this qualitative case study was to explore teachers' perceptions of the factors which most affect student satisfaction and course completion, both in online-only, as well as in hybrid classroom environments. Teacher perceptions were examined in this study.

The existing empirical literature which explores discrepancies between hybrid and online classroom environments has largely reflected student opinions of online and hybrid courses. A focused review of this literature has revealed a noticeable gap in previously completed research, specifically regarding teachers' opinions about student satisfaction and completion. This study addressed that gap of teacher perspective by using a qualitative research design to answer the following question: "How do teachers with experience in both online and hybrid teaching platforms in United States high schools perceive student satisfaction and completion rates of online courses?"

Through the use of questionnaires, interviews and a focus group discussion with teacher participants with backgrounds teaching in both hybrid and online classroom environments, data were extracted and analyzed. As has been considered in the prior review of study methodology, this study evaluated multiple sources of information to ensure accuracy, and purposeful sampling

was used as well, in order to minimize outlying information. Additionally, validity checking and triangulation were used to ensure accurate data interpretation.

All data revealed high percentages of consistency among participant perceptions, and a general belief that the hybrid component of an online course increases student success rates in these courses. This chapter discusses the participants and results of the study and begins by reviewing the backgrounds of the participants interviewed. An outline is then presented of the case study which was employed. Following this consideration, the data and results which were gleaned from this study's will be presented, along with a summary of these findings.

Description of Participants

Study participants were all women between the ages of 31 and 60 years. Of the eight teachers who completed the study, three participants were between the ages of 51 and 60, three participants were between the ages of 41 and 50 s and two participants were between 31 and 40 years old. Three-quarters of these participants were white. Five participants classified themselves as white, one was African American, and two were Hispanic. No male teachers responded to the email request sent to online and hybrid education programs requesting participants. Further demographic and participant data is presented in Appendix D.

All study participants responded either to a participation request sent through the participants' employment institutions or to referrals from other participants. This snowball sampling procedure of gaining additional participants outside of those who volunteered through their work, enabled the researcher to gain access to possible participants through the connections already made with those who had previously joined the study. The eight participants all completed the entire study, though two teachers (out of 10 participants who were initially solicited) dropped out of the study before the data-collection process began.

Requests for participation asked potential participants to provide feedback about their experiences teaching online and in hybrid classroom environments. All eight participants had prior experience working in online and hybrid classroom environments. One participant had six to 10 years of prior teaching experience, four participants had between 11 and 20 years of teaching experience, and three participants had over 20 years of teaching experience.

Research Methodology and Analysis

In order to gain a deeper understanding of the participants' perspectives toward online and hybrid classroom success rates, a qualitative study was used. This method provided the great insight into the participant beliefs regarding the source of low student course completion rates in online classes as well as paths that can be taken for improved outcomes. The teachers' perceptions provided a wealth of information which addressed the gap in the existing literature, which has primarily focused on students' perspectives of this phenomenon.

The interviews, questionnaires, and focus group enabled participants to share their teaching experiences with the researcher. Information which these subjects provided was organized information into charts and subtopics using Nvivo software. The respondent information was entered into the program, by which themes were recognized and thematic codes were created. Participant responses were then thematically coded into 40 thematic categories or nodes. Of these 40 nodes, 9 were found to be most similar to each other. The remaining themes had insufficient consistency for effective coding. Relevant codes are listed in order of the broadest under the summary of data. The remaining themes, although relevant, possessed fewer similarities. The information which was provided to the researcher by the teacher participants was categorized into these themes and checked for the number of references which these participants made to each of the codes. From here, the researcher was able to determine the

participants' most commonly held perceptions. Informational charts were created and are provided in the appendices.

Through this approach of organizing collected information with the use of questionnaires, interviews, and a focus group discussion, the researcher triangulated the data in order to uncover common themes. To verify the respondents' information, the researcher repeated participants' answers back to them, by which a confirmation of such views was found. As considered more in depth in Chapter 3, methods of data collection and analysis were intended to minimize bias and misunderstanding, to assist in data interpretation, and allow for an in-depth understanding of the topic to be gained. The section to follow describes the thematic categories which were from the most prominent defined nodes.

Summary of Data

As collected from the questionnaires, interviews, and focus group data-collection processes, a range of 'codes' were collected. These codes, beginning with the most commonly found, and moving on to those which were least prevalent, were:

- Preference of hybrid education over online education
- Procrastination as a primary concern in online education
- Reduced teacher involvement in online instruction
- Increased collaborative learning in hybrid education
- Improved supervision in hybrid over online-only education
- Difficulty connecting with instructors in online education
- Hybrid class permitting benefits of traditional and online classes in one program
- Online and hybrid classes offering greater flexibility not available in traditional classes

- Hybrid classes offering more educational options than online only or traditional classes

The following section will expand upon each of these identified codes, using data driven from the data-collection process, in order to inform a broad body of results.

Theme 1: preference of hybrid over online education. The most prevalent thematic response category which resulted from this study indicated that the respondents had a strong preference for hybrid classroom settings over online-only course settings. All eight respondents shared this view and expressed to one degree or another during the interview and discussion processes. A common view offered by the teacher participants credited hybrid courses with providing students with increased opportunities and capacity for learning and engagement. Such engagement was often credited to increased opportunities offered for student collaboration, in-person instruction, and the ability to meet the needs of varied learning styles.

An example of this is found in the opinion of Participant 4, who stated in the interview that hybrid instruction allowed for more opportunities for educators to "demonstrate the value of course materials, in order to better assist students." Though this educator, who taught mathematics, believed that "some students may understand the value of course material on their own, or through their own engagement with the material," often "at home," the hybrid class model allowed her to provide stronger "hands-on" assistance to her students. "This is not about the students who understand the material," she revealed. "Those students tend to do well either way, with or without meaningful engagement." Instead, this instructor felt that the truest value to be gained from hybrid instruction were those which impacted "struggling" students, who, without meaningful classroom interaction, would be "lost, especially at home, without the help of the instructor." While Participant 4 agreed that online learning has its merits, she argued that

it “must be paired with beneficial classroom instruction, or else students who are having difficulty with the material cannot be as easily identified by the teacher”.

This educator (Participant 4) agreed that technology assisted in students’ absorption of necessary course material, but argued that any processes of learning would be more effective through a hybrid model. This is especially true for those who learn best through a hands-on learning style, which she argued would help to minimize the level of “embarrassment” which struggling students often face if restricted to an “online portal, alone.” She believed that students who are facing a strong level of difficulty with the material were likelier to feel embarrassed, or “isolated” as a result of online-only instruction, and paths to assistance are “hampered” by the “impersonal” online-only model. As a result, students who face great difficulties are often likelier to escape detection, as well as meaningful assistance, in a manner by which students’ “likelihood to quit” is reduced. Moreover, teachers with personal access to students, as in the hybrid model, can more easily make connections with these students which are more relevant to their specific personalities and interests, due to this increased level of involvement with students on a personal level.

Finally, through personal interview, Participant 4 stated that the superiority of the hybrid format lies its supplementation of the physical learning environment. This participant specified that a physical learning environment is essential to successfully address varied learning styles and engage in peer interaction for collaborative learning relationships. This was further discussed in the focus group discussion, as examples of peer editing, and classroom rhetoric were raised show the importance of collaboration. Participants 7 and 8 also noted the significance of students having access to live teachers. Although both hybrid and online-only environments offer efficient teaching, the teacher participants preferred the hybrid setting and agreed that the

model fosters relationships between students and instructors while increasing learning opportunities. In particular, Participant 7 agreed with Participant 4, especially with respect to the embarrassment point; Participant 4 argued that students who have grown accustomed to "living their lives online, especially through social media sites," like Facebook, are uniquely predisposed to avoid "any online interaction" which might lead to their perception of a reduction in their "social reputation." Participant 8 agreed with this point and argued that in her estimation students who have grown accustomed to carefully "curating" their online reputation are "as a rule, less likely to admit fault online," even when such an admission can be made anonymously. To this end, the online-only sphere was shown to act as an impediment to the capacity of students to admit having difficulty with course material. By contrast, the hybrid learning space was shown to be a significant aid in the ability of students to admit fault or difficulty, as such admissions would leave, in the words of Participant 8, no reputation-damaging "paper trail".

Theme 2: Procrastination as the primary issue with online-only education. The second most prevalent theme among the teachers interviewed, which was mentioned by five out of the eight participants, was the belief that student procrastination is a primary obstacle to student success in online courses. Participant 8 specifically mentioned procrastination, stating explicitly that this the "primary issue [which she] had witnessed" in her oversight of online courses. "Students whose only understanding of the assignments they must complete, and the amount of study which is necessary for their courses, takes the form of text on the screen," she argued, are not as easily induced to provide the "same amount of effort" as students who have the "benefit" of in-class participation and interaction with a teacher who can act "as a meaningful motivator." To this end, a strong body of discussion issued from the focus group, out from which a generalized consensus was reached, which indicated (per Participant 4), that students

may feel it is easier to procrastinate when they don't have to "face their teachers directly, and admit that they have not done their work. In the past," offered Participant 4, "students have had to face the shame which results from failure to complete an assignment on time," and such shame is often "far worse, and a better motivator, than any bad grade they might receive for incompleteness".

As a result, this lack of face-to-face interaction was argued to be a general detriment to the motivation necessary to induce the completion of work. Generally, the participants offered views which indicated that students find it easier to hide behind their computers than admit to their teacher's face that the work is not complete. Participant 4 noted the crucial role time management plays managing procrastination and that this is a lacking skill with students. "Time management," offered this participant, is also very often a skill which is reinforced by the "social learning environment," and students who lack social supports, such as wishing to avoid shame for failing to turn in an assignment, but also that which can result from the pride at turning in an assignment on time, "might find that they are less apt to develop or reinforce the skills which are necessary to participate in the online learning environment." However, this general sense of difficulty in time management was presented less as a failing of students, than as a general deficiency of the online learning environment itself. Students who lack organization and time-management skills may be better served by the support and accountability found in hybrid environments.

Participant 4 further discussed this in the group discussion stating that the parents of students in online-only classes are often forced to "bring up the slack," or are otherwise "forced" to motivate their children, in order to "compensate" for the lack of social motivation which students receive by their limited participation in online-only educational formats. Because of

this, parents often serve as a driving force for the hybrid setting because they themselves lack the accountability to help guide their students better. A lack of self-discipline was another theme identified in the focus group, which was shown exacerbates the issue of procrastination as well, and agreed by all subjects to make success difficult for students in online-only classrooms.

Theme 3: Reduced teacher involvement in online-only classrooms. Three participants noted that a primary drawback of online classrooms was their lack of teacher involvement in student instruction. Participant 4 stated that "the major drawback is that you are unable to listen to the student and see their understanding." When this point was brought up in the group discussion, Participants 2 and 3 agreed. Participant 3 argued that this lack of instructor focus is often a draw for instructors, however. "Teachers will often seek out online instructor positions," offered Participant 3, as a means of "increasing their teaching income," but this is a path which these participants felt was often taken by "lazy or greedy" teachers, who seek out online teaching opportunities in order to let their "focus wane, and to ignore student work quality," as well as a means of adhering to "standardized lesson planning which requires little forethought or active engagement on the part of the educator."

While Participant 3 argued that some online instructors view such instruction as "easy," and as an opportunity to "not do much work," she felt that the opposite was, in fact, the case. "Online instruction is far more difficult, that is, to do it correctly, than classroom work. It's very difficult to note when a given student is having difficulty, so online instructors must be far more vigilant and focused on their students' progress, at least when compared to the traditional classroom, where signs and signals of difficulty can be more apparent."

That said, there was a common consensus that online educator jobs are taken by some teachers in order, per Participant 2, for educators to "limit their need to put in the necessary work

to ensure that their students succeed," as well as a means of allowing them to spend more time in other activities, rather than "taking their roles as teachers, and as mentors, seriously".

Just as these participants agreed that students have more difficulty in mustering the necessary energy and motivation to fully engage with lessons undertaken in an online-only format, so too did they agree that educators also tended to view these platforms as an excuse to muster less energy toward their own roles. Participant 2 observed that students in online courses are seldom aware of the options available for instructor assistance. In the group discussion, she elaborated upon this point: "Despite the course material which often outlines, in fairly plain terms, the resources and avenues for communication which are available to the students," some students "simply do not know" that they can text, email, or contact the teacher through the course for assistance, and that online educators often fail to make such resources known. The "overwhelming lack of student engagement" which this participant witnessed, was linked to the same general apathy shared by online-only students and teachers. This is an issue which serves as a strong detriment to students, who may also be unaware of assistance programs such as online libraries, editing help, and tutor-based assistance delivered through online educational portals.

Theme 4: Reduced peer learning in online-only classrooms. Six participants commented on the reduced peer learning in online classroom settings, as opposed to the learning opportunities which were available in hybrid classrooms. These participants felt that students would present stronger learning outcomes, with higher test scores and understanding, when they were taught in hybrid classes compared with online-only classes.

Two of the participants noted students' failure to participate and show up to online community discussions and class presentations. The participants felt that, when students did not

show up for online discussions or for class meetings, it was often difficult for them to gain the necessary information to succeed and that they could "quickly fall behind their peers," as Participant 1 noted. Participant 3 commented on the value of other students to classroom success, and argued that "the feedback from other students that might provide additional insight and or depth to the questions are not involved [in online discussions]." Focus group discussion lead to further elaboration upon this point, and to a discussion which led to an agreement that students often gain much insight into topics from their peers in class discussions, a situation which is often lacking in online-only classes.

Participant 2 explained that it is "a foregone conclusion that teachers can have a significant impact on teen development," not only through educational methods and practice, but "in all aspects of their social development as well," but that the strictures of the online-only classroom environment can often make these processes "highly difficult, if not impossible, to achieve. If students are only available to one another, and to their teachers," offered Participant 2, "as text messages on a screen, their likelihood of bringing real problems or difficult life questions 'to the table' is vastly reduced." To this end, the opportunity to observe and interact with teachers who can serve as meaningful role models, as would occur through traditional classrooms or hybrid learning environments, was shown to be greatly reduced in the online educational setting. Participant 2, in the course of her educational career, reported witnessing "a wide range of students who receive poor, often bordering on neglectful, parenting at home, of a quality which stood "to reduce their ability for healthy and happy social development." However, this participant argued that she was far less likely to "trust [her] instincts" when it came to suspicions of student's personal work difficulty when she could not "look the student in the eye." Hybrid classrooms allow teachers and students to meet face to face and allow teachers

and students to gain an understanding of content that may not have been available in an online-only classroom. Some teachers and students create lifelong friendships, but all participants agreed that such friendships are difficult, if not impossible to foster in the online-only educational environment.

Participant 3 stated that she felt that students benefited from the positive reinforcement and accountability found in peer interaction. This interaction, which largely absent in online environments, is more possible in a hybrid classroom. This participant felt that the lack of peer interaction has a relationship to online courses' low student success rates. "In my experience," offered Participant 3, "students can be helpful, cruel, or ambivalent toward one another."

Though the online environment may be helpful in protecting students from the interpersonal difficulties they might face, "as through bullying, or at the hands of unhelpful or vindictive peers," claimed Participant 3, it also isolates them from the "vast benefit they stand to gain," from the assistance of peers who are "genuinely supportive," and who wish to see their peers "succeed." The other participants agreed with these estimates of student-to-student assistance, and that student peers can often be highly beneficial and helpful to one another, especially in group project situations. Four of the participants also mentioned feelings of isolation which may be exacerbated by online-only coursework. Students, as presented by Participant 5, "tend to thrive when they interact with one another," and may experience feelings of "loneliness and isolation" when they are "cut off" from these peers.

As discussed by all participants, such isolation could lead to feelings of depression, often undetected by the educator or other mentors, which could further reduce work completion. Six of the eight participants agreed that a general reduction in learning occurred among students enrolled in online classes as opposed to those engaged in hybrid environments. The participants

discussed the importance of peer and teacher interaction for learning to take place, and all agreed that for many students, especially those prone to loneliness or depression, that education in isolation was a poor choice for many students.

Theme 5: Lack of supervision in online-only classrooms. The data contained six references to lack of supervision. According to these participants, students tend to lack general supervision in online classes. Participant 1 claimed that students who participate online courses often showed a tendency to "turn in late assignments and fail to participate in scheduled or assigned group discussions."

Responsibility, as a trait in students, was also shown to be highly difficult for teachers to foster without personal interaction with students. Participants noted that low parental involvement contributed to the minimal success among online students. Student success often depends upon self-motivation and independent responsibility. However, Participant 1 argued that when students lack these traits "going into the online classes, they are invariably more likely to show poor participation in their assignments, and are more likely to fail, or to quit, these classes."

The study participants agreed that most students lack the required self-motivation skills to be successful in an online course without external motivators and that a hybrid classroom helps to provide the necessary motivation. As a consequence of the lack of motivation which students often have in online-only educational environments, Participant 1 observed that students tend to fall behind because "there is no instructor directly, as in, physically, monitoring their progress." When such students are required to face their teachers directly, they will often feel a sense of guilt in their lack of work completion.

Participant 1 expressed that she was happy to be the one-person students feel responsible for completing their work if she must, as long as the work is completed. A goal of all instruction, as represented in this theme, was to get students to learn and do what they need to do to succeed. According to Participant 1, she is willing "to do whatever is needed to help lead students to success, but the online interaction often reduces my ability to motivate these students, and leads to them falling behind despite my best efforts."

Theme 6: Difficulties in connecting with teachers in online-only classrooms. Four study participants expressed the belief that students enrolled in online-only courses showed considerable difficulty in connecting with the course instructor. Participant 8 believed that it was more difficult to contact instructors online to ask questions in a timely manner because online instructor office hours may conflict with student availability. "Though students can ask questions of their instructor at any time," argued this participant, "the instructor is often hampered by other obligations, and unable to provide support to their students in a timely manner." In effect, Participant 8 argued that "the 'flexibility' offered by these courses "cuts both ways." From this discussion, the conversation led to the study participants agreeing that people generally take online courses in order to benefit from the flexibility offered by this format, but also that educators are just as motivated to teach online-only courses due to their flexibility, as students are to take them.

However, such educators, argued Participant 8, are often "more likely to fail to be 'on call' to their students in a manner which helps with their learning," or will often show a greater likelihood to only be "present" and "available" for students during hours determined in advance. Regardless of the stated 'office hours,' all participants agreed that students are often unable to

get the assistance they need, when they need it. This is problem can be so great for some that it causes increased drop out and failure rates.

Participant 8 further noted that her students often became frustrated due to an inability to receive adequate, personal, and timely assistance needed for course completion and success, and that "this frustration, combined with their inability to voice their difficulties, or with a perceived lack of access to their instructor," can lead to poor rates of course completion, low grades, or the students withdrawing from these courses altogether. Participant 2 mentioned students' problems with technical issues as an element which can reduce their capacity to complete work they have been assigned. A range of computer-based challenges was voiced through the conversation including difficulties with online document uploads or software use. "Without adequate technical instruction," argued Participant 2, students can become "highly frustrated" in a manner which causes these students to "hit a wall," leading to academic challenges. The participants each agreed that prerequisite information for online courses will often neglect to mention the computer knowledge which is necessary for students.

As a result, these participants agreed that a frequent problem is that students will often enroll in online-only courses without realizing that to be successful, they must know how to use other programs such as Excel, Power Point, or other subject-based programs. Students who struggle with lack of familiarity with necessary technology, who also lack access to timely instructor support, will invariably suffer poor academic outcomes in these courses.

Theme 7: Hybrid classes offer the students the 'Best of both worlds'. All eight participants expressed the belief that the hybrid classroom model offers students the advantages of both online and traditional classroom learning; Participant 5 deemed it, "the best of both worlds." All participants agreed that the hybrid model offers advantages to learning that the

strictly online classroom model does not. Participant 7 summed up the group's belief by stating "Hybrid classes allow students to have the flexibility that they need in an online setting, but they also give students collaboration." Participant 5 argued that the hybrid classroom offers a far greater degree of accountability than online-only courses because instructors are more readily available to help students when they are available physically. Communication, availability, and flexibility were all cited as attributes which favor hybrid classrooms.

Teachers noted that hybrid classrooms also offered a greater degree of flexibility because many students tend to complete work during self-determined hours. Participant 3 stated that her students seem to possess more focus in hybrid environments, whereas "their minds tend to wander" when they participate in traditional classroom settings. The limited time which hybrid students spend in the physical classroom was deemed to be sufficient for students to interact, create relationships, and get a deeper understanding of concepts. On the other hand, such time was deemed to not be "too great, or to present too much of a burden" as Participant 3 indicated, that it would cause students to "tune out," or to disengage with the classroom lessons. Participants perceived that the hybrid style encouraged increased flexibility and accountability for students. Students who were able to successfully motivate themselves to complete their work independently would benefit from the hybrid classroom's increased flexibility, where students who were unable to "self-motivate," per Participant 3, would receive "all the benefits of in-person accountability, as well as the social consequences that result from the failure to complete an assignment or show effort".

All of the participants agreed that the hybrid classroom offers students all of the benefits of a traditional classroom, especially by social qualities, as well as all of the 'flexibility' benefits

of an online course. All participants felt that unless extreme situations prevented it, a hybrid classroom was always superior to an online-only classroom environment.

Theme 8: Flexibility of online education. Flexibility was a prevalent theme in the data collection and was mentioned six times by participants. The first three references to the theme each discussed the ease, convenience, and enjoyment of working from home. This was seen as a benefit felt both by instructors and students. For example, online testing was mentioned by Participant 5, as providing "easily assessed multiple-choice tests for teachers," as well as a more "time-flexible environment for test-taking students." However, such considerable flexibility and ease were also argued to be a problem for teachers in the online-only setting, as both teachers and students may become "lazy" and poorly-accountable to one another due to the limitations of an environment where teachers' and learners' physical presence is not required.

Participants 5 and 8 felt that flexibility was an asset to the online classroom environment, and both argued that online classes allow students to complete work at their own pace, rather than being "limited" (Participant 5) by the pace dictated by classrooms. These "often run at the pace of the slowest student" (Participant 5). Such flexibility reduces pressure on both students and teachers. However, the discussion led to a consensus that this inherent benefit in flexibility may backfire, causing students to fail to complete courses altogether. This point brought the discussion back around to the hybrid design as a solution. Each of the participants perceived the independent learning aspect of online courses as beneficial, but that the hybrid design offers the clearest means by which accountability can also be ensured.

Theme 9: Educational options. The last thematic node pertained to educational options. The data contained four references to the perception of the value found in customizable options provided by online courses. These options included varied and more in-depth resources,

engaging project assignments, and independently-paced learning. The discussion and interview responses offered the view that online only and hybrid teachers can both make use of the internet more when students have access to it. As not all traditional classrooms have computers and internet access, Participant 5 argued that "traditional models are inferior as far as resources are concerned. The benefit of the online model lies in the fact that, by definition, all students have internet access." Online teachers are also able to utilize more creative projects, research methods, videos, games, and other educational tools when they can rely on the fact that all students have access to the internet. As such technology is often unavailable in the traditional classroom, the online educator is in a unique position to reach their students with a range of multimedia options.

Results

Participants reported a variety of benefits and drawbacks to online classroom environments. Those with a preference reported preferring the hybrid classroom model as opposed to the online classroom model. During the interview and group discussion, all participants reported some benefits from the hybrid model as opposed to the traditional or online only classrooms. The hybrid classroom was preferred by 87.5% of respondents. The most common reason for favoring the hybrid model was that the online component of hybrid classes provided students with considerable flexibility, while the in-person meetings provide vital collaboration and accountability for students who might be facing difficulties.

The questionnaire used in this study can be found in Appendix A. It was used to gather demographic data from the participants, as well as collected information about prior teaching experience and asked these participants to describe their beliefs regarding online education.

All participants had experience with teaching high school students through online-only classes, and one participant had experience teaching both high school and college students in online-only settings. All participants had also taken online-only courses, and all but one had participated in hybrid class formats as students. Having been both teachers and students in online and hybrid environments gave participants dual perspectives as both teachers and students.

Questions nine through sixteen of the teacher questionnaire asked respondents to answer using a Likert-style scale, where responses were provided that ranged from "strongly agree," through to "no opinion," to "strongly disagree." These questions addressed teachers' perceptions of student success in online-only classrooms as opposed to their views of hybrid courses. These questions explored perceptions of student satisfaction, student preference, student grade level, overall success, teacher-student communication and instructor availability, as well as strength of student connections in both modes of instruction.

Half of the respondents disagreed that students of their prior online classes appeared more satisfied than students of their hybrid classes, while the other half offered mixed responses. Although opinions regarding online course grade achievement varied considerably, most of the respondents disagreed when asked if students in online-only courses were more successful than those who were enrolled in hybrid courses. Most of the respondents agreed that hybrid students were more satisfied and achieved higher grades than students of online courses. All but two of the eight respondents agreed that hybrid course students were more successful in learning than those in online-only courses (see Appendix E). In terms of instructor-student communication and student performance, all but one respondent agreed that connections with hybrid students were more easily reached than with online-only students (see Appendix F).

To this end, five out of eight respondents disagreed that student access to their instructor was greater in online-only courses than through hybrid courses. However, it should not be presumed that participants agreed that they were more accessible to students via hybrid course environments. On the contrary, half of the participants disagreed that they were more accessible to students of hybrid courses than they were to online students (See Appendix G).

All respondents agreed that most students perform better in hybrid classroom environments than in online-only classrooms and disagreed that most students perform better within online classrooms. These same points were reiterated in the later focus discussion as well (see Appendix H).

When asked about perceived student preference, half of the respondents reported "no opinion" regarding students' preference towards hybrid classrooms, while the other half of the answers were varied. Regarding student preferences, three respondents reported "no opinion," three respondents "agreed," and two respondents "disagreed." Although respondents seemed to agree that student performance in hybrid environments was better than in online courses, a correlating student preference was not necessarily evident. These results indicate that students may perform better in hybrid classrooms, but prefer online-only classrooms (See Appendix I).

When discussing the connection between students in the two classroom environments, half of the respondents disagreed that online-only environments provided students with better connections to their instructors, and to each other, than hybrid classroom environments. All but one participant agreed that the connections which are forged between hybrid class students (and with instructors) are stronger than those between online-only students (see Appendix J).

Collection of answers to related questions addressing the same topics framed in different ways assisted in clarifying major themes for the study. Requesting the same information in the

focus group discussion further clarified the teacher participants' perceptions. Respondents reported a variety of benefits and drawbacks to both kinds of online class environments. Those who indicated a preference between the two environments preferred the hybrid classroom model.

Background Experience

The respondents all had experience teaching in both hybrid and online classroom environments. One respondent reported over 15 years of public-school teaching in traditional classroom environments, with online elements. Another participant had been an art therapist for the Department of Family and Children Services alongside teaching high school language arts in a hybrid environment. The participants' hybrid teaching experience ranged between one and five years, using a variety of software including Schoology, Odysseyware, and Blackboard. One participant offered an in-person hybrid component to an online course upon request, but no students made use of it.

Prior to teaching online or hybrid classes, most teachers used limited technology within traditional classroom settings. Often this was the result of their classroom teaching experience prior to the incorporation of advanced technology in classrooms, or due to lack of funding in their schools. Technologies that were used by participants ranged from Promethean boards to high function calculators. These participants also used web-based options such as YouTube, TED Talks, educational games, Google Plus, and Adobe platforms. All respondents claimed some level of technology use in classes prior to their online and hybrid format teaching.

When asked about the perceived benefits of online teaching aside from hybrid classrooms, participants answered that they enjoyed the flexibility that working from home provided, as well as the resources available through internet searches. The subject teachers noted that online courses gave self-motivated students the freedom to work at their own pace and on

their own schedules. This flexibility extended to research, scheduling, and learning pace. This was characterized as a benefit to online learning. When asked about the drawbacks of online learning without hybrid components, participants' answers reflected negative qualities including isolation, discipline issues, motivation issues, procrastination, and a lack of supervision and responsibility. One respondent also mentioned a lack of physical connection in online courses. The online-only educator's inability to be able to look into a student's eyes and confirm that a lesson has been absorbed or otherwise understood was argued to hinder effective instruction.

According to the participants, hybrid classroom environments offered the benefit of increased engagement among students, and more opportunities for teachers to address the needs of students with different learning styles. Drawbacks of hybrid classroom environments included the fact that students may not attend class on time, and often are insufficiently prepared. This leads teachers to believe that students and parents do not take the courses seriously. The participant teachers also perceived the benefit of socialization in the learning process.

Participants were asked to describe student feedback about online and hybrid courses. Respondents reported positive student feedback using the following key terms: Convenient, safe, accessible, and flexible. The negative feedback for online courses was reported by respondents using phrases and words which included: Reduced instructor availability and assistance, difficulty managing assignment workloads, frustration with mandatory discussions, time management, and organizational challenges.

In these teachers' estimation, hybrid classes seemed to have received more positive feedback from students. Feedback included the students enjoying the flexibility of the learning pace and assignment completion provided by online content combined with support provided through in-person meetings. The term, "the best of both worlds" was commonly used to describe

the benefits of hybrid courses. Negative feedback about hybrid classes included the difficulty attending scheduled meeting times, excessive workloads, and schedule conflicts.

Participants agreed that students achieved better grades in hybrid classroom environments than in online learning environments. Participants were asked, "Were grades, on average, the same, better, or worse in a hybrid classroom?" Six of the eight respondents reported that students achieved better grades in hybrid environments, while two out of the eight respondents reported that grades were the same. When asked about the efficacy of online versus hybrid teaching environments, all respondents agreed that hybrid environments were more effective. This was due in part to students' and teachers' ability to connect with one another, in a manner which allowed students to better understand the material. Participant responses reported that hybrid environments provided more platforms for assisting varied learning styles, including the use of physical hands-on learning, lectures, and interactive learning methods. The online components improved flexibility in class and content. Hybrid models combine both aspects to students while decreasing the drawbacks of each individually.

Participants were asked "If you were a student, would you prefer a hybrid classroom or an online-only classroom? Why?" Seven of the eight respondents reported preferring hybrid courses for the reasons listed above. The respondent who preferred online courses valued the flexibility offered through the online format. Respondents generally reported that when taking an online-only course, instructors seemed disengaged. Success here would typically depend on a combination of high motivation and prior knowledge of the subject matter being taught.

While respondents exhibited a clear preference for hybrid courses from an instructor standpoint, opinion was more evenly split regarding class type preference as a student. Four participants preferred hybrid courses as a student, while the other respondents favored online

courses because they have a self-perception of high motivation and intelligence. Participants tended to prefer hybrid courses when they were engaging with more difficult content. When referring to their own individual experiences as students, participants attributed many of the same aspects to success in online courses as in hybrid courses, particularly determination and self-motivation.

When questioned about their perceptions of student success in hybrid versus online courses, participants reported that student grades were slightly lower in online courses. When asked why these discrepancies may have existed between online and hybrid classroom environments, four of the eight respondents attributed the lower online grades to "falling behind" in course content and understanding. Other teachers speculated that the difference may be due to family issues or circumstances at home that make independent work more difficult for students.

Respondents were also asked which teaching style required the greatest time commitment from students and teachers. All participants agreed that hybrid courses required a greater time commitment than online-only courses. This was particularly true regarding student involvement. Six of the eight respondents agreed that teachers spend more time preparing for and instructing hybrid courses than online-only courses. Two of the respondents, by contrast, believed that the time spent by teachers on preparing for and overseeing the two classroom methods was equal.

In addition to interview questions and the teacher questionnaire described above, a focus discussion group was used to provide additional data for triangulation. Through the focus group, participants were given the opportunity to share ideas, opinions, and beliefs surrounding hybrid education. The researcher took detailed notes. The same questions used in the interview process were asked during the focus discussion order to control and direct the research consistently while providing more opportunities for response data to be confirmed. This functioned as member

checking to ensure accuracy. Focus group findings confirmed the previously held belief that participants felt that including a hybrid element in courses helped students to achieve higher completion and success rates. Teachers felt that the more opportunities that students have to be engaged with materials and other students and teachers, the more accountable and engaged students would be in a course. Participants also believed that more student-teacher engagement and interaction give instructors more opportunities to assist students. Participants seemed to link student success to effective communication and interaction.

Summary

This case study examined teachers' opinions about student success and satisfaction in online-only and hybrid education courses. The case study used teacher questionnaires, interviews, and a focus group discussion as a means of collecting data. The data was analyzed using Nvivo software and triangulation was incorporated into the study to uncover common themes within the primary research question, "How do teachers with experience in both online and hybrid teaching platforms in United States high schools perceive student satisfaction and completion rates of online courses?" and the secondary research question, which asked, "Which qualities do these teachers perceive as most beneficial to student learning, as a function of their online class preferences?"

Chapter 5: Summary, Conclusions, and Recommendations

Introduction

This study enabled an answer to the research question, "How do teachers who have experienced both online and hybrid teaching platforms in U.S. high schools perceive student satisfaction and completion rates for online courses?" and a secondary research question, "Which qualities do these teachers perceive as most beneficial to student learning, as a function of their online class preferences?" This research employed a qualitative case study, using data from eight female teacher participants. Data were analyzed using NVivo software, and multiple methods of data collection were used, including questionnaires, interviews, and focus groups.

The research design and interpretation were based on the theories of collaborative learning, Social Interdependence Theory and Social Constructivist Theory. According to Le and Lan (2014), many studies have shown the value of cooperative or collaborative learning throughout the twentieth century. Cooperative learning environments, as these researchers indicate, help to facilitate interaction, engagement, and peer support. All of these elements are crucial to the learning process as well as to processes of retention (Felder & Brent, 2007). Furthermore, Johnson and Johnson (2009) asserted the effectiveness of cooperative learning, in a manner by which lends credence to development theorist Vygotsky's (1978) earlier constructivist theory, which assumes students use prior knowledge to build reference points for understanding new concepts. According to Vygotsky's theory, as cited by Aly (2014) the student is autonomous and the instructor acts as a motivational catalyst to learning. Similarly, Social Interdependence Theory dictates that student-peer engagement and interaction is critical to the processes of solidifying conceptual learning and understanding leading to retention (Johnson & Johnson, 2009).

As computer technology has evolved, online learning has become increasingly popular. The concept of Massive Open Online Courses (MOOC) emerged in 2008; the first of these was a free online course at the University of Manitoba (Ronkowitz & Ronkowitz, 2015). However, these programs have been far from effective; Out of over 2000 students enrolled in this one course, less than 10% completed it (Israel, 2015). Completion rate statistics have not improved in the years since. Because of these difficulties, this work has approached the problem of online courses from a perspective of the necessity of investigating means by which online course completion rates can be improved.

Constructivism, as articulated by Vygotsky (1978), provides a conceptual foundation for cooperative learning. Vygotsky determined that students are often more successful when aided by the encouragement of instructors and peers in group environments, as opposed to learning by themselves (Le & Lan, 2013). The solitary nature of online-only courses directly conflicts with this theory. According to Egbue et al. (2017), a recent poll revealed that 100 % of participants asked agreed that "student engagement [is] a challenge regardless of the number of years [instructors] have been teaching online" (p. 107). The fact that teachers find it difficult to maintain student engagement through online courses challenging indicates that some inquiry into this topic has been warranted.

Summary of the Findings and Conclusion

In the current study, all three streams of respondent data revealed consistency among participants' perceptions. Reference coding was used to categorize respondents' answers into nine different and most prominent themes. The general belief among participants seemed to be that hybrid classroom components, when added to online classrooms, would add to student success rates. Seventy-five % of the participants stated that students in hybrid classes earned

higher grades than those enrolled in online-only courses. The same number agreed that students of prior hybrid classes were more successful than online-only students.

Of the study participants who agreed with the effectiveness of hybrid classes, 88 % believed this higher success rate in hybrid classes may have been due to stronger student social connections and communication between teachers and student in hybrid classes. Eighty-eight % of respondents also believed that communication was more easily achieved through hybrid courses than through online courses. All but one participant agreed that students performed better in hybrid environments than online-only environments. Despite the participants' preference for hybrid courses, only 38 % believed that students preferred hybrid classrooms, while half of the respondents had no opinion about student preferences.

Although respondents seemed reluctant to deem online-only courses "ineffective," respondents did claim that students in hybrid courses were more successful than their online-only peers. Teachers' perceptions of students' classroom preferences of classroom type seemed to elicit the most varied answers from respondents. The thematic categories that emerged from the data indicated that participant teachers believed that communication, self-motivation, and peer engagement were important determinants of success in either environment and that these qualities could best be served by the hybrid environment.

According to the teachers who participated in this study, low online course completion rates may be due to students' lack of self-discipline within online environments, a lack of instructor-student communication in online-only environments, a lack of teacher supervision, and a lack of interaction with both teachers and fellow students. Since engagement is known to improve learning according to Vygotsky (Le & Lan, 2013), it would logically follow that a lack of engagement would reduce effective learning. Without in-person socialization, there are fewer

opportunities for engagement. Practically speaking, increased engagement may improve student performance and satisfaction by increasing communication and accountability.

Although teachers saw online classes as more convenient and flexible for both teachers and students, most respondents preferred to teach hybrid style courses because those courses presented more opportunities for learning facilitation, student contact, and communication. Based on these findings, flexibility and convenience may not necessarily correlate with success and/or learning effectiveness. According to the teachers, motivation and self-discipline appear to be crucial components of success, both of which are likely to lessen in efficacy if online courses offer a lot of flexibility. Thus, students may be more motivated to complete courses when some form of accountability is present through peer and instructor interaction. This may, in turn, allow for better success rates and increased course satisfaction.

This study's qualitative findings are congruent with prior research that highlight the importance of cooperation and engagement, characteristics that distinguish hybrid courses from online-only courses. Hill (2014) indicates that the combination of online classrooms and in-person meetings has the highest success rates, among all learning environments. Since that study was limited, this qualitative study's results serve to support Hill's (2014) assumptions that hybrid environments are better for student learning and success than online-only environments. As a result, it can be argued that the primary research question indicates a uniform preference and evidence to indicate the increased efficacy of hybrid classes over the online-only model of online distance learning. It can be further argued that hybrid classes lead to greater completion rates, superior grades, and higher degrees of student satisfaction when compared to participant teachers' experience and firsthand knowledge of such qualities in online-only students.

When this consideration is extended to the secondary research question, which asked "Which qualities do these teachers perceive as most beneficial to student learning, as a function of their online class preferences?" it is apparent that the range of social elements provided by the hybrid learning environment is the most beneficial. Marcus (2014) suggested that students who enroll in the courses may also gain more benefit than expected, even if they do not complete the course. This is the case whether they present in the form of increased accountability, or due to the range of benefits which can result from social interaction, whether with a peer group or with a teacher and mentor. These results align with Vygotsky's (1978) theory that students learn first and foremost through experience and interaction. Since study respondents were nearly unanimous in agreeing that hybrid environments incorporating interactive elements and in-person meetings produced higher student achievement due to increased engagement, the results can serve as a partial confirmation of Vygotsky's theory.

Implications

The literature reviewed and participant perceptions in this study all support the idea that hybrid classroom environments are better for student success than online-only courses. This finding has important implications for American education. This study examined teachers' perceptions specifically, and results showed that these perceptions are generally congruent with the literature and with a range of quantitative studies on the topic. This study characterized low online only course completion rates as a symptom of poor communication, insufficiently structured interpersonal engagement, and a resulting lack of motivation and discipline.

For education to remain effective and to grow in an increasingly technology-driven world, improvements must be made to existing MOOC models (Wang & Baker, 2015)). This study has shown evidence to indicate that MOOCs may benefit from hybrid style incorporation

of physical meetings. Although this inclusion stands to decrease the flexibility and convenience of online-only courses, higher student completion rates may result.

The challenge of implementing these suggestions lies in the fact that students often enroll in online courses because they cannot attend classroom courses, or primarily for scheduling reasons. Furthermore, students from varied geographic locations may be enrolled in the same course, making the incorporation of hybrid elements difficult. Thus, smaller, community based hybrid classrooms may be formed to reach students, especially in less populated areas.

Other practical alterations to existing online and hybrid courses may include increased attention to student engagement during in-person meetings and while planning the curriculum. If a class is limited to an online-only format due to geographic qualities, students may benefit from instructor prompted forums and discussions (Onah et al., 2014). This study's participants also noted the great impact which instructor involvement has on student success, and each participant agreed that communication with students was better facilitated in hybrid environments.

In theory, applying this study's findings to educational practice and policy adjustments requires the full acceptance of Constructivist Theory and the realization that students learn best when provided with opportunities for engagement and cooperative learning (Vygotsky, 1978). Students also appear to exhibit increased motivation and self-discipline through peer interactive and instructor facilitated learning. Although it would be inaccurate to assume that Vygotsky's theory applies consistently to all students, the evidence seems to suggest that collective cooperative learning offers a superior approach for students than solitary learning only. Thus, this study suggests that an increased use of hybrid course environments may improve course completion rates, yet their effect on among student satisfaction was left unclear.

Recommendations for Further Research

This study suggests that hybrid educational models are beneficial to students. This is in support of the literature reviewed prior to the study. Replication of this qualitative study with a larger sample group may allow for a broader range of understanding, as well as for practical implications and policy recommendations to follow. Bringing opinions of students and teachers from the same courses may also provide beneficial insight. It might also be beneficial for a more diverse pool of participants to be evaluated. A more diverse pool of respondents would help researchers identify how much teachers' ethnicity, gender, or another background might affect their perceptions of what is necessary to succeed in online courses, if such perceptions differ along these lines. Performing similar studies outside of the United States may also be beneficial.

Conclusion

This study asked the question "how do teachers who have experience in both hybrid and online teaching platforms perceive student satisfaction and completion rates of online courses?" to better understand teachers' perspectives on the low completion rates of online courses and how those completion rates may be improved. All teachers participating in the study had online and hybrid classroom teaching experience. Participants had also experienced online and hybrid classrooms as both students and professors. This qualitative study used multiple methods of data collection to understand participants' perceptions. Using NVivo software to categorize the data, it was determined that teachers perceive student course completion rates to be higher in hybrid courses. Furthermore, upon asking, "Which qualities do these teachers perceive as most beneficial to student learning, as a function of their online class preferences?" it was found that this higher success rate was largely due to greater communication, in person engagement, and collaborative learning. Participants' perceptions about student satisfaction varied: Only 38 % of

respondents believed that students prefer hybrid courses, although 75 % believed that students achieve higher grades in hybrid course environments.

These findings are congruent with recent literature on the subject and suggest that students learn better in hybrid environments than they do when they are offered online only courses. Since little research has been done focusing on teachers' opinions, this study provides information to fill this gap in the literature. These findings may be woven with existing literature to support the development of more hybrid course environments into online educational curricula.

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Appendix A: Questionnaire for Teachers

1.What is your age group?

20-30

31-40

41-50

51-60

Over 61

2. What is your ethnicity?

American Indian or Alaskan Native

Asian

Hispanic

Black or African American

Native Hawaiian or Pacific Islander

White

3. How many years have you been a teacher?

Less than 5

6-10

11-20

More than 20

4. How many different courses have you taught in an online-only setting?

1

2-5

6-10

More than 11

5. How many hybrid classes have you taught?

1

2-5

6-10

More than 11

6. What is the age group of the students you have taught in an online only class?

9

10

11

12

College

Graduate level college

7. Have you ever taken an online-only class as a student?

Yes

No

8. Have you ever taken a hybrid class as a student?

Yes

No

9. Please respond to the following statements with Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree

1. The students in my online course were more satisfied than those in my hybrid courses.
2. The students in my online course received higher grades than those in my hybrid course.

3. The students in my online course were more successful overall in their learning than those in my hybrid course.
4. The students in my hybrid course were more satisfied than those in my online course.
5. The students in my hybrid course received higher grades than those in my online course.
6. The students in my hybrid course were more successful overall in their learning than those in my online course.
7. I was able to reach and connect with my hybrid students more than I could with my online only students.
8. I was more accessible for my students to reach me in my online course over my hybrid course.
9. I was able to reach and connect with my online students more than I could with my hybrid students.
10. I was more accessible for my students to reach me in my hybrid course over my online course.
11. Most students do better in hybrid classrooms.
12. Most students do better in online classrooms.
13. Students prefer hybrid classrooms.
14. Students prefer online classrooms.
15. The connections between students are better in an online course.
16. The connections between students are better in a hybrid course.

Appendix B: Interview Questions

At the beginning of the interview, the researcher provided the participants with background information on herself as well as her project studying hybrid classroom models for a doctoral dissertation. Participants were reminded that the interview was voluntary and the participant could stop and reconvene at any time. Permission to record the interview was requested from the participants.

Participant Interview Questions:

1. What is your background experience as a teacher, both in the classroom and as an online teacher?
2. What is your experience as a hybrid teacher?
3. Prior to teaching in a hybrid classroom, did you incorporate much technology in your classroom setting? How so?
4. In your experience as an online teacher without a hybrid classroom involved, what were the major benefits of the method for students?
5. In your experience as an online teacher without a hybrid environment involved, what were the major drawbacks of the method for students?
6. Once in a hybrid classroom environment, what have been the major benefits of the method for students?
7. Once in a hybrid classroom environment, what have been the major drawbacks for the method used?
8. What information have you received as positive feedback from students in an online only classroom?
9. What information have you received as negative feedback from students in an online only classroom?

10. What information have you received as positive feedback from students who taken hybrid classes with you as the teacher?
11. What information have you received as negative feedback from students who have taken hybrid classes with you as the teacher?
12. Were grades on average, the same, better, or worse in the hybrid classroom?
13. In your opinion, were you able to communicate with students better and more effectively in the hybrid classroom or the online classroom? Why?
14. As a teacher, which style do you feel is more effective for teaching students? Why?
15. If you were a student, would you prefer a hybrid classroom or an online only classroom?
16. Have you ever taken a course where you are the student in a hybrid course? If yes, what were the aspects you thought made you successful or unsuccessful in the course?
17. Have you ever taken a course where you are the student in an online course? If yes, what were the aspects you thought made you successful or unsuccessful in the course?
18. If you were to take aa course today, and the options were hybrid or online only, which would you choose? Why?
19. What do you do as a teacher to assist students in an online only course that you do not do in a hybrid course?
20. What do you do as a teacher to assist students in a hybrid course that you do not do in an online course?
21. In your experience as a teacher in both the online only classroom as well as the hybrid classroom, which do you feel students are more successful in?
22. What is the average grade that students received in your online-only course?
23. What is the average grade that students received in your hybrid course?

24. (If there was a difference between the grades) Why do you believe one was higher than the other? (If there was no difference) why do you feel that there was no difference between the grades in the classes?
25. Did your hybrid or online classes have students who dropped out midterm? If so, what were the reasons stated, do you know?
26. What do you believe makes a student successful or unsuccessful in a hybrid or online classroom?
27. Do you believe that online teachers or hybrid teachers spend more time working with students to ensure success and satisfaction? Explain why or why not.

Appendix C: Focus Group Discussion

At the beginning of the focus group discussion with the participants, the researcher reintroduced herself and reminded participants that this is a voluntary activity that they may leave if they desire. They were told that no last names, school districts or school names will be used in order to maintain confidentiality. The researcher explained that the purpose of the Skype-based meeting was to hold a focus group in which the participants have an open conversation regarding their experiences as an online-only teacher and as a hybrid teacher. The researcher requested permission to record the session and explained that extensive notes would be taken. Participants were told that the researcher may stop to clarify as discussions went on and that the information gained from the session would be reiterated back to the participants at a later date through email or phone to ensure accuracy.

The researcher conducted the conversation by asking participants in the group setting the same exact questions that they already answered in the interview process. Participants were encouraged to agree, disagree, and elaborate on responses. The discussion went through the series of questions as they were stated originally in the interview. The discussion continued for approximately one hour. Notes were taken by the researcher and the researcher concluded the discussion by thanking all participants for their time. The information gained was added to the interview information to be looked at in NVivo.

Appendix D: Demographics and Experience

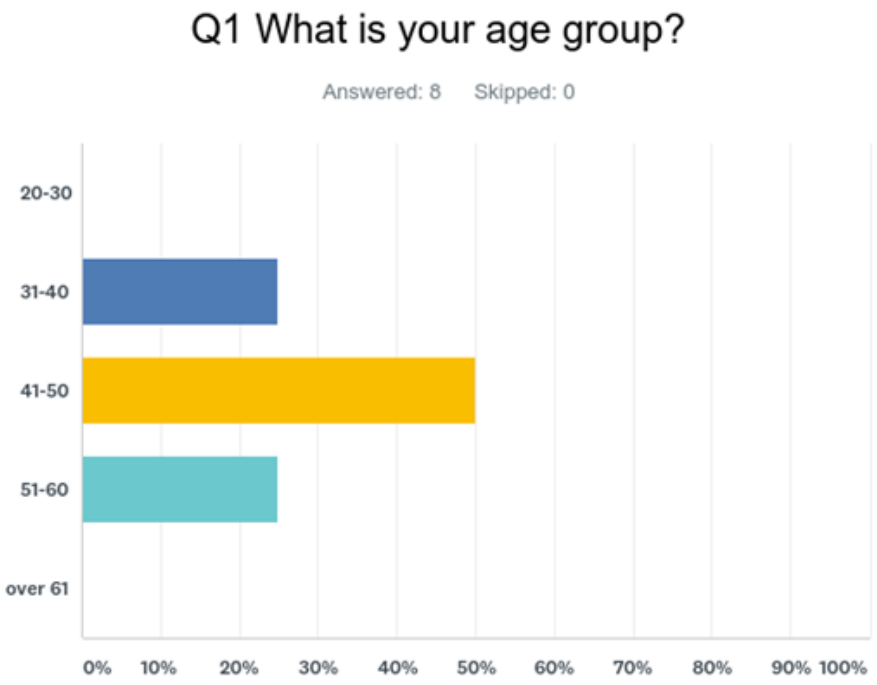

Figure 1. Responses to Question 1: What is your age group?

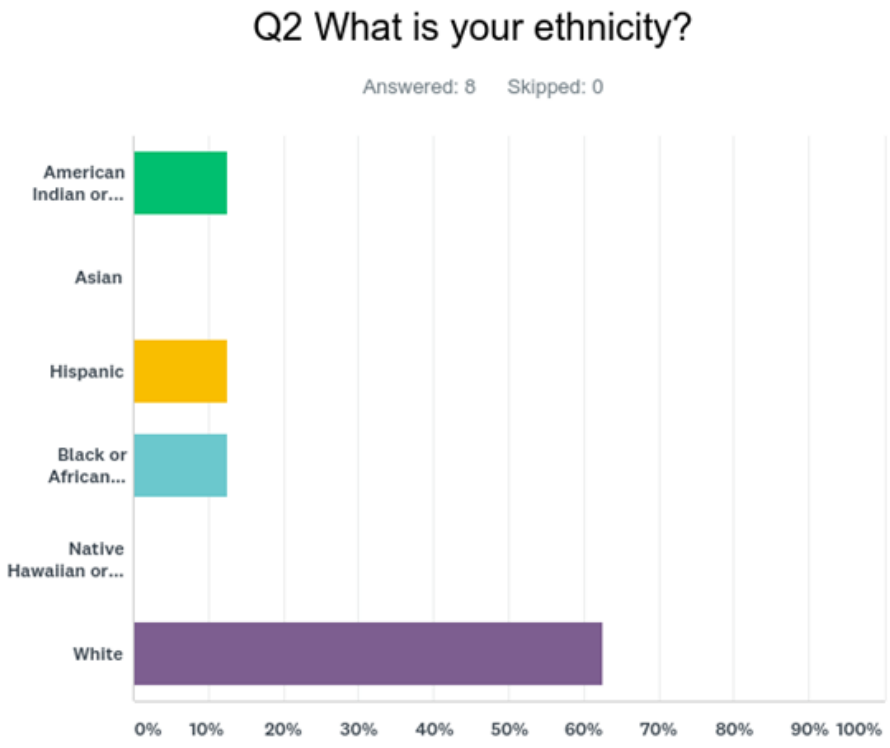

Figure 2. Responses to Question 2: What is your ethnicity?

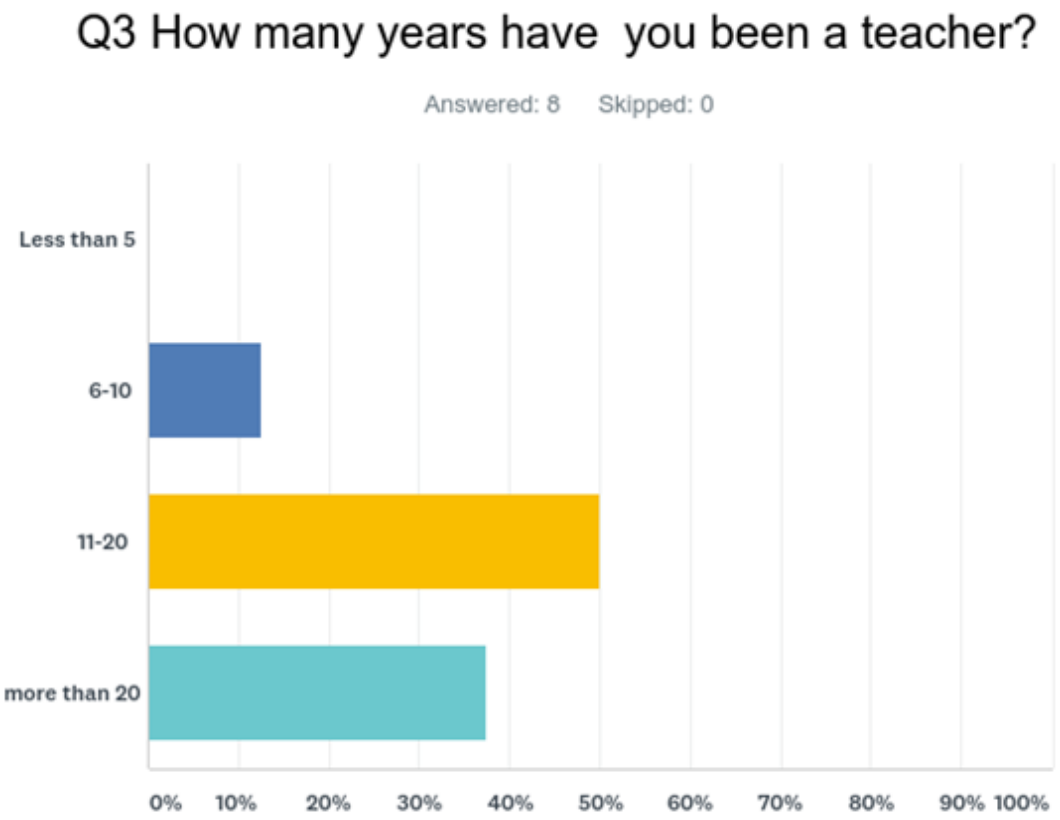

Figure 3. Responses to Question 3: How many years have you been a teacher?

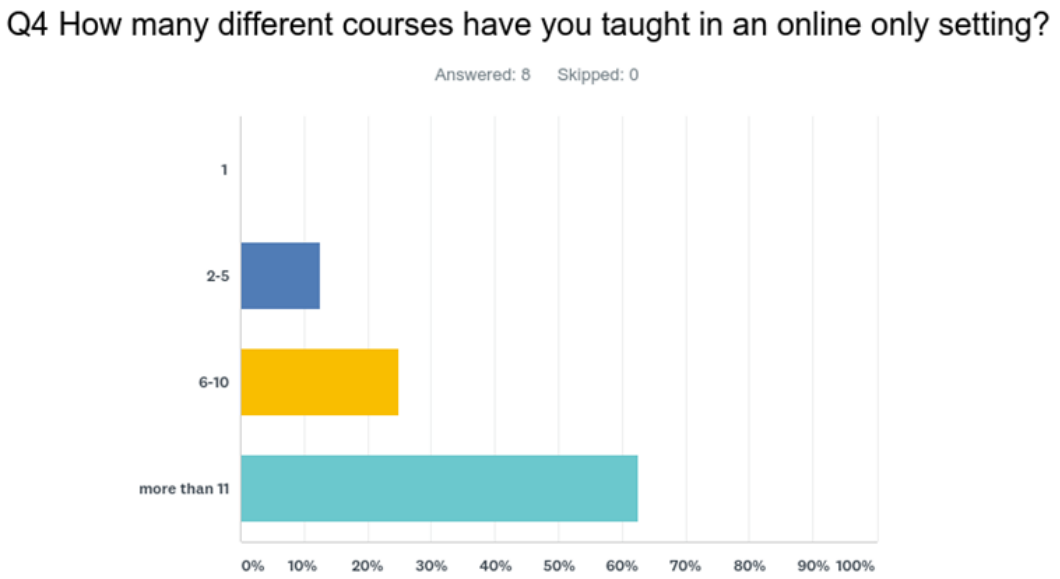

Figure 4. Responses to Question 4: How many different courses have your taught in an online-only setting?

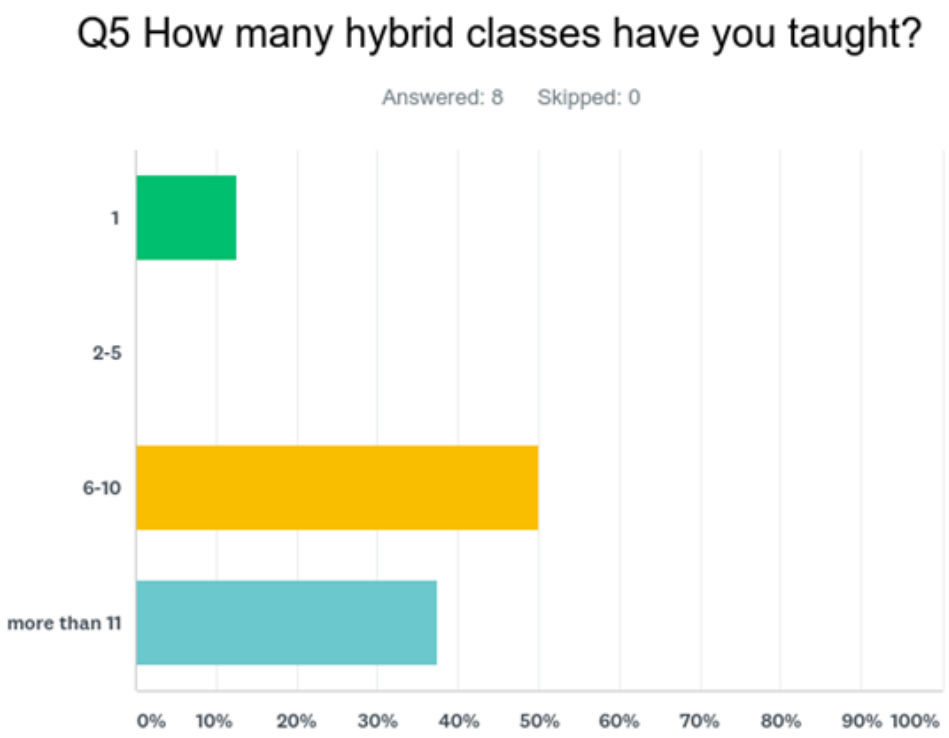

Figure 5. Responses to Question 5: How many hybrid classes have you taught.

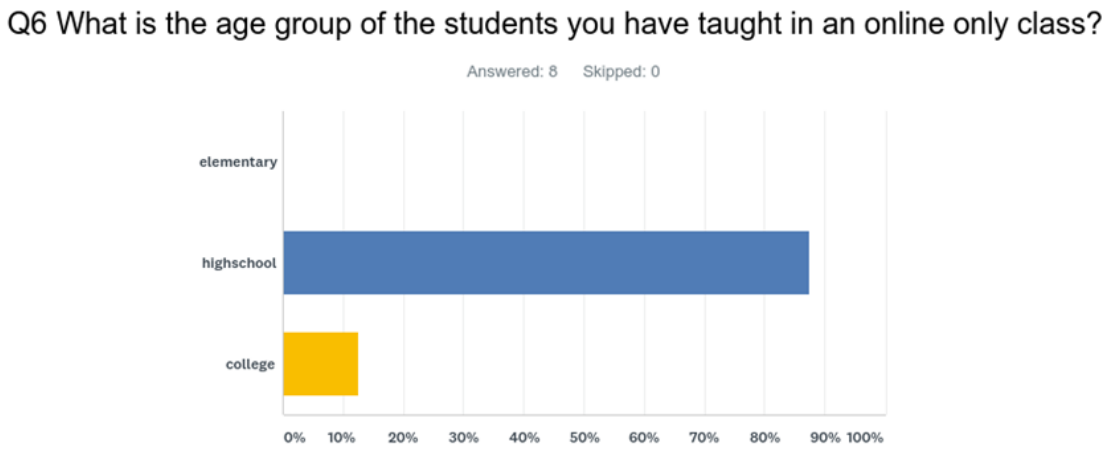

Figure 6 . Responses to Question 6: What is the age group of the students you have taught in an online-only class?

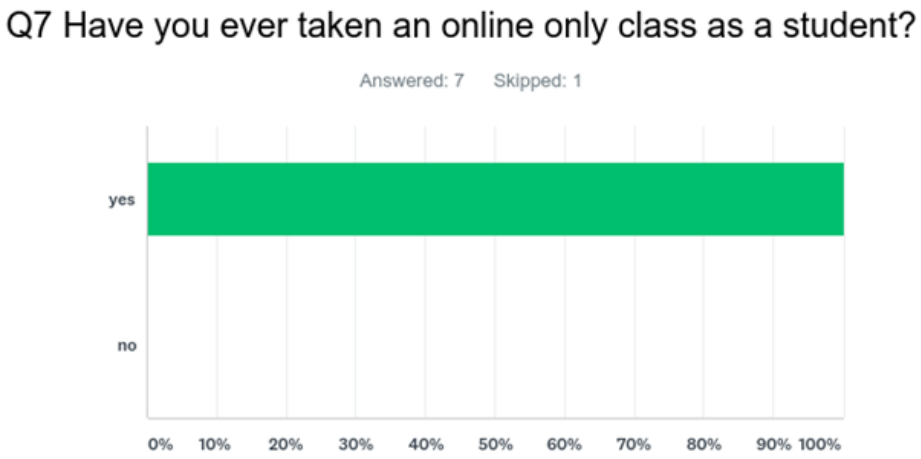

Figure 7. Responses to Question 7: Have you ever taken an online-only class as a student?

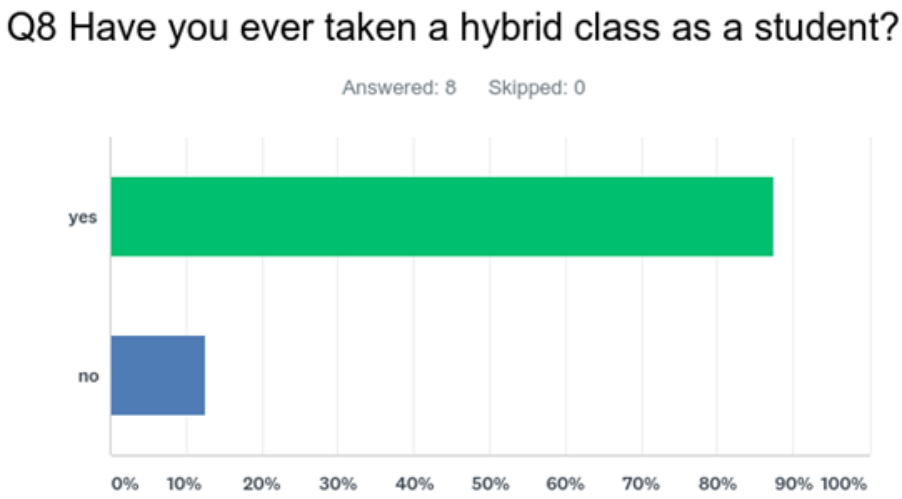

Figure 8. Responses to Question 8: Have you ever taken a hybrid class as a student?

Appendix E: Hybrid Success in Learning

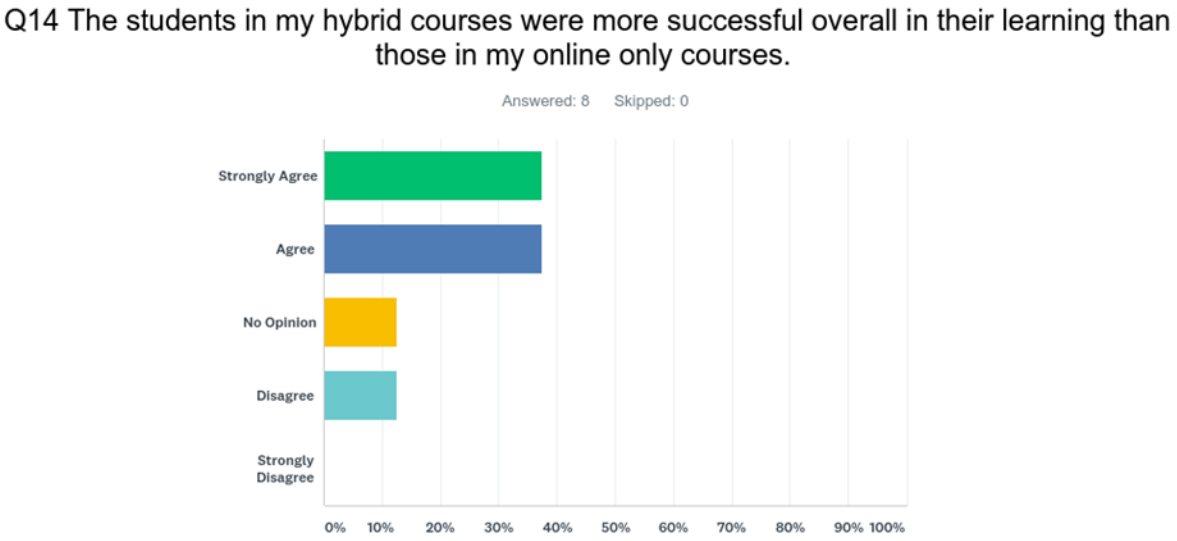

Figure 9 . Responses to Question 14: The students in my hybrid courses were more successful overall in their learning than those in my online-only courses.

Appendix F: Connecting with Hybrid Students

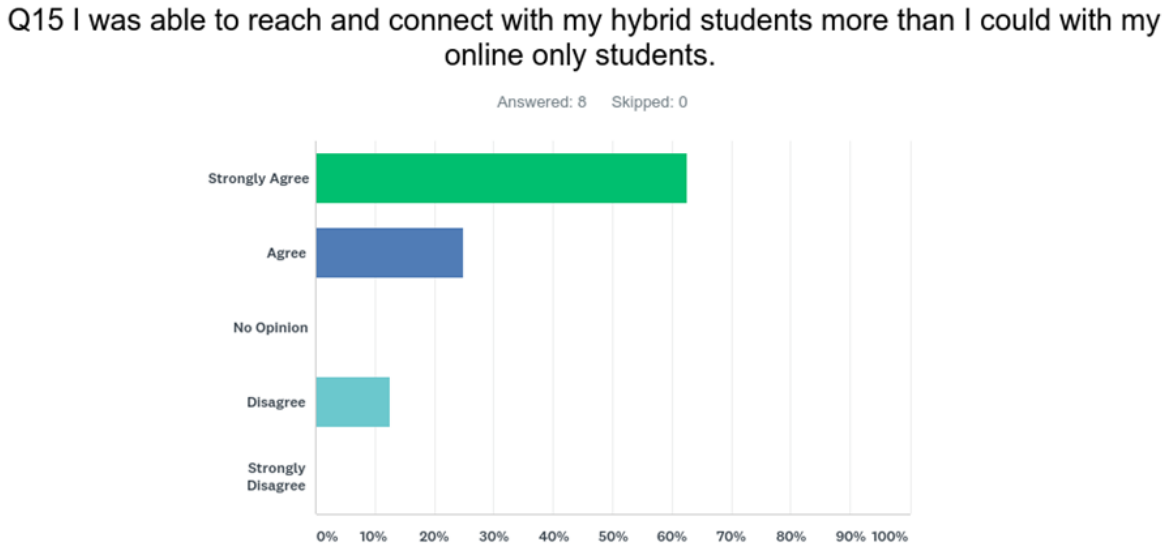

Figure 10. Responses to Question 15: I was able to reach and connect with my hybrid students more than I could with my online-only students.

Appendix G: Accessibility of the Instructor

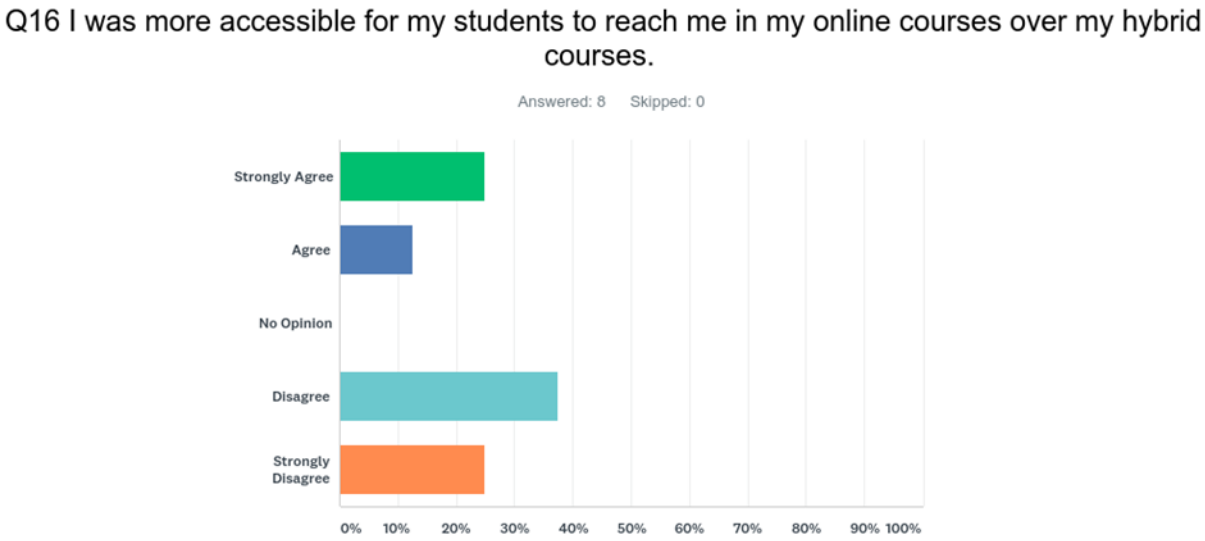

Figure 11. Responses to Question 16: I was more accessible for my students to reach me in my online courses over my hybrid courses.

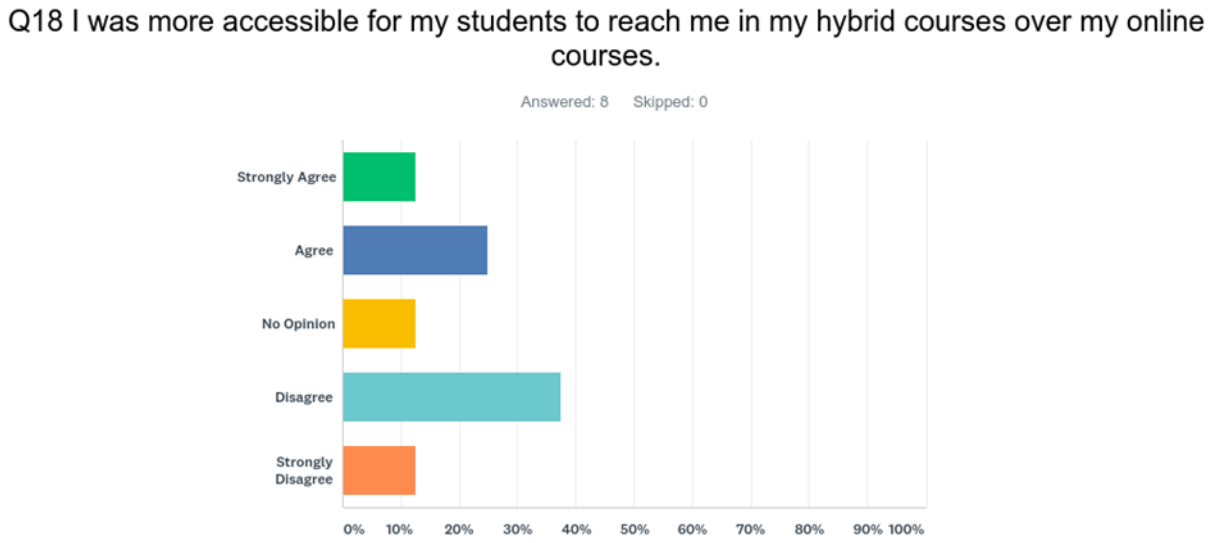

Figure 12. Responses to Question 18: I was more accessible for my students to reach me in my hybrid courses over my online courses.

Appendix H: Hybrid vs. Online Student Success

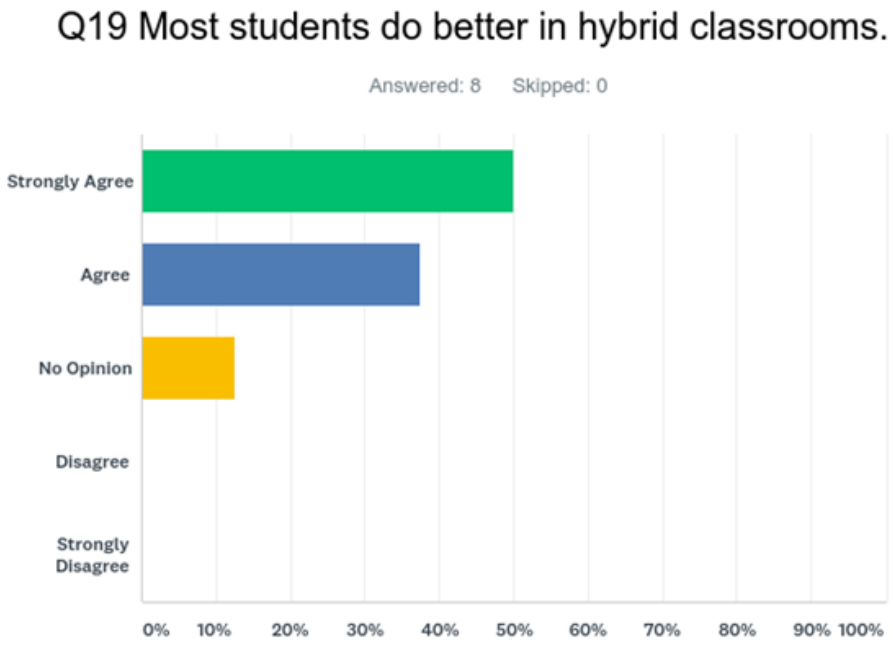

Figure 13 . Responses to Question 19: Most students do better in hybrid classrooms.

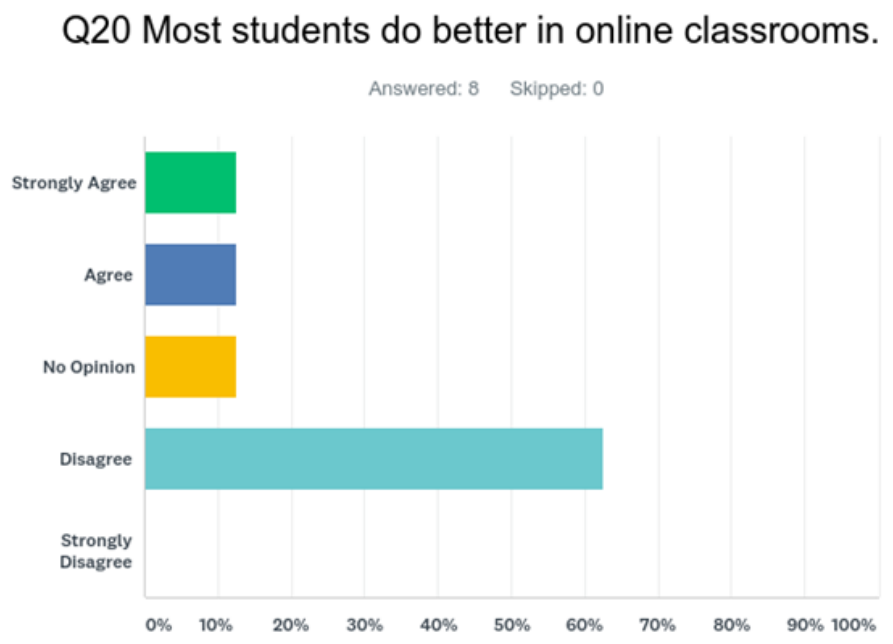

Figure 14 . Responses to Question 20: Most students do better in online classrooms.

Appendix I: Student Preference

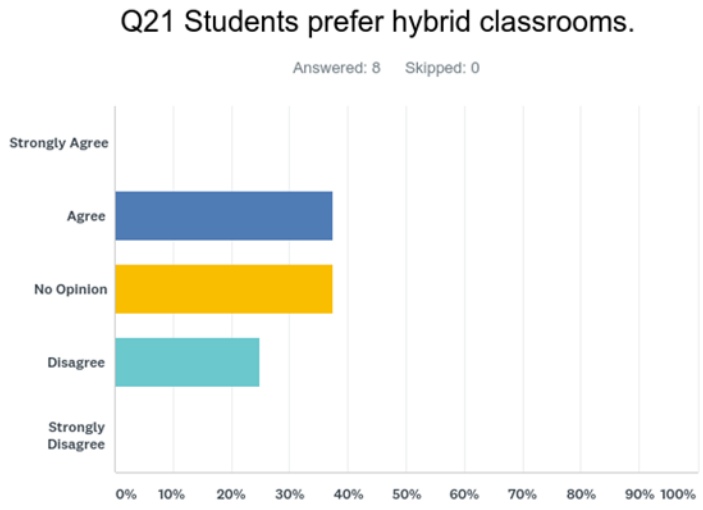

Figure 15. Responses to Question 21: Students prefer hybrid classroom.

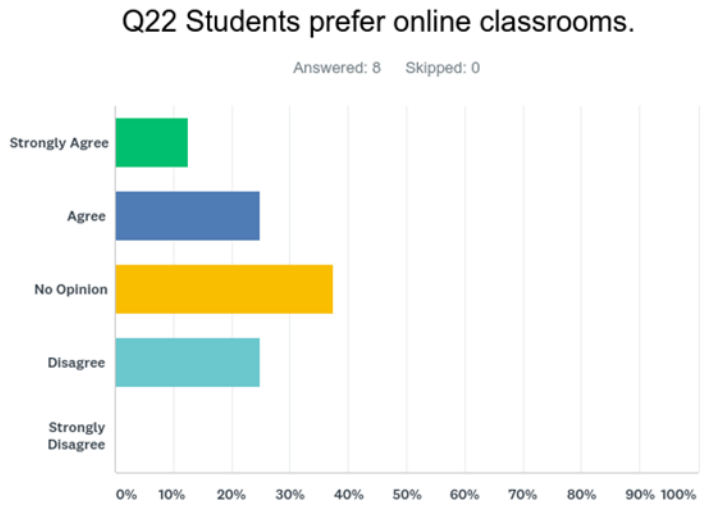

Figure 16. Responses to Question 22: Students prefer online classrooms.

Appendix J: Connections

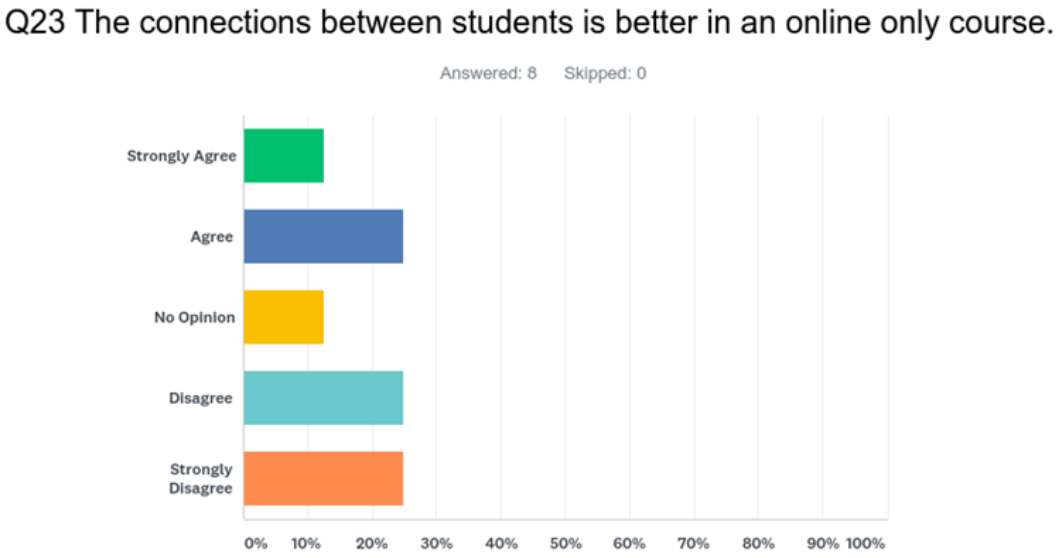

Figure 17. Responses to Question 23: The connections between students is better in an online-only course.

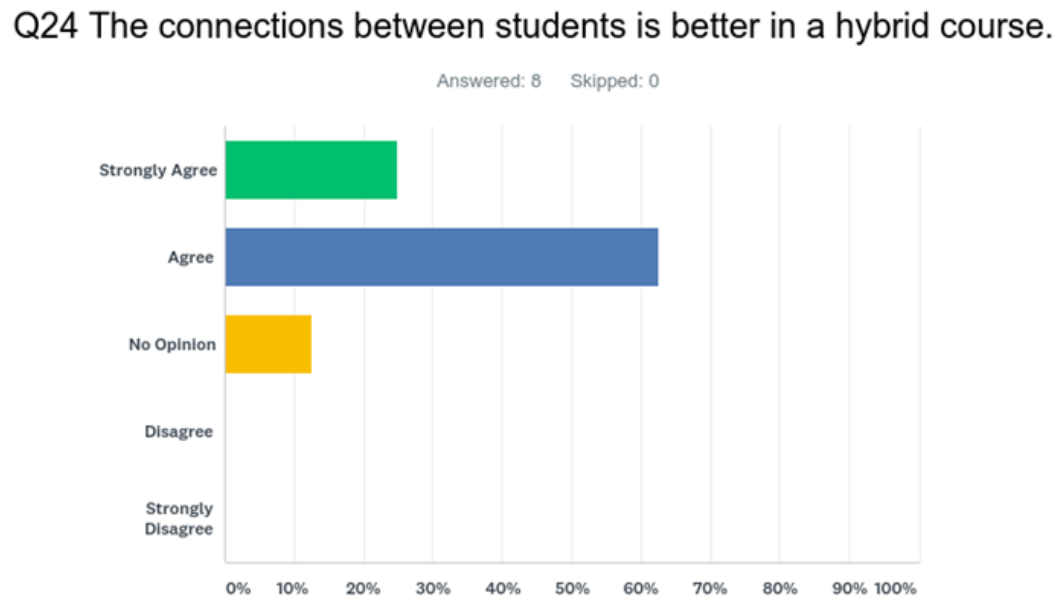

Figure 18. Responses to Question 24: The connections between students is better in a hybrid course.

Appendix K: Hybrid vs. Online

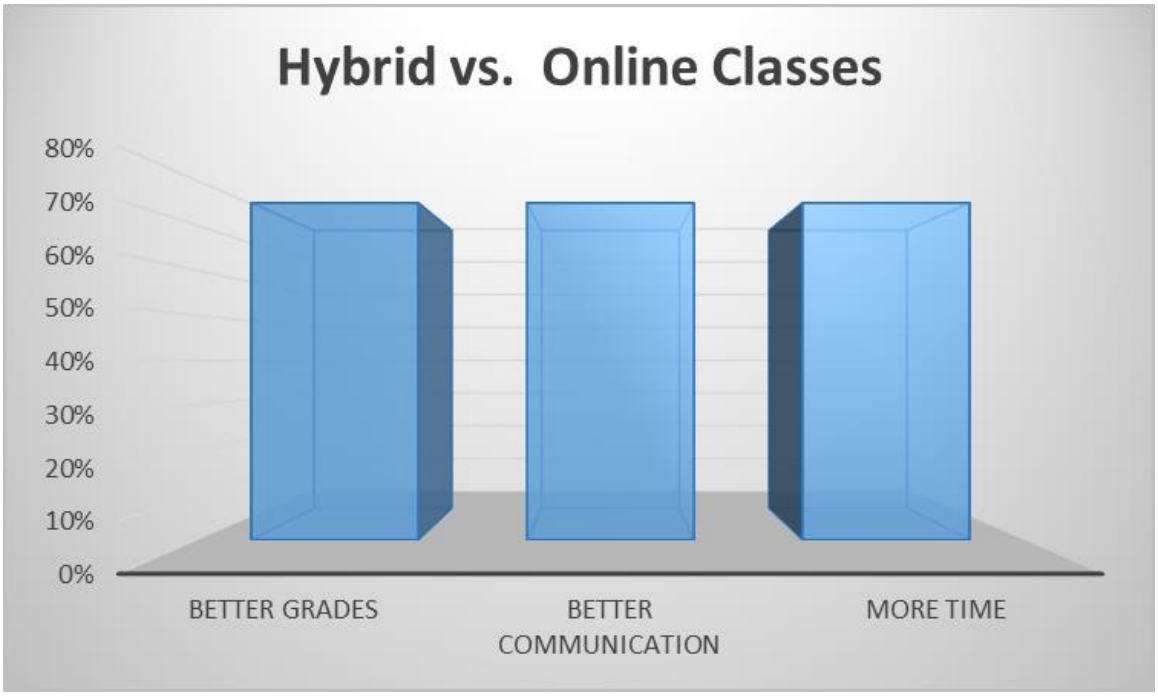

Figure 19. Perceived advantages of hybrid versus online classes.

Appendix L: Dropping Out of Online Courses

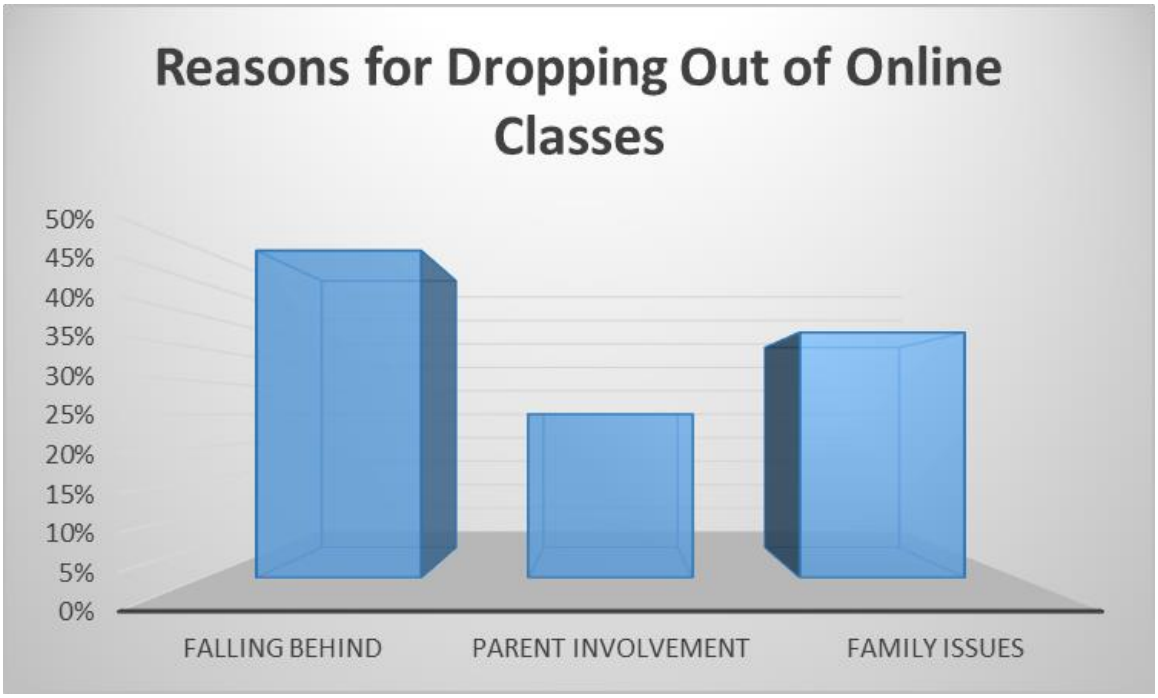

Figure 20. Reasons for dropping out of online classes.

Appendix M: Benefits of Online Classes

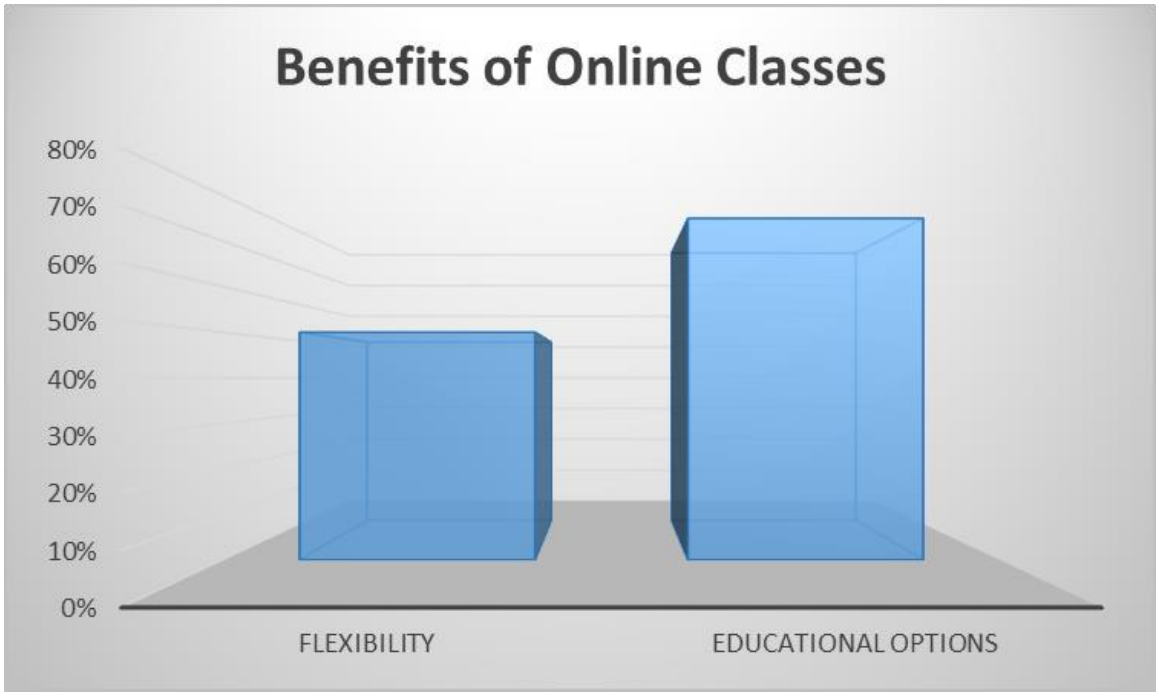

Figure 21. Benefits of online classes.

Appendix N: Drawbacks to Online Learning

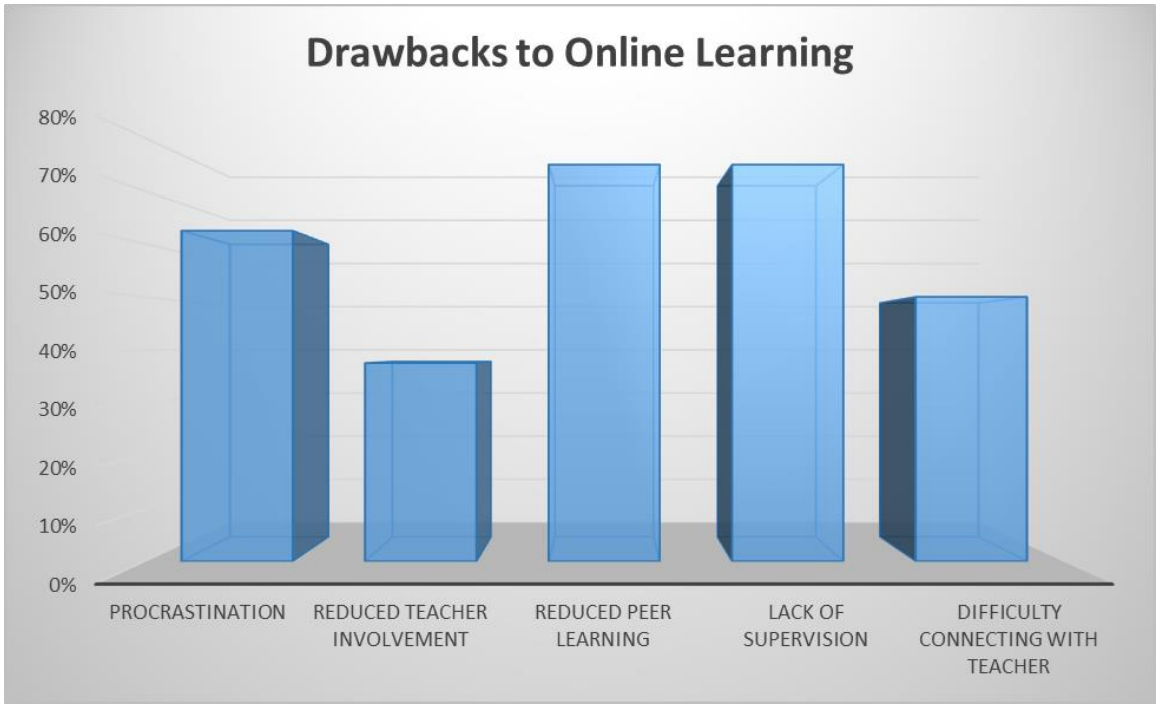

Figure 22. Drawback to online learning.

Appendix O: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously-researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

Statement of academic integrity.

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

Explanations:

What does "fraudulent" mean?

"Fraudulent" work is any material submitted for evaluation that is falsely or improperly presented as one's own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate's final work without full and complete documentation.

What is "unauthorized" assistance?

"Unauthorized assistance" refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another's work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.

Statement of Original Work

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University-Portland Academic Integrity Policy during the development and writing of this dissertation.
2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of The American Psychological Association*

Tamara Cesinger

Digital Signature

Tamara Cesinger

Name (Typed)

12/5/2017

Date