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Implementing the Flex Model of Blended Learning in a World History Classroom: How Blended Learning Affects Student Engagement and Mastery

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Dedication

This Dissertation in Practice (DiP) is dedicated to many people. To my parents, Grant and Linda, and my fairy god-mother, Faye, for always pushing me to do my best and never letting me give up on my goals. Your love and encouragement, along with the comedic relief, helped me through this journey. To my best friend—Kristen—your support through the last year of this time-consuming and exhausting process never went unappreciated. May we have many more girls' nights together! To my Joey—how can I express the gratitude I have for you, the happiness that you brought into my life, and the unconditional encouragement you have given me throughout this past year? You are my "goober" forever…

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Abstract

In the following action research plan, an explanatory sequential mixed methods research study of the implementation of the Flex model of blended learning in a World History classroom is presented. The study and its findings are used to measure mastery of, engagement with, and understanding of historical concepts presented in a six-week unit on the Enlightenment and the various revolutions this period in history caused. Data collection and analysis, including data from pre- and post-tests, Likert scale surveys, exit tickets, and student artifacts, are discussed. The pre- and post-tests were analyzed quantitatively using descriptive statistics (minimum and maximum score, average score, and mode), and the qualitative data provided rich description and themes that included the students were proud because of their "Completion," "Specific Connections," and "Hard Work." The results of the study were that students gained in mastery, engagement, and understanding, but when given the choice between a regular assignment and a blended learning assignment, students chose the regular, or easiest, assignment. Conclusions about blended learning in a history classroom are offered, such as modeling the blended learning strategies and starting earlier in the school year, as well as suggestions for further research on how to implement blended learning in an instructional setting.

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Chapter One

Overview of Dissertation in Practice (DiP)

This Dissertation in Practice (DiP) explores the use of a blended learning instructional technique in a history classroom. The Problem of Practice (PoP) is discussed and the action research is justified through the E-Learning principles and Flow theory and has its foundations in the constructivist theories. Relevant literature on the implementation of the blended learning instructional model is reviewed as well as a description of the research site and participants provided. The action research methodology and the findings of the study are also included.

Introduction

In theory, education should be the common equalizer among all people; everyone deserves a solid, rigorous, and relevant education that will benefit them, and the global community at large, in the future. However, this is not the case in the majority of American schools. According to DeBaun (2012), refusing to provide all children with a quality education—even unintentionally—is a "moral failure" that "will have dire consequences for the American economy" (p. 1). With the fast-growing demographics of color in America, closing the achievement gaps between these expanding groups becomes more significant—not only to today's educational environment, but to the future of the society. Closing the achievement gap benefits society, and the individual student, in a number of ways: social costs, such as health care, prisons, and unemployment, will decrease; more critical jobs in the workforce, which require additional education attainment, will be filled;

and the cycle of poverty, homelessness, and disenfranchisement will be broken (DeBaun, 2012).

Christensen, Horn, and Staker (2013) suggest that blended learning models, including the Flex model being implemented by this action research study, are "disruptive" to the traditional educational models and "are positioned to transform the classroom model and become the engines of change over the longer term in high school and middle school" (p. 3). The authors also claim that these "disruptive" instructional strategies will eventually take over the traditional instructional strategies that are being used in today's secondary schools, and they are considered "disruptive" because they are more recent, less costly, and more convenient; however, they still offer innovative solutions to a more tech-savvy audience of young people. These models of blended learning will "introduce new benefits—or value propositions—that focus on providing individualization; universal access and equity; and productivity" (p. 5). The results of implementing blended learning is what prompted this action research plan.

As an educator for seventeen years, I became interested in blended learning when my school transitioned to a new Learning Management System, or LMS. My school—Roxboro Community School—started this transition during the first year of my doctorate program at University of South Carolina. When I first started teaching, the most advanced technology I used daily was an overhead projector, but now everything starts and ends with technology; my school provides a one-to-one environment with each student getting a personal laptop to use that belongs to the school and for which they had to sign an Acceptable Use Policy. The technology provided to the students is remarkable, but this proposed action research study started growing in my mind when I saw my students being

distracted by the technology. Instead of doing their assigned work and being engaged in learning, they are more distracted by the technology that should help them. I wanted to see if my students' attention was focused on what they were learning when I incorporated an aspect of blended learning into my world history course. So I embarked on this journey of action research to determine whether implementing the Flex model of blended learning would increase engagement and, hence, mastery of the concepts they are learning.

History and Development of the Theoretical Framework

This proposed Action Research plan is based on research questions that are founded upon the E-Learning principles and Flow theory. The E-Learning principles are the culmination of learning strategies and technology approaches that are more student-centered and socially constructed. These include constructivism, information processing, and cognitive load theory.

Constructivism

The active engagement of students in their learning is an integral part of blended learning. Dewey (1938) states that learning should be through a student's experiences, not through "adult standards, subject-matter, and methods" (pp. 18-19). Students gain knowledge through actively participating in the learning experience, where the processes of knowledge construction take place based on students' prior experiences and cultural differences (Constructivism, 2016). This student-centered approach does not mean that no instruction is taking place in the learning environment; all experiences—good or bad—bring about some knowledge construction, and according to Dewey (1938), "Any experience is mis-educative that has the effect of arresting and distorting the growth of further experience" (p. 25). Therefore, any effective means of instruction—including brief

direct instruction—can cause learning and knowledge construction to occur (Constructivism, 2016). The use of a Flex model of blended learning combines effective face-to-face instruction with online activities in order to construct new knowledge based on previous experiences with the subject matter.

Information Processing

Technology is an important part of the information age, and how information is processed is significant to learning. Effective instruction takes place when information is processed in meaningful chunks (Miller, 1956). George A. Miller (1956) presented the concept of chunking when referring to the amount of information that the "immediate memory" can hold (p. 90). The goal of dividing learning up into meaningful chunks is so the learner can move the information from the immediate memory to the working memory and then to the long-term memory, which will eventually lead to mastery (Entress & Wagner, 2014). Using Canvas as a Learning Management System (LMS) with the Flex model of blended learning, I will split up the content into meaningful chunks of information and assist my students in practicing the concepts in a variety of ways, facilitating their mastery of the concepts.

Cognitive Load Theory

Cognitive Load Theory (CLT) relates to informational processing theory in that it recognizes Miller's (1956) theory about a limited amount of information can be held in the short-term memory, but CLT builds on to it through schema—which are structures in the long-term memory that permit learners to think critically, solve problems, and perceive intelligently (Sweller, 1988). Schemata permit learners to see multiple concepts as a single element, and they are the cognitive building blocks which help form the basis of

knowledge. Learners have difficulty with building schemata if there is too much irrelevant information in the working memory (Solomon, 2015). By incorporating the face-to-face instruction utilized in the Flex model of blended learning, I will give my students clear, relevant information that will connect to their schemata about history concepts, and through the online activities, I will enforce those concepts through practice and repetition.

E-Learning Principles

Building upon the history of the CLT, the E-Learning principles—originating in the works of Moreno (2007), Mayer (2003; 2007), and Sweller (1988)—propose a reduction of extraneous elements in the working memory in order to increase learning at appropriate levels. E-Learning or, as Mayer (2003) calls it, "the science of e-learning" is based on three elements: evidence, theory, and applications (p. 297). Mayer explains the science of e-learning as replicated findings through rigorous and appropriate methods (evidence), a model or link to the findings (theory), and how it reacts in the real world (application) (pp. 299, 309). E-Learning is seen through these eleven principles: multimedia, modality, coherence, contiguity, segmenting, signaling, learner control, personalization, pre-training, redundancy, and expertise (E-Learning Theory, 2016). The three principles of E-Learning that are most important to my action research plan are the segmenting principle—dividing large concepts into smaller chunks of information; learner control principle—most learners learn more effectively when they can control the learning rate; and pre-training principle—introducing harder vocabulary and concepts before the learning takes place. By utilizing these three principles of E-Learning in the Flex model of blended learning, I would like for my students to be more engaged and to become proficient in the history concepts I teach.

Flow Theory

According to Shernoff, Csikszentmihalyi, Schneider, and Shernoff (2003) many artists and athletes have flow, which is "a deep absorption in an activity that is intrinsically enjoyable" (p. 160). Students show that they are in the "flow" when they have intense concentration, immense interest, and active enjoyment (Shernoff et. al., 2003). Blended learning has been shown to be a strategy for increasing student engagement (Stevens and Rice, 2016), and students have more engagement when they have control over how they learn (Deci, Nezlek, and Sheinman, 1981). Therefore, because the action research study utilizes the Canvas LMS, which the students are accustomed to using to control the pace in which they learn, and engagement, interest, and concentration are heightened when flow is achieved, my action research study fits well within the confines of Flow theory.

Review of Related Literature

The Clayton Christensen Institute for Disruptive Learning (2015) defines blended learning as when students control some element of time, place, path or pace of an online component of the course, the students spend at least some time in a brick-and-mortar school environment, and the modalities of the students' learning are incorporated and connected between the online and face-to-face components of the course. There are four basic types of blended learning models: Rotation, Flex, A La Carte, and Enriched Virtual Models. They have sponsored several studies and resources on how best to implement blended learning in the classroom.

Working for the Center for Technology in Learning at the United States Department of Education, Means et. al. (2010) completed a comprehensive review of the literature on

online learning and a meta-analysis on their findings. While most of the research was conducted in higher education and career training programs, some findings may be transferable to a K-12 school setting. Means et. al (2010) explored one area related to K-12 school settings and my action research topic. The researchers sought to understand if supplementing face-to-face teacher instruction enhanced the online learning program (p. xi). In their initial meta-analysis of literature dated 1996 to 2006, there were no studies that met the researchers' "methodological quality criteria" which utilized and supplemented face-to-face instruction within the online learning environment (p. 53). Consequently, Means et. al. (2010) extended their search to 2008, and they found only five qualified studies which met their criteria (p. 54). Therefore, these findings show how blended learning is progressively being implemented in K-12 settings and that more research, including this action research plan, needs to be conducted.

Murphy et. al. (2014) conducted an extensive survey with a selected number of schools in California—funded by the Dell Foundation—that used different models of blended learning to improve instruction for low-income communities and families. The authors had five research questions, but two of them were of specific interest to me as the researcher of this proposed study: Do students in blended learning models show changes in academic achievement that differ significantly from their peers' academic achievement, and are blended learning models more effective for some types of students or subject areas than for others? (p. 3). In this particular article, the schools used varying models of blended learning from online learning stations during the classroom setting to online instruction that is completely separated from teacher-led instruction in another classroom or computer lab (p. 4). These secondary sources show a wide range of schools in the United States

using the blended learning instructional strategy to improve student achievement. One particular finding by Murphy et. al. (2014) describes how students' benefitted from implementing blended learning in the classroom; the students had more factual and lower-level recall rather than higher-order thinking skills, but teachers perceived higher student skill levels depending on the implementation of blended learning—both online and traditional instruction (p. 7). This finding proposes that further research, including the proposed action research plan, needs to be done to determine if indeed the implementation of blended learning does promote higher-order thinking skills.

Kazu and Demirkol (2014) published a study of blended learning in an upper-level biology course at Diyarbakir Anatolian High School in Turkey. The researchers found an increase in academic achievement in both the traditional instruction group (teacher-led lecture) and the blended learning instruction group (face-to-face and online), but there was a statistically significant increase in the blended learning group. Kazu and Demirkol used pre-tests and post-tests as instruments in determining the academic achievement of both groups, discovering gender differences in this achievement as well. The female students in both groups turned out to be more successful than their male counterparts. Erdem and Kibar (2014) found positive student reactions to a blended learning approach implemented at a Turkish university. These researchers studied students' perceptions of the blended learning environment with the use of social media—Facebook—to support the online learning environment. The quantitative and qualitative data collection showed significant levels of satisfaction with the blended learning procedures, with the highest scores given to the face-to-face component (p. 203). Also, Chang et. al. (2014) researched blended learning in a vocational school in Taiwan. The participants in the study were 11th grade

students in an electrical machinery class. The researchers found no significant change in academic achievement between the classes taught through blended learning or a traditional format; however, they did find a significant increase in the students' self-assessments, indicating that the students' perceptions of blended learning were more positive than those of the traditional method (p. 225). These articles informed me that blended learning is an international movement, and educational institutions around the world are figuring out that today's students need more than a traditional or online instructional format to be effective. Even though these studies have had mixed results, the trend in blended learning is that it keeps student perceptions positive whether in K-12 or in college.

Problem of Practice

As an 11th grade World History instructor at Roxboro Community School in North Carolina, I find it difficult for my students to remain actively engaged in learning and to master, or at least be proficient in, the content of the course. Perhaps this lack of engagement and passivity come from the teacher-led instruction and irrelevant facts to which most history classes lend themselves. According to Kaiser (2010), many history teachers daily find that "[g]etting students to engage in the study of history, to find relevance in the events of the past, and finally to analyze the effects of change over time is perhaps the most difficult thing [they] are asked to do" (p. 223). Because my school has transitioned to a new Learning Management System (LMS), Canvas, I want to explore if using the Flex model of blended learning, which according to the Clayton Christensen Institute (2015) is an approach that uses both online and face-to-face instruction but that can be modified by varying degrees in order to best meet the needs of the students, will increase my students' engagement and mastery of the content of the history course that I

teach. By creating a unit on the Enlightenment and Revolution and utilizing the Flex Model of Blended Learning in it, I determined if the implementation of blended learning helps to engage my students and also helps them to achieve mastery of the concepts I teach.

As the primary researcher for this action research study, I am an educator who has had teaching experience at all levels of middle school and high school. I am certified by the state of North Carolina with a Standard Professional II license with endorsements to teach Social Studies (6-12), English (6-12), Reading (K-12), and Special Education (K-12). I am also licensed to be a Principal (K-12) in North Carolina in addition to holding teaching licenses in North Carolina, South Carolina, and Tennessee. My own educational background is primarily in English, as I was an English teacher for 13 of the 16 years I have been teaching. I have taught Social Studies as well as English for 4 years. At the time of the study, it was fourth year I had taught Social Studies only. I hold a BA in English (Meredith College, Raleigh, NC), an MEd in Reading, an EdS in Educational Leadership (Liberty University, Lynchburg, VA), and an MA in Multicultural and Transnational Literatures (East Carolina University, Greenville, NC). This study occurred in the process of pursuing a doctorate in Curriculum and Instruction at the University of South Carolina.

Action Research Site

This action research study took place at Roxboro Community School in a rural county in north-central North Carolina. The school itself is a College Preparatory Charter School where the students enter a lottery to attend. The school draws its population from the surrounding counties, but the majority of the students are from the county in which the school is located—Person County. The county, according to the United States Census Bureau's estimation for July 1, 2014, has a population of approximately 39,100 and a racial

breakdown of about 70% White, 25% African American, 4% American Indian, and the remainder of the population coming from Asian and mixed races (2016). North Carolina also produces a School Report Card which lets the school and its employees, the community, and the shareholders in the school know how effective the instruction was during the past year. Roxboro Community School scored a School Performance Grade and Score of 85, which is an A (North Carolina School Report Card, 2015). The school got the additional honor of becoming an A+NG school, a school with no significant achievement or graduation gaps (North Carolina School Report Card, 2015). Roxboro Community School is the only school in the county to ever earn this rating. Roxboro Community School's website also gives information about its mission "to create educated, responsible and productive men and women who are equipped to face the challenges of the 21st Century" (Roxboro Community School, 2016). The site delineates the school's core values as well, one of which states that teachers have high expectations for all of their students and believe that their students can learn at higher and deeper levels (Roxboro Community School, 2016).

Participants

The participants in my action research study included two classes of College Preparatory (CP) World History. One class is smaller than the other—11 students; the other class has 22 students. I am more concerned with this level of student than my more advanced students who are taking a reading and writing intensive class of Honors World History because they do not have the deeper learning skills that some Honors students possess. Typically, these CP classes are larger than the Honors classes, and they are composed of students with a wider range of abilities and learning styles.

Purpose of the Action Research Study

The purpose of this action research study is to determine how implementing the Flex model of blended learning affects student engagement with and mastery of the historical content in a World History class. History is a subject that lends itself to rote memorization of dates, important figures, and significant events and time periods with a regurgitation of those dates, figures, and events or time periods on a test or exam. Miller (2011) states, "The 'mass production' mode of education, marked by a teacher imparting knowledge and students absorbing facts, will not 'produce' transformational leaders" (p. 447). I want my classroom to become less lecture-driven and more student-centered, thus having the students actively engaged in their own learning, experiencing history, and making relevant connections to their own lives. Since Dewey (1938) suggests that "[educators] should know how to utilize the surroundings, physical and social, that exist so as to extract from them all that they have to contribute to building up experiences that are worth while" (p. 40), I would like to see my students take more ownership of their learning and be less passive, more active learners. If students are more actively engaged in their learning, mastery will follow, and according to Fredericks et. al. (2004), this mastery is important because "establishing a commitment to education is essential if youth are to benefit from what schools have to offer and acquire the capabilities they will need to succeed in the current marketplace" (p. 60). The use of the Canvas LMS with the "assignability" that is so crucial for teachers supplementing face-to-face instruction with online learning (Murphy et. al., 2014) should generate critical thinking skills and the ability

to connect history to their present lives, creating well-informed citizens in this global society.

Research Questions

While implementing a unit on the Enlightenment and Revolution using the Flex model of blended learning, I used the following questions to guide my data collection:

RQ#1: What is the impact of the Flex model of blended learning on eleventh-grade students' understanding of a unit on the Enlightenment and Revolution?

RQ#2: How does the use of the Flex model of blended learning affect the students' engagement with the unit on the Enlightenment and Revolution?

RQ#3: How does the use of the Flex model of blended learning impact mastery of the concepts included in the unit on the Enlightenment and Revolution?

Methodology and Data Collection

In order to learn more about implementing the Flex model of blended learning in a World History class, I addressed my research questions through an explanatory sequential mixed methods design (Creswell, 2015) to study my own students' perceptions of blended learning and how face-to-face instruction with online learning impact student learning and mastery. Merriam and Tisdell (2016) describe an explanatory sequential mixed methods research design; they state, "[T]he quantitative data are collected first; the collection of the qualitative data follows, generally with the purpose of *explaining* the results or a particular part of the findings in more depth" (p. 47, emphasis in original). This action research study benefited from an explanatory sequential design; the quantitative data measuring mastery is more thoroughly be explained through the qualitative techniques measuring student understanding and engagement.

In the implementation of the Flex model of blended learning, I addressed the three research questions that guide this proposed action research study. Research Question #1 explores student understanding of a unit on the Enlightenment and Revolutions. To gauge understanding, I used exit tickets incorporating Likert-scale rating questions to gain students' perceptions of their understanding. I also used student artifacts to see if my students are understanding what they are learning. To answer Research Question #2, which addresses student engagement, I utilized the exit tickets again to explain that particular part of the research. This qualitative data is based off of Keller's (1987) ARCS model of motivation. The final Research Question focuses on mastery, and I applied the findings from the quantitative data from the scores of the pre-test and the post-test to indicate how well the students mastered the concepts presented. I used the qualitative data from the exit tickets and student artifacts to explain how the mastery occurred. All data was collected from two classes of College Preparatory World History, the lowest level of World History that the school offers.

These methods and data collection strategies fit well with the conceptual framework of E-Learning principles, Flow theory, and constructivism. I segmented my unit into meaningful chunks, removing all extraneous content to promote effective learning and encourage mastery of the historical concepts. The entire unit was learner-directed, meeting the second relevant principle of E-Learning: the learner control principle. The face-to-face portion of the Flex model satisfied the pre-training principle—the final relevant aspect of the E-Learning principles. Depending on how the students experienced the content, based off the exit tickets, I presented the harder material before the students are asked to work with it. The entire study examined how the students construct meaning in

experiencing the Flex model of blended learning and experienced "flow," which is key to student engagement. The only challenge was the massive amount of data to be taken and the limited amount of time.

Data Analysis

During my research study, I utilized several strategies for data analysis. The pre-test and the post-test featured the same questions, just in a different order, and measured quantitatively the students' mastery, providing numerical data suggesting what worked with Flex model of blended learning. The exit tickets and student artifacts provided qualitative feedback showing the students' level of engagement with the content, their perception of the blended learning format, and their understanding of their material, creating a description that is thick and rich with intuitive details, interpretations, and constructions that are unique to the students' experiences with blended learning. The Likert scale survey incorporated within the exit ticket showed the impact of the Flex model of blended learning on the students' engagement with a unit on the Enlightenment and Revolution through numbers and descriptions. One strategy that I utilized is triangulation; with the multiple sources of qualitative data (the exit tickets and the student artifacts) and the pre- and post-tests that will be conducted, this action research study had reliability and consistency.

Ethical Considerations of Action Research

Educators must follow an ethical approach to teaching and reflecting on what is taught, the students' learning, and how to improve their own instruction. Dana and Yendol-Hoppey (2014) claim that "when teachers engage in the process of inquiry [or action research], they are engaging in a process that is a natural and normal part of what good,

ethical teaching is all about" (p. 148). Good teachers strive to do their best for their profession, their students, their colleagues, and themselves as an educator, and their best should include professional and ethical treatment of the participants and the corresponding data involved with any action research study.

Mertler (2014) addresses four principles that are integral to maintaining an ethical stance within action research: accurate disclosure, beneficence, honesty, and importance (p. 108, 112). As a practitioner of action research, I took advantage of these four principles in my study and adhered to the Code of Ethics for North Carolina Educators (North Carolina State Board of Education, 1998) as it relates to my action research study of implementing the Flex model of blended learning in a World History course.

Principle of Accurate Disclosure

The principle of accurate disclosure, as described by Mertler (2014), involves a description of the research topic, research study, and participant involvement; a guarantee to remain confidential when reporting data, events, and research findings; and an opportunity for the participant to accept or decline the invitation to join the study (p. 108). I have approached the Managing Executive Director (MED) of the charter school and the Board of Directors with my action research study and explained to them my reasons for doing this study. Even though it is unnecessary to have consent given by my students' parents because this is no different than my normal teaching strategy, I did write a letter to my students and their parents, outlining the purpose for the study and the ways in which the findings will be used. I also gave the option to my students of not participating in the action research project with a guarantee of no adverse consequences. My main goal was to clearly present my research study to the MED and Board of Directors, parents, and

students, and to remain transparent throughout the action research implementation with regard to methods, data collection, and findings. All information will remain confidential and anonymous.

Principle of Beneficence

Schmerling (2014) claims that an important step in becoming a doctor is taking the Hippocratic Oath, yet the old adage "first, do no harm" is not found anywhere in it. The medical profession definitely does not follow by this principle of "doing no harm," when chemotherapy treatments, surgery, and radiation all help to fight cancer; however, educators can follow this principle through their action research by not "doing harm to individuals or groups or to denigrate, find fault, or suppress academic progress" (Mertler, 2014, p. 112). The principle of beneficence is an important part of educational and action research, according to Mills (2014), "because there is little distance between teacher researchers and their subjects, the students in their classrooms and schools" (p. 31). I kept all data, records, and information collected during the action research study confidential and anonymous so as to not expose my students to ridicule, embarrassment, intimidation, or censure by parents and other teachers.

Principle of Honesty

Mills (2014) states, "There is no room for deception in action research" (p. 33). Professional educators should not even have to mention the principle of honesty; in fact, it goes without saying that a teacher-researcher should be honest about all aspects of her action research study, from the purpose of the study and the way it is implemented to the data she receives. An open, honest action research study is key to good, reliable data that can change the way the teacher teaches and the students learn. The Code of Ethics for North

Carolina Educators (North Carolina State Board of Education, 1998) states that all teachers and educators "shall not engage in conduct involving dishonesty, fraud, deceit, or misrepresentation in the performance of professional duties" (p. 3). Since teacher-research is considered a part of a teacher's professional growth and development (Creswell, 2016; Dana & Yendol-Hoppey, 2014; Mertler, 2014; Mills, 2014), it is part of their professional duty as an educator; thus, the principle of honesty applies. Specifically, I focused on the "pursuit of truth and devotion to excellence" in my career, which includes the action research study and all of its many components (North Carolina State Board of Education, 1998).

Principle of Importance

Mertler (2014) defines the principle of importance as "the findings of research should somehow be likely to contribute to human knowledge or be useful elsewhere in the field of education" (p. 112). This action research study adds not only to my knowledge of the ways in which my students learn and what keeps them engaged, but also, in a small way, to the field of literature on blended learning. Blended learning in a history class can assist the teacher-researcher with what Yilmaz (2009) argues is the goal of the history teacher. Yilmaz (2009) claims, "History teachers need to have a satisfactory knowledge of how students learn in history or construct understanding and meaning out of curricular activities to be able to teach the subject effectively and to help students develop historical understanding and consciousness" (p. 43). In my action research study, I utilized the Flex model of blended learning in order to discover how her students learn best and in what ways they develop a historical understanding. This discovery is of utmost importance not

only to my teaching, but for the mission of the school and to the overall scholarly research of blended learning as well.

Code of Ethics for North Carolina Educators

I am an educator in North Carolina, and as such, I followed and adhered to the Code of Ethics for North Carolina Educators (1998). The Code of Ethics pertains to the educator's commitment to her students, the school, and her profession; it describes how the educator should "maintain the respect and confidence of colleagues, students, parents and legal guardians, and the community, and to serve as an appropriate role model" (p. 1). I maintained and preserved my professionalism and integrity while conducting the proposed action research in my class. I protected the students' identities and maintained confidentiality in all my data collection and analysis strategies and required reports. By adhering to the Code of Ethics, I promoted the integrity of not only my action research but also my school and my profession.

Dissertation in Practice (DP) Overview

This Dissertation in Practice measured how the Flex model of blended learning impacts the understanding of, engagement with, and mastery of historical concepts presented in a unit on the Enlightenment and Revolution. An explanatory sequential mixed methods research design was used, and before the six-week unit of study, the students in my College Preparatory World History classes were given a pre-test to record their mastery before the implementation of the Flex model of blended learning took place in order to determine their baseline mastery of the concepts. During the unit, lessons were taught and explicit principles of E-Learning, such as the segmenting, learner control, and pre-training principle, were incorporated. Exit tickets were given after each assignment that

incorporated blended learning, and within those exit tickets, a Likert scale survey measured the students' engagement with and understanding of the concepts being taught. After the unit was completed, the students were given a post-test on the historical concepts to see if mastery had taken place by incorporating face-to-face instruction with online learning activities. The quantitative and qualitative data were analyzed, and the findings reported.

Summary

Chapter One introduces the Problem of Practice (PoP), purpose of the action research study, the guiding research questions, a brief overview of the related literature, a summary of the data collection, analysis, and methodological strategies that were employed, and the ethical considerations of this study. Chapter Two contains a deeper review of the related literature on blended learning and the use of technology in assisting with engagement and mastery of learning. Chapter Three discusses the methodology of my action research study—the research site, participants, implementation, and data collection methods. Chapter Four delineates the findings of the proposed action research study, what conclusions can be drawn for teaching pedagogy, and reflections on the effectiveness of a blended learning environment in a World History classroom. Chapter Five concludes with a summary of the findings and major points of the action research study as well as suggestions and implications for further future research on blended learning.

Chapter Two

Literature Review

Introduction

Educators have a unique ability to reach learners where they are, but sometimes the educator cannot get the students motivated and engaged in the concept they are learning because of a variety of circumstances, such as irrelevancy, lack of confidence, inability to perform the task, or a combination of all of these issues. As an 11th grade World History teacher at Roxboro Community School, I found it difficult to engage my students in the history curriculum and to have my students master, or at least become proficient in, the concepts and the content of the World History course. Perhaps this was due to the teacher-led instruction, the distraction of the technology, and the dull, irrelevant facts to which most history classes lend themselves. Because my school was incorporating a Learning Management System (LMS)—Canvas, I wanted to determine if utilizing the Flex model of blended learning would assist the students in increasing their engagement and mastery of the concepts in a unit on the Enlightenment and Revolution.

Purpose of Research

The purpose of this action research study was to determine if implementing the Flex model of blended learning would increase my students' engagement and mastery of the historical concepts. The Flex model of blended learning is defined by the Clayton Christensen Institute (2015) as an approach utilizing both face-to-face and online learning but that can be modified to best meet the needs of students. By using the Flex model of

blended learning, I adjusted my methods of teaching (either face-to-face, small group, direct instruction, or online activities and assignments) to meet the diverse needs of my students. Using the Canvas LMS, I was able to differentiate the assignments and generate discussions and the critical thinking skills that these students needed to become well-informed citizens in this global society.

Participants

The students with which I completed the research were in a College Preparatory class, the lowest level of instruction at Roxboro Community School. I was concerned about these sections of World History because the students seemed to have more distractibility and were more likely to be off task. Some of the students had Individualized Education Plans (IEPs) where accommodations must be made for them by law. I often made accommodations for students without an IEP so that they would experience success without missing any of the content of the course I teach. The Flex model of blended learning could possibly be an accommodation, or an intervention, that I could give to all of my students, regardless of their ability levels.

Research Questions

While implementing the Flex model of blended learning with a unit on the Enlightenment and Revolution, my action research study was guided by the following research questions:

RQ#1: What is the impact of the Flex model of blended learning on eleventh-grade students' understanding of a unit on the Enlightenment and Revolution?

RQ#2: How does the use of the Flex model of blended learning affect the students' engagement with the unit on the Enlightenment and Revolution?

RQ#3: How does the use of the Flex model of blended learning impact mastery of the concepts included in the unit on the Enlightenment and Revolution?

Overview of the Chapter

Chapter Two contains a deeper review of the related literature surrounding the problem of student disengagement, including the purpose and process of the literature review. The theoretical and recent historical perspectives of blended learning are provided. Then, some reasons for student disengagement with high school academic content are explained, as well as, the strategies educators can use to influence and increase student engagement with the content they are teaching, which includes technology use and implementing a blended learning environment. A more specific review of the literature on how blended learning affects student engagement follows. This literature review concludes with how student engagement relates to social justice and a brief statement about how providing opportunities for students to engage in academic content will allow them a more complete understanding and mastery of the concepts learned.

Purpose and Process of the Literature Review

Literature reviews have two main purposes: to produce a thesis based on the body of literature reviewed and to propose further research by identifying a problem that necessitates a unique research study. Machi and McEvoy (2009) identify these two purposes as a basic literature review and an advanced literature review (p. 2-3). The authors state that all doctoral dissertations use the advanced literature review method; however, they claim, "[w]hile basic reviews and advanced reviews seek different outcomes, the manner by which they uncover knowledge and produce a thesis are similar

and parallel" (p. 4). In my action research study, I followed the advanced literature review method.

Scholars and educational researchers have looked to other experts in their fields and their studies in education to find numerous solutions to problems. I, too, looked to theories and research to determine the perspectives of students who show a lack of engagement and to see how blended learning can benefit the learning environment by giving the students in my classes an opportunity to engage with my curriculum in a novel way. I used keywords, such as student engagement, motivation, blended learning, and online learning, to access online databases, such as Google Scholar, ERIC, EBSCO, Academic Search Premiere, and Proquest to find peer-reviewed articles, as well as qualitative and quantitative research studies. I also looked up reputable websites related to blended learning, school report cards, government documents on student engagement, and other sources related to my topic of student engagement and blended learning. In addition, I utilized my personal textbooks, in addition to books I already had that related to action research.

Theoretical Perspectives

This section of the literature review reflects the philosophical and theoretical perspectives of the action research on implementing the Flex model of blended learning in a World History class and how it will affect student engagement with and mastery of historical concepts. Constructivism, on which the whole action research study is based, will be discussed, along with the Information Processing and the Cognitive Load theories. Next, the E-learning principles will be explained and its impact on the actual research study

itself. Following this discussion, the Flow theory will be delineated as it corresponds to student engagement and mastery.

Constructivism. Founded in the seminal works of Dewey (1938) and Vygotsky (1978), the theory of constructivism states that students gain knowledge through actively participating in the learning experience, where the processes of knowledge construction take place based on students' prior experiences and cultural differences (Constructivism, 2016). Vygotsky (1978) created the concept of the zone of proximal development (ZPD): the distance between a student's independent working level and the student's level when he is guided by a teacher or more advanced classmates. The ZPD in effect explains the experiences the student goes through as he builds on his prior experience and learns more complex concepts. This student-centered approach does not mean that no instruction is taking place in the learning environment; all experiences—good or bad—bring about some knowledge construction, and according to Dewey (1938), "Any experience is mis-educative that has the effect of arresting and distorting the growth of further experience" (p. 25). Therefore, any effective means of instruction—including direct instruction, cooperative learning, and independent projects—can cause learning and knowledge construction to occur (Constructivism, 2016).

Information Processing. The effective means of instruction take place when information is processed in meaningful chunks (Miller, 1956). Miller presented the concept of chunking when referring to the amount of information that the "immediate" memory can hold (p. 90). Dividing learning up into meaningful chunks is the goal of every educator because the learner can move the divided information from the immediate memory to the working memory and then to the long-term memory; this movement of

information into the long-term memory will eventually lead to mastery (Entress & Wagner, 2014). Information processing theory also relates to reading with automaticity, described by LaBerge and Samuels (1974), and the more automatic the students' reading and learning is, the less information that is involved in the immediate and working memory; students can master more information by grouping the concepts together and adding their own experiences to it.

Cognitive Load Theory. Cognitive Load Theory (CLT) relates to Information Processing theory in that it recognizes Miller's (1956) theory about how limited the amount of information is that can be held in short-term memory; however, CLT builds on to it through the concept of schema—which are structures in the long-term memory that permit learners to think critically, solve problems, and perceive intelligently (Sweller, 1988). Sweller (1988) claims schemata permit learners to see multiple concepts as a single element and that they are the cognitive building blocks which help form the basis of knowledge. Learners have difficulty with building schemata if there is too much irrelevant information in the working memory (Solomon, 2015). Chandler and Sweller (1991) further this by saying, "[I]nformation should be presented in ways that do not impose a heavy extraneous cognitive load" (p. 295). The authors are saying that irrelevant information should not be included in effective instruction in order for them to be engaged in learning.

E-Learning Principles. Building upon the history of the CLT, the E-Learning principles—originating in the works of Moreno (2007), Mayer (2003; 2007), and Sweller (1998)—propose a reduction of extraneous elements in the working memory in order to increase learning at appropriate levels. E-learning or, as Mayer (2003) calls it, "the science of e-learning," is based on three elements: evidence, theory, and applications (p. 297).

Mayer explains the science of e-learning as replicated findings through rigorous and appropriate methods (evidence), a model or link to the findings (theory), and how it reacts in the real world (application) (pp. 299, 309). Comparing E-Learning to traditional learning, Moreno and Mayer (2002, as cited in Mayer, 2003) found that "the same design principles that promote learning in traditional environments are likely to promote learning in electronic environments" (p. 298) E-Learning is seen through these eleven principles: multimedia, modality, coherence, contiguity, segmenting, signaling, learner control, personalization, pretraining, redundancy, and expertise (Mayer, 2003; E-Learning Theory, 2016).

The three principles of E-Learning that are most important to the action research plan are the segmenting principle, the learner control principle, and the pretraining principle. These three principles of E-Learning have their foundation in the theories listed above: constructivism, information processing, and cognitive load theory. The first principle is the segmenting principle in which I divided larger chunks of information into smaller, meaningful chunks (Miller, 1956) and removed all irrelevant information from the text (Mayer, 2003). The second principle is learner control principle; I created a learning environment where students can control their experiences and pace their rate of learning, assisted by myself as the teacher (Mayer, 2003; Vygotsky, 1978; Dewey, 1938). The pretraining principle—the final E-Learning principle that is of significance to the action research study—is founded upon the works of Sweller (1988). Sweller emphasizes schema development as a way to connect multiple concepts and move them into long-term memory; I introduced harder vocabulary and more difficult concepts before the learning takes place in order to facilitate connections between concepts to enhance mastery. By

receiving these three principles of E-Learning in the Flex model of blended learning, my students should increase their engagement and become proficient in the history concepts I teach.

Flow Theory. According to Shernoff, Csikszentmihalyi, Schneider, and Shernoff (2003) many artists and athletes have flow, which is "a deep absorption in an activity that is intrinsically enjoyable" (p. 160). Students show that they are in the "flow" when they have intense concentration, immense interest, and active enjoyment (Shernoff et. al., 2003). Blended learning has been shown to be a strategy for increasing student engagement (Stevens and Rice, 2016), and students have more engagement when they have control over how they learn (Deci, Nezlek, and Sheinman, 1981). Therefore, because the action research study utilizes the Canvas LMS, which the students are accustomed to using to control the pace in which they learn, and engagement, interest, and concentration are heightened when flow is achieved, the action research study fits well within the confines of flow theory.

Causes of Student Disengagement with Academic Content

Educators have the difficult job of making sure that all students have their learning needs met, meaning that they have to differentiate their instruction for the struggling learner and the gifted student (Lloyd, 1998). Lloyd (1998) claims that the educators who are more comfortable implementing these differentiation strategies, thus getting their students engaged with the academic content, are the educators who perceive themselves as a facilitator of student learning. However, many students do not feel engaged with the academic content for a variety of reasons, namely the performance-oriented tasks, their lack of academic motivation, and the irrelevance of the subject (Self-Brown & Matthews,

2003; Farman, Natriello, & Dornbusch, 1978; Myers, 2008; Van Straaten, Wilschut, & Oostdam, 2016).

Performance-oriented tasks. Students are motivated intrinsically and extrinsically. Performance-oriented tasks often relate to extrinsic motivation, earning prizes and competing against other students. Students who are in classrooms that have performance-oriented tasks show little effort in achieving those same tasks, which infers disengagement (Ames, 1984; Covington, 1984). Self-Brown and Matthews (2003) in their study found that in the classroom where the performance-oriented tasks or goals were prominent, the students were only getting rewarded for passing normative standards, which implies that some students were not giving the effort to surpass those normative standards. Sustaining effort in a task, along with interest and enjoyment, is associated with engagement (Shernoff, Csikszentmihalyi, Schneider, and Shernoff, 2003). In addition, Dweck (1986) equates performance goals with ability levels and learning goals with mastery. Her review of the literature on performance versus learning outcomes indicates that an emphasis on performance goals would cause students to avoid or withdraw from the activity; however, an emphasis on learning—or mastery—goals, would cause students to show more effort and energy for the task at hand. Therefore, by focusing on mastery or learning goals, a teacher can determine the level of student engagement.

Lack of Academic Motivation. Not only do teaching practices that focus on performance-oriented goals lead to student disengagement with academic content, but the very action of progressing to higher levels of education can have an impact on engagement as well (Eccles, Wigfield, Midgley, Reuman, MacIver, and Feldlaufer, 1993; Hidi and Harackiewicz, 2000). Eccles and her colleagues (1993) performed a longitudinal study of

2,500 students transitioning from elementary to middle school. They conclude that as students transition from elementary to middle school, their academic motivation suffered less from the developmental period of adolescence but more from a "mismatch between students' needs and the opportunities afforded them in traditional middle grades school" (p. 567). The researchers also determined that more studies are needed to examine which school environments will meet the academic needs of the individual students. Thus, if teachers can reevaluate their instructional strategies and their classroom environments, then students will not lose academic motivation, and consequently, their engagement in school.

Hidi and Harackiewicz (2000) also studied the lack of academic motivation. They posit that interest and goals have the largest impact on academic motivation, and thus engagement. The researchers argue that situational interest should be an integral part of maintaining student motivation when it comes to academics. They suggest, "By focusing on the enhancement of situational interest in classroom, educators can find ways to foster students' involvement in specific content areas and increase levels of academic motivation" (p. 153). Hidi and Harackiewicz suggest that educators enhance their content-based situational interest by reading for a particular purpose in the content area and providing choice for their students.

Irrelevance. Educators and curriculum leaders have been calling for reform in the area of relevance for many years (Farman, Natirello, and Dornbusch, 1978; Greene, 2017; Myers, 2008; Van Straaten, Wilschut, and Oostdam, 2016). A major reason for students' disengagement is a lack of relevance. Many classes experience student disengagement, but history classes are the most notable place for students' disengaging with the content because it is not relevant (Farman, Natriello, and Dornbusch, 1978; Van Straaten, Wilschut,

and Oostdam, 2016). Van Straaten, Wilschut, and Oostdam (2016) define relevance as it pertains to the history classes as "allowing students to recognize and experience what history has to do with themselves, with today's society and their general understanding of human existence" (p. 482). Farman, Natriello, and Dornbusch (1978) decided that more should be done to keep students engaged, especially in the social studies classes. The authors researched three concepts as they related to relevance of articulation. Articulation, in the way the authors used it, is "the extent to which students perceive that coursework will be helpful to some future aspect of their life" (p. 27). The three concepts they researched were careers, family, and community.

The sample of Farman and colleague's study consisted of eight urban public high school in the San Francisco school district; the population was very diverse, including all racial and ethnic backgrounds. The researchers discovered that the subjects of English and math had high career articulations, which resulted in higher than average engagement with the subjects. Social studies courses were not considered highly articulated with concern to careers, but demonstrated high articulation to the basic skills one would need later in life. Farman, Natriello, and Dornbusch discovered that students' favorable attitudes toward a subject was a mediating factor: "they were influenced by articulation, and in turn they influenced the level of student effort" (p. 37). However, this favorable attitude mediating factor is an indirect effect, and it can be caused by a number of different aspects of the class.

Overall, educators focusing their instruction more on performance-oriented tasks, students losing academic motivation as they progress in education, and the fact that some subjects are irrelevant to the students' future lives are just some of the causes of student

disengagement with academic content. However, educators and curriculum leaders can transform these causes into factors that increase student engagement.

Factors that Influence Student Engagement

To combat the disengagement of students, researchers and teachers have studied particular strategies and attitudes that will influence students to participate more in class, increase their interest in what they are learning, and begin to think critically about the topics they encounter (Whitman, 2013; Taylor and Parsons, 2011; Marks, 2000; Ryan and Patrick, 2001; Furrer and Skinner, 2003; Faircloth and Hamm, 2003). Among the multitude of reforms and techniques, the following stood out in the literature on student engagement: Small Learning Communities (SLCs) within a larger school, a sense of belonging and relatedness at the school, the structure of the classroom, authentic instruction, and blended learning.

Small Learning Communities (SLCs). Creating smaller class sizes has been a reform strategy for enhancing student achievement and engagement. Smaller class sizes means the teacher gets to focus individualized attention on less students, and the students have the opportunity to ask questions of the teacher, get more help from the teacher, and be in an environment that is less stressful (NEA Policy Report, 2008). Finn and Voelkl (1993), in their study of eighth-grade students across the nation, posit that class size does affect student engagement: "In general, absenteeism is lower, classroom participation is better, and students feel that the environment is more warm and supportive when the school enrollment is smaller" (p. 265). Whitman (2013) explains how developing Small Learning Communities (SLCs) within large public high schools can increase student engagement because of small class sizes. The purpose of Whitman's study was to examine the

perceptions of faculty members and school leaders who worked in a SLC high school to determine the strategies implemented to support student engagement and academic achievement.

The results of Whitman's study led to four categories of perception: personalization, professional learning communities, pedagogy, and instability. Three of these categories—personalization, professional learning communities, and pedagogy—led to increased student engagement with academics and with the school. Within the category of personalization, the interviews revealed that the small school developed a sense of belonging to a community, which enhances student engagement. Under the category of professional learning community, the researchers discovered that sharing best practices, data analysis, and teacher commitment were significant factor in student engagement and achievement. The third category, pedagogy, was assessed through interviews with administrators and school leaders, and researchers found that common instruction and instructional supervision was vital in the growth of student engagement and academic achievement. In reforming these studied high schools by reducing class size, Whitman (2013) discovered that the faculty and administration found opportunities that increased student achievement and engagement for the students who attended them.

Sense of Belonging. In Whitman's (2013) dissertation about perceptions of faculty and administrators fostering student engagement through creating an SLC, he also found that the smaller classes in the smaller learning communities nurtured a sense of belonging. This sense of belonging has been noted by many researchers in the education field (Finn and Voelkl, 1993; Faircloth and Hamm, 2003; Furrer and Skinner, 2003). Faircloth and Hamm (2003) conducted a study in which four ethnic groups (European American, Latino

descent, African American, Asian descent) were used to determine their motivation and academic success in relation to their sense of belonging to their school. The authors employed a structural equation model to analyze survey data from students in the ninth through twelfth grades from seven ethnically-diverse high schools. The researchers found that all four measures of belonging, which are student-teacher relationships, relationships with peers, extracurricular involvement, and perceived discrimination, were important to European Americans and Latino students. However, relationships with peers was not found to be strongly connected to motivation and success in the African-American and Asian-descent students. Yet, the researchers found support within all four groups that a sense of belonging is the best measure of motivation and success, providing student engagement in their classes.

Also, a study by Furrer and Skinner (2003) examined whether a sense of relatedness—or belonging to the school and building relationships with teachers, parents, and peers—would predict a child's level of academic engagement and performance. Researchers found that a child's sense of relatedness is vital to their motivation in the third through the sixth grade. Students' reports of a sense of relatedness to parents, teachers, and peers led to an increase of academic engagement and performance, especially emotional engagement. Girls reported a higher sense of relatedness than boys, but boys were found to have a deeper sense of relatedness when it came to the teacher. However, both sexes showed a drop in teacher relatedness from fifth to sixth grade. Furrer and Skinner only examined students until sixth grade, the beginning of middle school. This limitation shows that a sense of relatedness, or belonging, was indeed strong in elementary school, but that sense of relatedness, which is associated with student academic

engagement, tended to drop off as the students got closer to middle school. The evidence in this study can make educators assume that student engagement did not increase or was maintained from that level in the sixth grade on to high school.

Classroom structure and teacher practices. Engagement with academic content decreases as students advance from elementary to middle to high school (Eccles, Wigfield, Midgley, Reuman, MacIver and Feldlaufer, 1993; Hiri and Harackiewicz, 2000; Furrer and Skinner, 2003). However, several researcher studies (Finn and Voelkl, 1993; Skinner and Belmont, 1993; Ryan and Patrick, 2001) have found that the structure of the classroom and the structure of the school itself had an impact on student engagement. In their study of 6,488 high risk eighth-grade students, Finn and Voelkl's (1993) data indicates that smaller school enrollment promotes lower absenteeism, better classroom participation, and more positive feeling from students toward the school environment (p. 264). Educators cannot control the numbers of students in their classes, but if policy makers and school reformers want students to be more engaged with academic content then they will decrease class sizes at all levels of schooling.

Something that educators can control, however, is their behaviors and instructional practices. Skinner and Belmont (1993) conducted a research study examining teacher involvement, classroom structure, and support for student autonomy on 144 students' behavioral and emotional engagement. They conclude that teacher involvement was crucial to student engagement and that ideal structure and establishment of student autonomy enhanced student experiences in the classroom. Yet, Skinner and Belmont also found that reciprocal effects—students who were disengaged received teacher responses that further deteriorated their engagement—were also present. Therefore, educators who

desire students to be more engaged in academic content should utilize structure in their classrooms and adjust their instructional practices to be more involved and to support their students' autonomy.

Authentic instruction. Teachers can control their instructional practices to increase student engagement with academic content, and educators can do this be adding in authentic instruction (Marks, 2000; Newmann and Wehlage, 1993; Preus, 2012; Myers, 2005; Dennis and O'Hair, 2010). Newmann and Wehlage (1993) explain what is meant by authentic instruction; they define authentic instruction as "achievement that is significant and meaningful…[as opposed to] that which is trivial and useless" (p. 8). The researchers suggest five standards that belong under the category of authentic instruction: higher-order thinking, depth of knowledge, connectedness to the world, substantive conversation, and social support for student achievement (p. 8-10). Newmann and Wehlage relate authentic instruction to student engagement by using these standards to examine "the extent to which such activities actually put students' minds to work on authentic questions" (p. 11). Authentic instruction brings out greater student engagement.

Preus (2012) performed a research study on select racially and economically diverse schools that used and daily implemented authentic instruction. She found that teachers who encouraged authentic learning in their students used a variety of instructional strategies and differentiation, such as scaffolding, modeling, and providing students with open-ended questions and writing (p. 67-70). The researcher also discovered that teachers who used authentic instruction worked in schools that had administration and policies open to new techniques and instructional strategies. Dennis and O'Hair (2010) found the opposite to be true. In their case study of three urban high schools, the researchers found

that at schools where the administration provided professional development in authentic instruction techniques, had a shared vision with their teachers, and were supportive of teachers' taking risks, students were more engaged and had more success in school, but traditional public schools were the least likely to have these elements. Authentic instruction when used correctly and supported by an encouraging administration provided students with more time on task and engagement opportunities.

Blended learning. One strategy teachers can use to promote student engagement is blended learning. Defined by the Clayton Christensen Institute for Disruptive Learning (2015), blended learning occurs when students control some element of time, place, path or pace of an online component of the course, the students spend at least some time in a brick-and-mortar school environment, and the modalities of the students' learning are incorporated and connected between the online and face-to-face components of the course. I incorporated the Flex model of blended learning, one of the four models included in this article. Blending learning, including the Flex model, has a strong impact on and will promote greater student engagement.

In the literature on how to promote and influence student engagement, five topics revealed the strongest evidence: Small Learning Communities (SLCs), a sense of belonging to the classroom environment, classroom structure in terms of teacher instructional practices, and authentic, higher-order instruction; blended learning, the fifth of the topics that stood out in the literature, will be discussed in the next section.

Impact of Blended Learning on Student Engagement

Utilizing blended learning has an impact on student engagement and achievement. Whether the subject area is math or science, blended learning will enhance student

connectedness with the academic content. Providing more significant feedback will engage students, as well as providing more efficient course designs and structure that will keep students engaged.

Blended Learning in Math and Science. Blended learning as a strategy to increase student achievement and engagement has been studied more in the subject areas of math and science. Bottge, Ma, Gassaway, Toland, Butler, and Cho (2014) conducted a study to test the large-scale effects of five Enriched Anchored Instruction (EAI) units on students' computation with fractions and problem-solving skills. EAI is an instructional method that blends realistic problems in an 8- to 15-minute video that is set in an interesting and intriguing context with hands-on application and projects. The authors developed EAI for the purpose of increasing the computation and problem-solving skills of students who had learning disabilities in math. The students involved with the EAI intervention scored higher than the other students who were taught with regular instruction on three of four math measures. In one unit that the students who received the EAI intervention scored higher on the teachers did something different than they had in previous studies; they "taught computation skills in a direct way…prior to students using them with the anchored problems" (p. 434). This combination of direct instruction, or face-to-face learning, combined with the EAI intervention, the online component, provided the students who received the intervention with more engagement with the mathematical content.

Math is not the only subject that relates well with blended learning. Chen and Wang (2015) researched Augmented-Reality (AR) instructional techniques in determining Earth science learning achievement. The researchers found a positive effect of AR instruction on learning achievement through analysis of pretest / posttest scores. Also, when

determining which of the three instructional techniques used in this experiment—traditional lecture, AR implementation, and reinforcement stage—that students found most helpful for understanding and engagement with the content, nearly 90 percent of students preferred the AR implementation. The authors suggest this data reinforces various scholars' belief that "students learn effectively in e-learning environments where learning activities are combined with recent interactive technologies" (p. 844). Hence, the blended learning technique of using AR in addition to the various learning activities was more engaging than the traditional technique of lecturing. As seen in these two studies, blended learning is more easily implemented in math and science, and more related to student engagement.

More Significant Feedback. Several research studies have been conducted that situate blended learning with student engagement in academic content through significant instructor feedback (Journall, 2008; Journall, 2012; Umek, Tomaževič, Aristovnik, Keržič, 2017; Hatziapostolou and Paraskakis, 2010). Journall (2008) examined the results of having historical discussions through an asynchronous summer U.S. History course. He found that students were not very interested in using the discussion boards to further their thinking and learning in order to be engaged with the content. Journall discovered that the teacher, although he modeled it at the beginning, declined in providing significant, formative feedback throughout the course. An educator must realize that in order for blended learning to be successful in engaging students, she must provide consistent and impactful feedback. Later, Journall (2012) published an article encouraging school systems to fund more online learning, but he cautions them about certain pitfalls, such as teacher professional development to create online classroom communities, to utilize online

communication in synchronous and asynchronous learning environments, and to promote an online reflective pedagogy. In addition, Umek, Tomaževič, Aristovnik, and Keržič (2017) performed a research study of Slovenia's institutions of higher education and how blended learning, specifically teacher feedback, was utilized in students' learning outcomes and performance—thus, how the students mastered and engaged with academic content. Umek and colleagues determined that students with higher grades in the courses expected the teachers' feedback to be richer and more useful, and the students with lower grades found the teachers' feedback to be useful and more formative to assess their needs. Overall, teachers' feedback plays a significant role in affecting student engagement if it is consistent and differentiated to the level of the students.

Hatziapostolou and Paraskakis (2010) studied the usefulness and effectiveness of formative feedback given online. The researchers created an Online FEedback System (OFES) as a way of getting students to look at their teachers' feedback. The authors found that students interacted more and were more engaged with their assignments. The researchers determined the enhanced engagement by noting that all students accessed their Online FEdback System (OFES), a significant number of students accessed OFES before their final exam, comments made by students were welcoming and appreciative, and that students felt their feedback was timelier and their grades were fairer because of the feedback. Thus, the teachers were intentional about giving solid, formative feedback to their students, and the students were found to be more engaged with their learning of academic content.

Course Design and Structure. Teachers being able to provide significant feedback in a blended learning environment is not the only aspect of this intervention that

will engage students with academic content; the actual course design and structure can engage students as well (Potter, 2015; Agosto, Copeland, and Zach, 2013; Jaggers and Xu, 2016). Agosto, Copeland, and Zach (2013) provide insight into different blended learning environments; the teacher can incorporate blended learning into an activity within the course, the course itself, or the institutional level. The purpose of the researchers' study was to examine the integration of blended learning into a Library and Information Services (LIS) course. In addition to providing real-world applications, the integration of blogging—an example of blended learning in a course—provided significant increases in peer-to-peer learning and student control, both elements of student engagement. This increase of student engagement, according to the authors, "will contribute to their ability [to] make critical decisions regarding use of social technologies in providing library services, as well as their ability to aid library patrons in their use of similar technologies" (p. 104). Increased student engagement through the course design of blended learning will help facilitate students' understanding of complex academic concepts.

Jaggers and Xu (2016) also claim the course design of a blended learning course will increase student engagement. The researchers found through their own literature review that the following characteristics of course design of a blended or online course may influence student engagement in learning: organization and presentation, learning objectives and assessment, interpersonal interaction, and use of technology (p. 271). Jaggers and Xu studied 23 courses at two community colleges in the spring of 2011 in order to examine whether the four indicators would lead to student performance, or student engagement with academic content. They only found a positive correlation between the standard of interpersonal interaction with student performance. The other standards—

organization and presentation, learning objectives and assessment, and the use of technology—did not show significant results. However, their analysis of the data did not show a negative correlation between course design and student performance. If a teacher's design of a blended learning course is intentional, and focused on the four criteria discussed in the Jaggers and Xu study, then the likelihood of increased student performance and engagement will occur.

Blended learning has a definite and significant impact of student engagement. Whether it is in math, science, or another subject area, blending learning can have a positive influence on participation and learning outcomes. The significant opportunities for teacher feedback and the course design and structure of the blended learning environment itself both tend to increase student engagement with the content.

Student Engagement and Social Justice

Student engagement has a definite connection to social justice and the achievement gap. In theory, education should be the common equalizer among all people; everyone deserves a solid, rigorous, and relevant education that will benefit them, and the global community at large, in the future. However, this is not the case in the majority of American schools. According to DeBaun (2012), refusing to provide all children with a quality education—even unintentionally—is a "moral failure" that "will have dire consequences for the American economy" (p. 1). With the fast-growing demographics of color in America, closing the achievement gaps between these expanding groups becomes more significant—not only to today's educational environment, but to the future of the society. Closing the achievement gap benefits society, and the individual student, in a number of ways: social costs will decrease; more critical jobs in the workforce, which require

additional education attainment, will be filled; and the cycle of poverty, homelessness, and disenfranchisement will be broken (DeBaun, 2012). If students are engaged with learning, they are less likely to drop out or be a statistic in the achievement gap.

Since student engagement seems to increase with the implementation of blended learning instruction, educational reformers, school leaders, and even teachers themselves should look to this teaching strategy to lower achievement gaps and receive greater sustainability (Yair, 2000; Castle and McGuire, 2010). Yair (2000) acknowledges the extensive work that has been done in reforming education, but he claims there are cultural and organizational features that reproduce inequality in the educational setting. He suggests that research studies "have found that tracks, curricular sequences, and teaching practices all construct divergent learning trajectories for socially different students, enlarging small inequalities to socially significant ones" (p. 248). He adds that students must be engaged in the content to make the learned content move from short-term memory to long-term memory, and not many students can do that because of their preoccupation with external issues, such as jobs, family issues, and personal problems. Yair posits that lack of student engagement in instructional opportunities will ultimately lead to a significant drop in "human capital" (p. 265). However, Castle and McGuire (2010) give a promising explanation of how the use of blended learning can lead to higher opportunities for vast numbers of students to engage with learning. The researchers state that blended learning can increase the availability, quality, and variety of learning experiences to a wide audience of students, including those are at-risk and disenfranchised. Even though some students do not have access to online services at home, the time and sustained, intentional

effort that goes into blended learning will certainly make a difference in student engagement, and thus, in alleviating the growing achievement gap.

Summary

In Chapter Two, there was an in-depth literature review of my problem of practice: the lack of student engagement. After a brief introduction of the theoretical perspective on which the action research is based, the literature revealed pressing issues about student engagement: the causes of student disengagement with academic content (performance-oriented goals, lack of academic motivation, irrelevance) and factors that increased student engagement (creating SLCs, having a sense of belonging to the learning environment, the structure of the classroom and teacher practices, authentic instruction, and blended learning). This last factor—blended learning—was researched to determine how it contributed to student engagement; the literature revealed that blended learning related to math and science more readily, significant feedback from the teacher or instructor was important, and the design and structure of the course made it easier for students to engage in learning. Finally, the issue of student engagement and its relationship to social justice was explained. The following section will delineate the methodology in my action research study.

Chapter Three

Methodology

Introduction

Research focused on education became prevalent in the late 19th century, when policy and practice came to be viewed as important effects of educational research studies (Nisbit, 2005). However, educators were not involved in the research process. More recently, educators, as part of their profession, began conducting research—action research—in order to improve their quality of instruction and find new ways to teach their students a particular subject or concept. According to Kemmis (2010), professional educators are stewards, and as such, they are caretakers of the profession, nurturing it, supporting it, and helping it to change based on the changing needs of the students and society. Kemmis (2010) further explains that if educators take seriously their profession, then "action research is one way for practitioners to fulfill their stewardship for their generation" (p. 420). As a dedicated educator, I will fulfill my stewardship by performing an action research study.

Overview of Study

Over the last four years, I have noticed my 11th grade students in my World History class are not engaged with the history concepts they are learning. History classes are known for tedious facts and teacher-led discussions; however, I would like for my World History class to be more relevant and interesting to my students. According to Flow Theory, many artists and athletes have "a deep absorption in an activity that is intrinsically

enjoyable," and when students show that they are in the "flow," they have intense concentration, immense interest, and active enjoyment (Shernoff et. al., 2003, p. 160). Students who concentrate, are interested in a topic, and have intrinsic enjoyment are engaged in learning. By utilizing my school's Canvas Learning Management System, I will implement the Flex model of blended learning in a unit on the Enlightenment and Revolution to evaluate whether the students' are more engaged and will master the historical concepts in a more proficient manner. The action research study will assist me in preparing lessons and facilitating student learning within her World History class.

While implementing the Flex model of blended learning with a unit on the Enlightenment and Revolution, I was guided by the following research questions:

RQ#1: What is the impact of the Flex model of blended learning on eleventh-grade students' understanding of a unit on the Enlightenment and Revolution?

RQ#2: How does the use of the Flex model of blended learning affect the students' engagement with the unit on the Enlightenment and Revolution?

RQ#3: How does the use of the Flex model of blended learning impact mastery of the concepts included in the unit on the Enlightenment and Revolution?

Students' understanding and engagement affect their mastery of the historical concepts taught through the Flex model, and I wanted to determine if it is through the blending of face-to-face instruction and online learning that does so.

Research Design

In order to learn more about implementing the Flex model of blended learning in a World History class, I will address my research questions through an action research study. Johnson (2005) explains that the goal of action research "is to understand what is

happening in a particular classroom or school" (p. 97). My main goal is to assist my own students in their learning and mastery of the concepts I teach. My other goals are to reinforce the school's mission and vision of producing well-equipped citizens who can function effectively in the globalized society (Roxboro Community School, 2016). The action research study is an explanatory sequential mixed methods design (Creswell, 2015), in which I studied my own students' perceptions of blended learning and how face-to-face instruction with online learning impact student learning and mastery. Merriam and Tisdell (2016) describe an explanatory sequential mixed methods research design; they state, "[T]he quantitative data are collected first; the collection of the qualitative data follows, generally with the purpose of *explaining* the results or a particular part of the findings in more depth" (p. 47, emphasis in original).

Intervention

Blending learning is defined as "a formal education program in which a student learns at least in part through online learning…and at least in part at a supervised brick-and-mortar location away from home" (Christensen, Horn, & Staker, 2013, p. 7). I desire to implement a more "disruptive" model of blended learning—the Flex model—into my World History classroom. Christensen and colleges (2013) define the Flex model as "a program in which online learning is the backbone of student learning, even if it directs students to offline activities at times" (p. 31). The authors go on to explain that some of the programs in the Flex learning model have more or less face-to-face instruction, giving the ability to "flex" with the students' needs (p. 31).

I implemented a six-week unit on the Enlightenment and Revolution in which I alternated between online learning activities and face-to-face instruction. Because the Flex

model is the least restrictive of all the blended learning models, I incorporated various face-to-face teaching techniques—small group and direct instruction—with online learning activities—Hyperdocs and Google Drawings. This fit into my regular classes because Roxboro Community School has implemented Canvas as a Learning Management System (LMS), encouraging every teacher to utilize it in some way in their respective classrooms. I used the Canvas LMS to utilize incorporate the Flex model of blended learning, using the modules in Canvas to provide opportunities for engagement in online, face-to-face instruction, and small-group teaching.

Description of Variables and Constructs

This explanatory sequential action research study focused on several different variables and constructs. Every educator knows how important it is for students to understand the content, be engaged in the learning, and master the concepts, so I relied on three specific variables in my research study. I addressed the three research questions that guide this action research study.

Understanding. Research Question 1 explores student understanding of a unit on the Enlightenment and Revolution. Each child should be able to understand the basic concepts of the subjects the educators teach if these educators scaffold the concepts to a deeper, more complex understanding.

Engagement. The question of whether the Flex model implementation affects student engagement is posed in the second Research Question. I am concerned that my students are not as engaged in the World History content, so I added enhancing videos, interesting activities, and inquiry-based online learning opportunities in my utilization of the Flex model of blended learning to determine if engagement is present.

Mastery. The final Research Question focuses on student mastery of certain concepts that I selected from the unit on the Enlightenment and Revolution. It is important to reinforce certain concepts to the students through direct instruction, small group activities, and online opportunities so that the students master the concepts and remember them for not just the test or exam, but for later life as a productive citizen.

Context and Setting of Study

Roxboro Community School (RCS) is a college preparatory charter school in Person County, North Carolina. The county, according to the United States Census Bureau's estimation for July 1, 2014, has a population of approximately 39,100 and a racial breakdown of about 70% White, 25% African American, 4% American Indian, and the remainder of the population coming from Asian and mixed races (2016). North Carolina also produces a School Report Card which lets the school and its employees, the community, and the shareholders in the school know how effective the instruction was during the past year. RCS scored a School Performance Grade and Score of 85, which is an A (North Carolina School Report Card, 2015). The school got the additional honor of becoming an A+NG school, a school with no significant achievement or graduation gaps (North Carolina School Report Card, 2015). RCS is the only school in the county to ever earn this rating, and we have earned this rating for two years in a row. In addition, RCS's website also gives information about its mission "to create educated, responsible and productive men and women who are equipped to face the challenges of the 21st Century" (Roxboro Community School, 2016). The site delineates the school's core values as well, one of which states that teachers have high expectations for all of their students and believe that their students can learn at higher and deeper levels (Roxboro Community School,

2016). RCS takes students from all counties in North Carolina, but mainly from those counties that surround Person County with a majority of students from the county where it is located. The teacher-researcher is employed there as an 11th grade World History teacher. All data were collected from two classes of College Preparatory (CP) World History, the lowest level of World History that the school offers. Of the two CP classes that I taught (2nd and 3rd period), second period is half the size (11 students) of third period (22 students).

Role of the Researcher

As an 11th grade World History instructor at Roxboro Community School in North Carolina, I find it difficult for my students to remain actively engaged in learning and to master, or at least be proficient in, the content of the course. Perhaps this lack of engagement and passivity come from the teacher-led instruction and irrelevant facts to which most history classes lend themselves. According to Kaiser (2010), many history teachers daily find that "[g]etting students to engage in the study of history, to find relevance in the events of the past, and finally to analyze the effects of change over time is perhaps the most difficult thing [they] are asked to do" (p. 223). Because my school has transitioned to a new Learning Management System (LMS)—Canvas, I want to see if using the Flex model of blended learning, which according to the Clayton Christensen Institute (2015) is an approach that uses both online and face-to-face instruction but that can be modified by varying degrees in order to best meet the needs of the students, will increase her students' engagement and mastery of the content of the history course she teaches. By creating a unit on the Enlightenment and Revolution and utilizing the Flex model of

blended learning in it, I was able to study if the blended learning helps to engage my students and also helps them to achieve mastery of the concepts I teach.

As an educator who has had experience at all levels of middle school and high school instruction, I am certified by the state of North Carolina with a Standard Professional II license with endorsements to teach Social Studies (6-12), English (6-12), Reading (K-12), and Special Education (K-12). I am also licensed to be a Principal (K-12) in North Carolina, and I hold teaching licenses in North Carolina, South Carolina, and Tennessee. My own educational background is primarily in English, as I was an English teacher for 13 of the 16 years I have been teaching. I have taught Social Studies as well as English for 5 years, and this is the fourth year I have taught Social Studies only. I hold a BA in English (Meredith College, Raleigh, NC), an MEd in Reading, an EdS in Educational Leadership (Liberty University, Lynchburg, VA), an MA in Multicultural and Transnational Literatures (East Carolina University, Greenville, NC), and is currently a candidate in the doctoral program in Curriculum and Instruction for the University of South Carolina.

The role I played in this action research study was, first and foremost, of reflective educator of her students. I teach my students to the best of my ability and focus on their different learning modalities. I gathered data from my two CP classes with reflective precision, and I performed my research with care, confidentiality, and respect for all of my students.

Participants

The participants in this particular action research study were 33 students, ranging in age from 16-18, from my second and third period CP World History classes during one

academic semester. The classes consisted of 33 students—11 total in second period and 22 total in third period. There were 16 females (4 in second period; 12 in third period) and 17 males (7 in second period; 10 in third period). One female student was African-American, one female student was biracial, and four of the 33 students had an Individualized Education Plan (IEP) / 504 Disability plan. These participants were a convenience sample, which according to Merriam and Tisdell (2016) is inherent in any sampling, but convenience sampling alone provides little credibility and a lack of rich information for the study itself. But with an action research study, I was looking to improve my own students' engagement with the material I teach. So, this type of purposeful sampling is appropriate for this action research study.

Data Collection Measures, Instruments, and Tools

In the six-week implementation of the Flex model of blended learning, I used several data collection tools. I used the quantitative data collection tools of the pre-test / post-test and the Likert scale, and I also used the qualitative data collection tools of the exit ticket and the student artifact.

Pre-test / post-test. Johnson (2005) calls the pre-test / post-test "the most primitive" of data collection tools, but I feel that this tool best captures the students' mastery of the concepts (p. 97). I developed a test of approximately fifteen multiple-choice questions that I administered to all my students before the intervention of the Flex model of blended learning and after the intervention. The actual instrument had the same questions, just not in the same order. I administered the pre-test on April 9, 2019, and the post-test on May 17, 2019. I used the descriptive statistics of mean, median, and mode to analyze the data. It was scored by the number correct, and while the pre-test / post-test tool

will measure mastery, the one variable that it did not determine was maturation. Johnson explains, "[S]imply by cognitive maturation and exposure, most students make some academic gains regardless of the technique or methodology" (p. 98).

Likert scale survey. Mertler (2014) states that the Likert scale "can be used very effectively to measure students' attitudes, perceptions, or behaviors" (p. 140). I measured my students' degree of understanding of the concepts I taught them and their engagement with the blended learning activities. The Likert scale survey has questions based on Keller's (1987) ARCS model of motivation. For example, the instrument has three statements and a 5-point rating scale with 1 being the lowest score and 5 being the highest score; the students could agree or disagree with the statement. I administered the Likert scale with the motivationally-based statements approximately every two weeks on April 26, May 10, and May 22 on a Google Form. For a copy of the Likert scale survey statements and the rating scale used with it, see Appendix B. This quantitative data explored more deeply the topics that the students were engaged with and their level of understanding of these topics.

Exit Tickets. Exit tickets are a way to gauge student learning through formative assessment. Edutopia (2015) provides the simplest definition of this technique; it is used to assess the material the students should have learned on a daily or weekly basis. My students are accustomed to having exit tickets presented to them as I regularly use them as an instructional strategy and a formative assessment in my regular teaching. I used the exit tickets in connection with the Likert scale survey, and I gave them to my students when I gave the Google Form survey in April and May. The exit ticket asked the students to explain their choices on the motivationally-based statements contained in the Likert scale

survey. This data collection tool provided qualitative data as a type of document that is for the purpose of learning "more about the situation, person, or event being investigated" (Merriam and Tisdell, 2016, p. 174). The students provided comments from which themes emerged in my analysis. For a complete listing of themes, see Chapter 4.

Student Artifacts. The final data collection tool that I used is my students' artifacts. Merriam and Tisdell (2016) suggest that "a qualitative study of classroom instruction would lead to documents in the form of instructors' lesson plans, student assignments, objects in the classroom, official grade reports and school records" (p. 175). I assigned three blended learning assignments in my implementation of the Flex model where I collected the students' artifacts and analyze them to see if I can discern understanding from their work. I collected several Google Drawings where the students had to create memes for Enlightenment thinkers, several Hyperdocs on the American Revolution, and presentations on the Industrial Revolution. I collected these assignments one or two days prior to administering the Likert scale surveys and the exit tickets.

Research Procedure

During this six-week intervention of implementing the Flex model of blended learning in a unit on the Enlightenment and Revolution, I followed a specific procedure in carrying out my action research. Prior to doing any actual data collection, I presented my action research to the Managing Executive Director (MED) and Board of Directors at Roxboro Community School, and I also presented letters to the students and their parents that delineate what research I performed, the data I collected, and the results I hope to get from the action research. I also created modules in the Canvas LMS for each topic with

various online activities and opportunities for direct instruction, small group activities, and independent work. The following is a week-by-week schedule of the research study.

Week One. At the beginning of the first week of the research study, I administered a pre-test to the 33 students in the two classes of CP World History. I covered the topics of the European Enlightenment and the American Enlightenment, preteaching the vocabulary from each section of the text first. I gave an assessment—a vocabulary quiz—at the end of the week to check on my students' understanding of the concepts presented thus far; I adjusted instruction accordingly. The following week was Spring Break; therefore, no research was performed.

Week Two. At the beginning of the second week (April 22-26), I gave my students a blended learning activity to review what they learned. The activity consisted of the students completing a Google Drawing of Enlightenment thinkers and creating original memes for them. I collected these projects as student artifacts to determine the understanding my students had on the concepts presented during last week's lessons. This week's content was on the Scientific Revolution and how it helped facilitate the Enlightenment. I pretaught the vocabulary before the students interact with any text. The students did group work, focusing on collaborating on a graphic organizer detailing the causes of the Scientific Revolution and the effects of the Scientific Revolution that led to the Enlightenment. An assessment in the form of a vocabulary quiz was given at the end of the week, and instruction adjusted as necessary. I gave the Likert scale survey with the exit ticket on Friday of Week Two.

Week Three. During the third week (April 29-May 3), the class discussed the American Revolution and how it related to the Enlightenment ideas first started in Europe.

I again pretaught the vocabulary and utilized a close reading of the text. I assigned a blended learning activity—a Hyperdoc on the American Revolution—that was not due until Week Four. I gave the students a choice of which assignments to complete and then gave a formative assessment, adjusting my instruction as necessary.

Week Four. During the next week (May 6-10), the class spent the time in class learning about Napoleon and the French Revolution. Students completed group work comparing and contrasting the revolutions in France and America, and they compared the concepts of the French and American Revolution to what they have already learned about the ideas of the Enlightenment. The students compared the Congress of Vienna to the United Nations during this week. Vocabulary was pretaught, an assessment was given, and instruction adjusted as needed. Exit tickets with Likert scale surveys were given at the end of the week (May 10) to gauge understanding and engagement in the blended learning activity of Week Three.

Week Five. At the beginning of the fifth week (May 13-17), my class was introduced to the Industrial Revolution—the last of the revolutions in this unit. The students learned about the beginning of the Industrial Revolution, what went on during the Industrial Revolution, how the ideas from the Industrial Revolution spread, and how industry was reformed. They connected the Industrial Revolution to modern day industry and technology through discussion boards. I pretaught all vocabulary, gave formative assessments, adjusted instruction as needed, and gave a choice of blended learning activity on the Industrial Revolution—a recording and visual presentation or a Google Slides presentation.

Week Six. This week (May 20-22) was the last in the research study and the unit. Along with being given an Exit ticket with the Likert scale survey questions on the blended learning activity from Week Five, the students reviewed what they had learned, doing group activities and individual review work in preparation for the post-test I administered on Wednesday. After Wednesday, my school was giving exams to the middle and high school students.

This intervention of implementing the Flex model of blended learning helped me answer my three research questions that were the basis of the action research study—what is the impact of the intervention on student understanding, student engagement, and student mastery of the concepts presented in the unit on the Enlightenment and Revolutions.

Treatment, Processing, and Analysis of Data

As this is an explanatory sequential mixed methods action research design, I collected the quantitative data first, and then I explained the data with richer, deeper descriptions of the qualitative findings. The qualitative data more completely describes the quantitative data. The processing and analysis of the quantitative and qualitative data are explained below.

Quantitative Data Analysis

In order to make sense of the quantitative data that I collected with my pre-test / post-test strategy and the Likert Scale surveys, I used descriptive statistics. First, I looked for individual growth from the pre-test to the post-test. I compared individual and class growth with the descriptive statistics, which indicates a higher understanding level that were be analyzed through the Likert Scale surveys. Next, I assigned a numerical value to the categories measured by the Likert Scale. The lower the number, the less understanding

the student had of the topics discussed during the unit; on the other hand, the scores which were higher indicate a greater understanding of the topics presented during the implementation of the Flex model of blending learning

Qualitative Data Analysis

For this action research study, I used a grounded theory approach. First introduced by Glaser and Srauss (1967), grounded theory is a data analysis theory which is grounded in data. Merriam and Tisdell (2016) explain that grounded theory is substantive theory, which "has as its referent specific, everyday world situations…[and] has a specificity and hence a usefulness to practice often found lacking in theories that cover more global concerns" (p. 31-32). Therefore, this type of data analysis relates to the action research study because I am exploring a new way of incorporating blended learning into my teaching strategies in order to promote mastery, engagement, and understanding in my World History classroom.

I used two methods of collecting qualitative data: exit tickets and student artifacts. For the exit tickets, I utilized a Google Form as a method of collecting qualitative data electronically. When the data was collected, I employed a coding strategy suggested by Corbin and Strauss (2015), which includes three elements of coding: open coding, axial coding, and selective coding. For the student artifacts, I collected the documents from the three assignments of blended learning I have incorporated into the unit on the Enlightenment and Revolutions. For each one, I evaluated the document based on the students' understanding of the instructions and the historical concepts I have taught for the specified lessons.

Summary

Chapter Three is the methodology of my action research that involved implementing the Flex model of blended learning into a unit on the Enlightenment and Revolution. The action research was an explanatory sequential design with a purposeful, but convenience, sample of students in my two CP World History classes. I collected the data to improve my students' engagement with and mastery of the history unit's concepts through a pre-test / post-test design, Likert rating scales, exit tickets, and student artifacts. The research procedure is described in detail as well as how the data collection analysis was performed and why these methods are most appropriate for the research study.

Chapter Four

Presentation and Analysis of Data

Introduction

Professional educators try to inform themselves of the best methods to engage their students and facilitate their learning. As a professional educator, I performed an action research study that incorporated the Flex model of blended learning into a unit about Enlightenment and Revolutions in my World History Class. The chapter includes an overview of the study, a description of the intervention, general findings and results of the study, and an analysis of data based on the three research questions.

Problem of Practice

Over the last four years, I have noticed my 11th grade students in my World History class are not engaged with the history concepts they are learning. History classes are known for tedious facts and teacher-led discussions; however, I would like for my World History class to be more relevant and interesting to my students. Incorporating the Flex model of blended learning should keep the engagement level of my students higher than the teacher-led didactic instruction according to several studies which incorporated blended learning (Agosto, Copeland, and Zach, 2013; Jaggers and Xu, 2016; Hatziapostolou and Paraskakis, 2010; Potter, 2015) to increase student engagement.

Significance of Study

Action research studies have been used to bolster teachers' repertoires and encourage them to branch out into new instructional techniques or answer questions that

they have about students and their unique learning strategies. This study is significant for my own personal professional development in that I desired an instructional technique that engaged my World History students with the content they were learning. By incorporating a blended learning activity during strategic portions of the unit on Enlightenment and Revolution, I wanted to keep them engaged throughout with the historical concepts they were learning. Because of the personal nature of the action research study, I could perform research with my own students and learn about their engagement in a way that was less invasive and prescribed; the action research fits in with my personal teaching style.

Research on blended learning is relatively new to the field of research in education, especially how it relates to student engagement and mastery. The data reported in this chapter will add to the literature base on blended learning in this aspect of incorporating the Flex model of blended learning into a World History class. There are numerous studies that show the importance of blended learning in math and science (Bottge, Ma, Gassaway, Toland, Butler, and Cho, 2014; Chen and Wang, 2015; Dennis and O'Hair, 2010), but very few actual studies have shown its importance in World History. With the emphasis on understanding, student engagement, and mastery, my action research study brings an impactful and significant piece of the blended learning literature.

Research Questions

The following research questions guided my study of the implementation of the Flex model of blended learning into a World History class:

RQ#1: What is the impact of the Flex model of blended learning on eleventh-grade students' understanding of a unit on the Enlightenment and Revolution?

RQ#2: How does the use of the Flex model of blended learning affect the students' engagement with the unit on the Enlightenment and Revolution?

RQ#3: How does the use of the Flex model of blended learning impact mastery of the concepts included in the unit on the Enlightenment and Revolution?

Data Collection Methods

My main goal with this action research study on the implementation of the Flex model of blended learning into a unit on the Enlightenment and Revolution is to assist my own students in their learning and mastery of the concepts I teach. My other goals are to reinforce the school's mission and vision of producing well-equipped citizens who can function effectively in the globalized society (Roxboro Community School, 2016). The action research study is an explanatory sequential mixed methods design (Creswell, 2015), in which I studied my own students' perceptions of blended learning and how face-to-face instruction with online learning impact student learning and mastery. Merriam and Tisdell (2016) describe an explanatory sequential mixed methods research design; they state, "[T]he quantitative data are collected first; the collection of the qualitative data follows, generally with the purpose of *explaining* the results or a particular part of the findings in more depth" (p. 47, emphasis in original). According to Creswell and Plano Clark (2018), the intention of the explanatory sequential research design is to take a qualitative strand to explain the quantitative results. In my action research, the quantitative measure of mastery will be explained through the qualitative strands which will measure understanding and engagement with the concepts I teach while incorporating blended learning activities throughout the unit. Within the framework of the explanatory sequential mixed method

research design, I used the following data collection methods: pre-test / post-test method, Likert scale survey, exit tickets, and student artifacts.

Pre-test / Post-test Method. Brogdan and Kutner (1980) claim that a pre-test / post-test research study is a "common research design" (p. 229). For both my pre-test and my post-test, I created an assessment of important historical concepts about the time period of the Enlightenment and the revolutions it caused. For a copy of the pre-test / post-test that was used in my action research study, see Appendix A: Pre-test / Post-test.

Likert scale survey. Surveys are commonly used to measure quality, and Likert scales are the most consistent form of rating, or measuring, quality (Allen and Seaman, 2007). The Likert scale survey I utilized in my action research study was for measuring the quality of understanding, based on Keller's (1987) ARCS model of motivation. For a copy of the Likert scale I created that was used in my research, see Appendix B: Likert Scale.

Exit tickets. Many educators use exit tickets to determine where their students are in the learning process and to differentiate the instruction as necessary. In my action research study, I chose to use exit tickets to measure my students' engagement with the concepts I was teaching. Created using Google Forms, the exit ticket was used in conjunction with the Likert scale survey and was distributed to the students at three different times throughout the unit. The students' comments on the exit ticket's three statements on the three administrations of the Likert scale survey that was used in my action research study can be seen in Appendix C: Exit Tickets—Student Comments.

Student artifacts. The final data collection tool used in my action research study was student artifacts, a qualitative data tool. Merriam and Tisdell (2016) suggest that "a

qualitative study of classroom instruction would lead to documents in the form of instructors' lesson plans, student assignments, objects in the classroom, official grade reports and school records" (p. 175). I selected a sampling of student work from the three blended learning activities to determine if there is student understanding and engagement in the projects. For examples of the blended learning activities that my students turn in, see Appendix E: Student Artifacts.

Sample Characteristics

This section will outline where and with whom I performed my action research study. It contains descriptions of the context and the participants.

Context. Roxboro Community School (RCS) is a college preparatory charter school in Person County, North Carolina. RCS takes students from all counties in North Carolina, but mainly from those counties that surround Person County with a majority of students from the county where it is located.

Participants. All data will be collected from two classes of College Preparatory (CP) World History, the lowest level of World History that the school offers. The participants in this particular action research study were 33 students, ranging in age from 16-18, from my second and third period CP World History classes. I am concerned about these sections of World History because the students seem to have more distractibility and are more likely to be off task.

Intervention

In my action research study, I implemented the Flex model of blended learning in a unit on the Enlightenment and Revolution, a period of time that changed the world. I implemented a six-week unit on the Enlightenment and Revolution in which I alternated

between online learning activities and face-to-face instruction. I utilized the Canvas LMS to incorporate the Flex model of blended learning into my regular teaching, using the modules in Canvas to provide opportunities for engagement in online, face-to-face instruction, and small-group teaching.

General Findings and Results

In this section, I detail the general findings and results of all the data collection tools that were used in my action research study.

Pre-test / Post-test Results

Pre-test results. In order to get a baseline for the students' knowledge of the time period of the Enlightenment and the various revolutions that the time period sparked, I administered a pre-test on the concepts I wanted them to master over the course of the six-week unit where I implemented the Flex model of blended learning. There were a total of 15 questions, and 33 students took the pre-test. I used descriptive statistics to determine the range of scores, the mean (or average) score, and the mode of the scores. For the range, the minimum score was 2 (13.3%) and the maximum score was 9 (60.0%). The average score was 5.2 (34.3%) and the mode was 4 (26.7%). Table 4.1 represents this data in chart form.

Table 4.1: Pre-test Results

Minimum Score	Maximum Score	Average Score	Mode
2	9	5.2	4

My students' scores ranged from 13.3% to 60.0%. Figure 4.1 represents in graph form the percentages scored on the pre-test by each student.

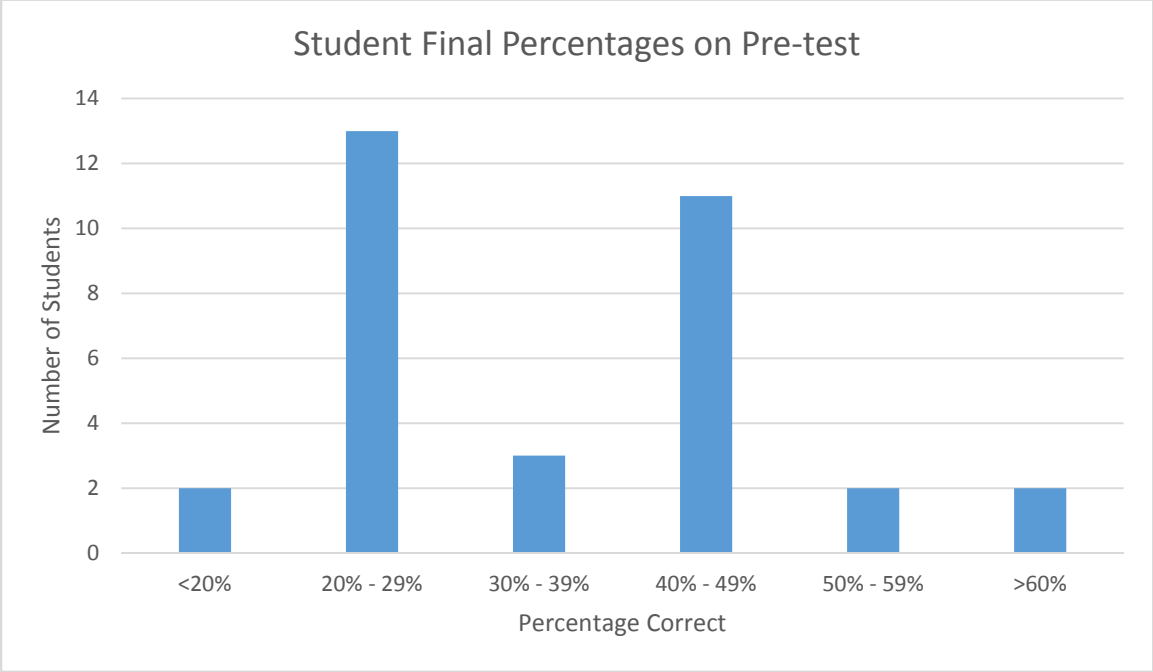


Figure 4.1: Student Pre-Test Percentages

Post-test results. To determine how many concepts my students mastered at the end of the six-week intervention of blended learning techniques, I administered the same assessment of 15 questions to the 33 students as I did when they started the action research process. Again, I used descriptive statistics to determine the range, the average, and the mode. The minimum score was 4 (26.7%) and the maximum score was 14 (93.3%). The average score was 9.9 (66.1%) and the mode was 10 (66.7%). Table 4.2 shows the post-test data.

Table 4.2: Post-test results.

Minimum Score	Maximum Score	Average Score	Mode
4	14	9.9	10

My students' post-test scores ranged from 33.3% to 93.3%. Figure 4.2 represents in graph form the percentages scored on the post-test by each student.

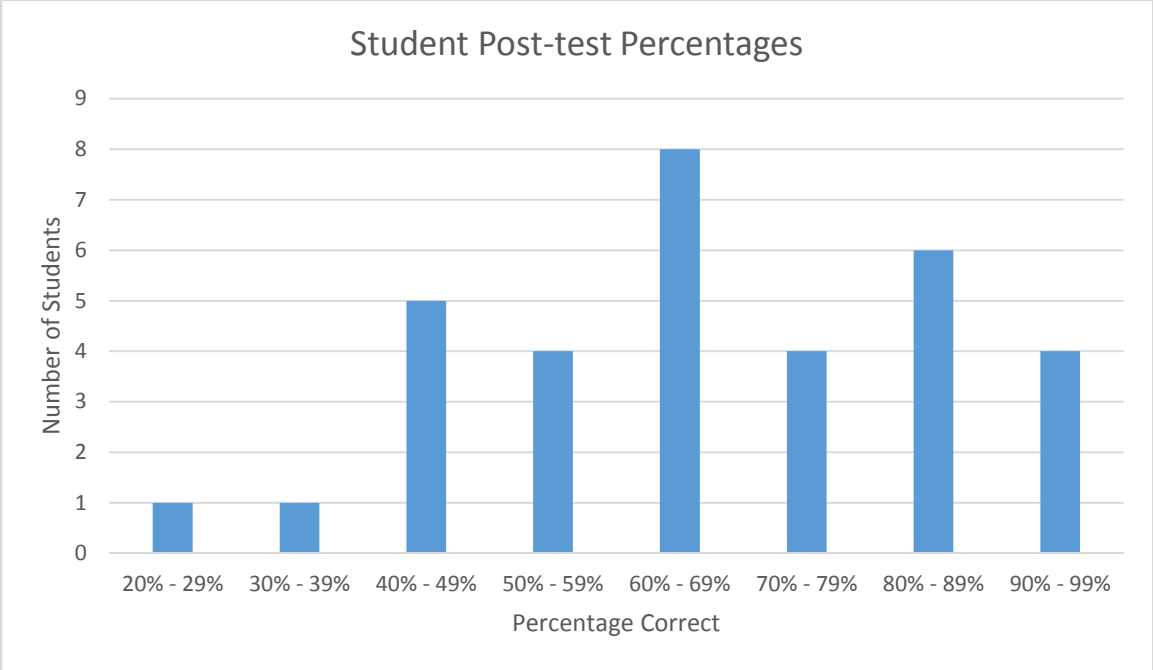


Figure 4.2: Student Post-test Percentages

Likert Scale Survey Results

The Likert scale survey that was used in my action research study was created with Keller's (1987) ARCS model of motivation in mind. The purpose of the Likert scale survey was to measure understanding. As understanding is essential to motivating students, the incorporation of the ARCS model of motivation was needed.

First administration of Likert scale survey. Thirty-one students, out of the 33 who participated, filled out the 3-item Likert survey on April 26, 2019. The first statement related to active participation, focusing on the attention component of the ARCS model. If a student pays active attention, he or she will likely understand the concept. Sixteen of the

thirty-one students (51.6%) chose 4, the option just below the highest level of understanding. Two students chose 2 (6.6%), the second choice above the lowest level of attention. Five students chose 3 (16.1%), and seven students chose 5 (22.6%), the highest level of attention.

The second statement, which represented relevance in the ARCS model, was about making connections with what the students had previously learned or known. If students understand something, they will make connections to it as they process the new information. Seven students chose 5 (22.6%), meaning they were able to make connections from the blended learning activity to something they learned or had studied previously. Eleven students (35.5%) chose 4, eight students (25.8%) chose 3, three students (9.7%), and two students (6.6%) chose 1, making no connections at all.

The final statement represented a combination of confidence and satisfaction; this statement was about pride in the students' work. When students understand and accomplish a task, they feel proud of themselves; with this pride comes satisfaction with themselves. Twelve students (38.7%) chose 5, the level that indicated the most pride in themselves and what they accomplished. Eight students (25.8%) chose 4, nine students (29.0%) chose 3, and two (6.6%) chose 2. No student chose level 1, showing that all my students were proud of themselves to some extent.

Second administration of Likert scale survey. Since the statements on the Likert scale survey did not change but the lessons did, I used the Likert scale survey at the end of the fourth week (May 10, 2019). Twenty-nine out of thirty-three students took the Likert scale survey; four students were absent. On the first statement which addressed attention, no student chose 1, which indicated that each one of my students was paying at least some

attention. Three students chose 2 (10.3%), nine students chose 3 (31.0%), ten students chose 4 (34.5%), and seven students chose 5 (24.1%). For the second statement concerning relevance and making connections, four of my students chose 1 (13.8%) and four of them chose 2 (13.8%). This indicated that over a quarter of my students (27.6%) made little or no connections to what they previously learned. However, eleven of my students chose 3 (37.9%), six chose 4 (20.7%), and four chose 5 (13.8%). This indicated that more than half of my students who took the survey found the blended learning activity relevant to what they had learned. For the third question on the Likert scale survey about having pride in what the students accomplished, four students chose 1 (13.8%), three students chose 2 (10.3%), five students chose 3 (17.2%), twelve students chose 4 (41.4%), and five students chose 5 (17.2%).

Third administration of Likert scale survey. At the end of the unit on the Enlightenment and Revolutions, I administered the final Likert scale survey. This time, only twenty-five students out of the 33 students who participated in the research study took the survey; seven students were absent and one student, who was a senior, was taking his exams. On the first statement about attentiveness and active participation, one student chose 1 (4.0%), one student chose 2 (4.0%), eight students chose 3 (32.0%), eleven students chose 4 (44.0%), and four students chose 5 (16.0%). These results indicated that over 90% of my students paid attention and noted their active participation in the last two weeks of the unit. For statement two relating to the learning being relevant and making connections to prior learning, five students chose 1 (20.0%), four students chose 2 (16.0%), and five students chose 3 (20.0%). This finding indicated that over half of my students did not think the historical concepts were relevant and could make no or very little connections to

anything they had learned. Eleven students (ten chose 4—40.0% and one chose 5—4.0%) noted that they made connections. On the final statement about being proud of what they accomplished, over a quarter of my students (one student chose 1—4.0% and six students chose 2—24.0%) noted that they had no pride or very little in what they accomplished over the last week. Well over half of my students noted pride in their accomplishment of the last week (three students chose 5—12.0%, seven students chose 4—28.0%, and eight students chose 5—32.0%). These results indicated a slight change in my students' perceptions of their work; since the beginning of the unit, my students were increasingly noting less pride in their accomplishments and their work.

Students' responses were averaged for all three administrations of the Likert scale survey. For the first administration, the average for Statement #1 about active participation was 3.87, Statement #2 about relevance and making connections was 3.58, and Statement #3 about confidence and satisfaction within themselves was 3.97. For the second administration, the average students' responses for Statement #1 was 4.00, for Statement #2, 3.10, and for Statement #3, 3.40. For the final administration, Statements #1-#3 were represented by scores of 3.64, 2.90, and 3.60, respectively. See Figure 4.3 for a graphic representation of all the Likert scale survey data.

Exit Ticket Results

Exit tickets are used to assess what students are learning, where students are in the learning process, and how teachers can adjust their instruction to meet their students' ever-changing needs. They are commonly used for formative assessment. The exit tickets I used in my action research plan were to measure student engagement; they were used in conjunction with the Likert scales surveys, used to measure understanding. Engagement

comes from understanding the material, being interested in the topic, and being motivated to learn more. My exit tickets consisted of a Likert scale survey question and an explanation question that prompted the students to go further than choosing a number; it was to explain why they chose their option. The explanation responses ranged from why the students maintained active participation, what connections they made, and why they were proud of themselves.

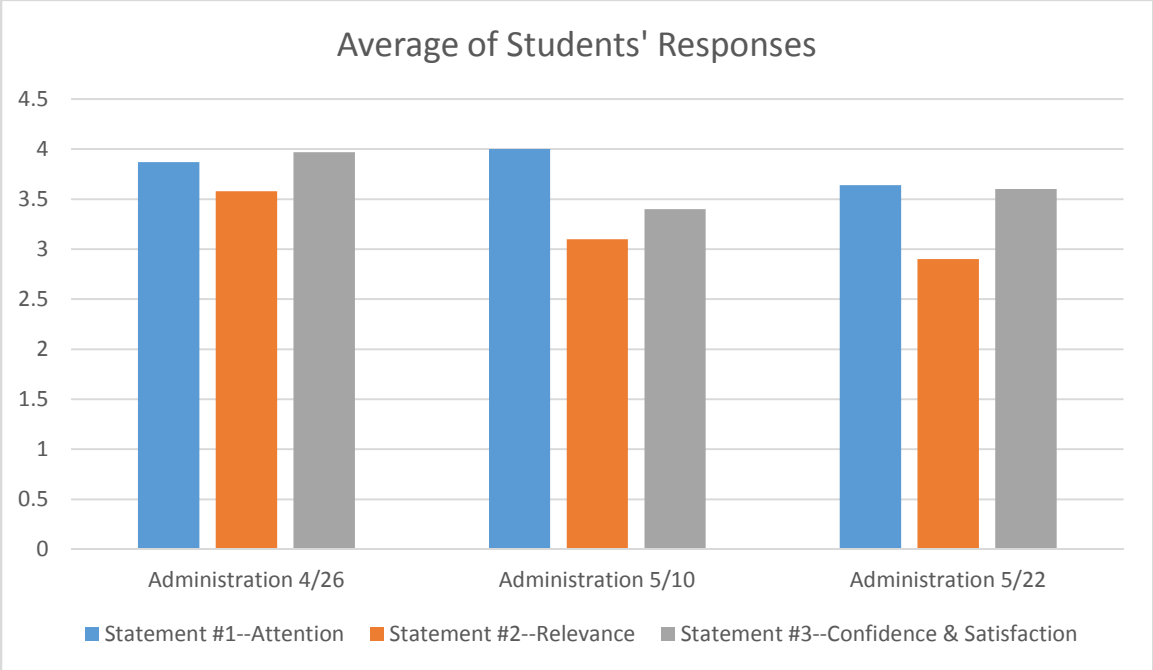


Figure 4.3: Average of Students' Responses to Each Administration of the Likert Scale Survey

For the three administrations of the exit ticket, many themes emerged as I read through the explanation questions and answers. For Statement #1, the themes of "Completion," "Different and Difficult," "Interesting," and "Distracted" emerged. For "Completion," I read comments like "I turned everything in on time" and "BEcuase i did it the day it was due and I git alot of help from Mrs.Davis (sic)." This statement on active

participation was taken as getting work done, which showed engagement but not motivation and consequently understanding. Comments such as "Because it was [a] different way of how we did things" and "it was very hard to come up with a meme" constituted the theme of "Different and Difficult." Even though these students said that the Enlightenment Thinkers Memes Google Drawing was "different" and "difficult," they still noted that they had active participation in the project, by choosing a 4 and a 5. In addition, the theme of "Interesting" was supported by comments like "I like the new format because it's less repptative and it feels like yo get more info this way (sic);" this example shows not only interest and novel ideas brought out by the blended learning, but also more information was disseminated through this new technique. However, there were those students that gave evidence to the theme of "Distracted." Several students explained in their exit ticket question the reason they were distracted was "because its friday (sic)" and they were "done with school."

For the second statement about relevance and making connections, the same three themes emerged throughout the three administrations of the exit ticket: "Specific Connections," "Vague Connections," and "No Connections." Many students made very specific connections; they included connections to "Baron de Montesquieu," the "French Revolution," "feminism," and "freedom of religion." For the "Vague Connection" theme, students noted that they made connections to "history," "why things are what they are," and to "the main topics." The exit ticket had the direction to "Be Specific" written in the directions, but these students either didn't read the directions or thought that "things i knew or heard about (sic)" or "Stuff i already knew (sic)" was specific. For the students whose responses supported the "No Connection" theme, there was a variety of answers: "There

wasn't really much to make connections to," "Because I didn't really do my work," and "bc i havent been to war," when we were learning about the American Revolution.

The final set of responses were about having confidence, satisfaction, and pride in what the students' accomplished, and the following themes emerged from the data: "Completion," "Worked Hard," and "Should Have Done More." For the "Completion" theme, some students wrote "got alot done (sic)," "I did my work," "I finished the assignment," and "I was proud that I did it in two days." Students' responses that showed evidence for the theme of "Worked Hard" were "I did a good job and worked hard," "Because I worked hard and was proud of my accomplishment," and "Got my work done, didn't slack off, feels good." For the final theme that emerged from the data—"Should Have Done More"—there were several renditions in my students comments, such as "I could have done more and focused more but I am very stressed and just need breaks sometimes" and "I didn't really do anything this week." Some students were candid about the fact that they were stressed and didn't do anything they were proud of during the week, but others simply did not care, such as the student who wrote "Because [I] dont care (sic)." See Appendix C: Exit Tickets for all the responses from the exit tickets.

Student Artifacts

Merriam and Tisdell (2016) suggest that "a qualitative study of classroom instruction would lead to documents in the form of instructors' lesson plans, student assignments, objects in the classroom, official grade reports and school records" (p. 175). The results from the three types of student artifacts were taken from rubrics for the individual assignment. The three assignments were a Google Drawing of a Enlightenment Thinkers Meme, an American Revolution Hyperdoc, and a presentation—either verbal or

Google Slides—on the Industrial Revolution. The category that was the most important, and was included in all three rubrics, was "Followed Directions." If the student was engaged, then they would follow directions for each assignment. Based on a thorough review of my students' work that they submitted, their understanding and engagement increased even though the number of the students who turned in the assignment decreased. See Appendix D: Instructions for Blended Learning Activities for the directions the students were given and a copy of the rubric that was used to score each one. See Appendix E: Student Artifacts for samples of my students' work.

Analysis of Data Based on Research Questions

My action research study data collection was driven by three research questions. Therefore, I decided to present the data analysis differentiated by the research questions. The research questions are as follows:

RQ#1: What is the impact of the Flex model of blended learning on eleventh-grade students' understanding of a unit on the Enlightenment and Revolution?

RQ#2: How does the use of the Flex model of blended learning affect the students' engagement with the unit on the Enlightenment and Revolution?

RQ#3: How does the use of the Flex model of blended learning impact mastery of the concepts included in the unit on the Enlightenment and Revolution.

RQ #1: Impact on Student Understanding

My action research study revealed the incorporation of blended learning activities had a positive impact on student understanding. I used the Likert scale survey results and the exit ticket to determine this impact. Over the three administrations of the Likert scale survey, the averages of the student responses were fairly high, ranging from 2.9 to 4.0. The

student comments, taken from the exit tickets, reflect this positive impact on student understanding of the blended learning activities; some of the positive remarks were that students felt the project was "fun," that they were "able to focus on the task," and that they were "proud because [they] completed everything." The ability to make connections and finding relevance was the lowest during the third administration of the Likert scale survey. See Figure 4.3. My students could have zoned out of the assignment because they had gone over the Industrial Revolution since the eighth grade and had two years of American History in the ninth and tenth grade.

During the implementation of two of the blended learning activities—the Google Drawing and the Hyperdoc—showed a positive response to the statements based on Keller's (1984) ARCS model of motivation. However, the final blended learning activity—the choice of using a video recording presentation or a Google Slides presentation—was not rating as high as the first two. The explanation of why the data turned out this way was taken from the students' comments from the exit tickets. The final administration of the exit ticket including the Likert scale survey was on May 22, 2019. This date was nine days away from the end of the school year, six days away from their final exams, and ten days away from summer vacation. Some of my students comments were "I am very stressed," "almost done with school," and "Im tired done with school so im not working to hard (sic)." Yet, their feelings of pride in their work and the amount of attention the students paid was on the same level as other administrations given after the first two blended learning activities were implemented.

RQ #2: Impact on Student Engagement

For the impact of blended learning on student engagement, I analyzed the quantitative data from the Likert scale survey and the qualitative data from the exit tickets and the student artifacts. Shernoff, Csikszentmihalyi, Schneider, and Shernoff (2003) claim students that are engaged, or in the "flow," have intense concentration, immense interest, and active enjoyment, so the active participation and the ability to follow directions to complete the assignment denote engagement in the blended learning activity. Throughout the three administrations of the Likert scale survey, over half of the students who took the survey each time chose a 4 or 5, indicating on Statement #1 that they were very actively involved with the lesson and the blended learning activity, with 23 out of 31 students (74.2%), 17 out of 29 students (58.6%), and 14 out of 25 students (56.0%), respectively. The qualitative data from the exit tickets revealed that the students were engaged in the blended learning activities as well. The comments display the link between the amount of work done by the student and the level of active participation as well as the novelty of the teaching strategy, as evidenced by the themes of "Completion" and "Interesting."

The student artifacts revealed something different about the level of engagement, though. As the blended learning activities were implemented over the 6 weeks of the unit on the Enlightenment and Revolutions, the number of assignments students turned in decreased. Prior experience in teaching CP World History has shown me that the assignments that students turn in can be hit or miss; some students turn in every assignment while other students rarely turn in their assignments. With each subsequent blended learning activity, the number of students who turned in the assignment decreased. For the

Enlightenment Thinkers Memes activity, 28 out of 33 students (84.8%) turned it in; for the American Revolution Hyperdoc, 25 out of 33 students (75.8%) turned it in; and for the third assignment—the Google Slides presentation on the Industrial Revolution—22 of the 33 students (66.7%) turned it in. The level of engagement, based on the number of turned-in assignments, decreased as the blended learning activities were implemented. Although the number of students turning in assignments decreased, based on the criterion of "Followed Directions" noted in the rubric of the blended learning activities, the number of students who followed the instructions of the assignments increased. For the Enlightenment Thinkers Memes activity, the number of students who included the research document and followed the meme activity instructions was just over half of the those that were turned in—17 out of 28 (60.7%); but for the two subsequent blended learning activities—the Hyperdoc and the Google Slides presentation—23 out of 25 (92.0%) students and 21 out of 22 (95.5%) students, respectively, followed directions. Therefore, the students who turned in all three assignments became more engaged the longer the blended learning activities were implemented.

RQ #3: Impact on Student Mastery

The implementation of blended learning into the unit on the Enlightenment and Revolutions definitely showed an increase in student mastery. Even though two students got one less question correct on the post-test than the pre-test and three students scored the same amount correct on pre-test and the post-test, the average growth of my students from pre-test to post-test was 4.6 questions correct. The most common growth score was 9 questions, with five of my students growing that amount. For individual growth in mastery,

one student grew 12 questions from getting only two questions correct on the pre-test to getting 14 question correct on the post-test. For this data in table format, see Table 4.3.

Table 4.3: Student Growth and Mastery based on Pre-Test and Post-Test

Student	Pre-test Results	Post-test Results	Growth
ZP	2	14	+12
SP	4	14	+10
SH	3	12	+9
WM	3	12	+9
ES	5	14	+9
CT	4	13	+9
PW	3	12	+9
LP	2	11	+8
JC(1)	7	14	+7
LS	4	11	+7
HD	3	10	+7
SB	7	13	+6
KH	4	10	+6
GW	4	10	+6
CB	2	7	+5
JC(3)	5	10	+5
KT	6	11	+5
PC	9	13	+4
CH	4	8	+4
CY	6	10	+4
KF	6	9	+3
JR	6	9	+3
AW	7	10	+3
JC(2)	9	11	+2
CC	4	6	+2
WL	6	8	+2
MM	5	7	+2
JE	7	8	+1
IW	4	4	+0
EA	6	6	+0
LC	8	8	+0
GL	6	5	-1
JO	8	7	-1
Average:	5.45	10.55	5.13

Summary

Chapter 4 included an overview of my action research study, including the problem of practice and the three research question. The context and participants of the action research study were discussed, as well as the data collection tools reviewed. Then, the general findings were presented from the four data collection tools, and the results were analyzed according to the three research questions on understanding, engagement, and mastery. Chapter 5 will further discuss the place of my action research study in the literature on blended learning, recommendations for my own practice, limitations of my action research study, and future areas of research brought about by reflections on my research.

Chapter Five

Discussions, Conclusions, and Recommendations

Introduction

Ottesen (2007) claims that reflection is an important aspect of teacher education and teachers' professional development, and my action research study was part of my professional development as an educator (Creswell, 2016; Dana & Yendol-Hoppey, 2014; Mertler, 2014; Mills, 2014). This final chapter concludes with a review of my action research study and how the results link to the literature and to my actual teaching practice. Then, a discussion of the limitations of my research will be provided, and suggestions for future research connected to blended learning will be recommended.

Overview of Study

This section of the chapter will be a short review of my action research study on blended learning and student engagement.

Problem of Practice

Over the past four years when I was teaching World History, I noticed that my eleventh grade students were not engaging with the content that I was teaching. Since my school—Roxboro Community School—was transitioning to a new Learning Management System (LMS), a system called Canvas, I implemented a blended learning approach to teaching World History because blended learning has been shown to have a positive effect on student engagement according to several studies (Agosto, Copeland, and Zach, 2013; Jaggers and Xu, 2016; Hatziapostolou and Paraskakis, 2010; Potter, 2015). Within this

implementation of the Flex model of blended learning, I created a unit on the Enlightenment and the Revolutions it created. In this six-week unit, I incorporated three blended learning activities along with whole group instruction, small group activities, and online discussions and projects.

Significance of Study

Although blended learning activities have been studied and their benefits noted in science and math courses, this strategy and its effectiveness has not been reported in a World History class. By incorporating three blended learning activities at strategic times during the unit, my study shows just how engaged my students are with the World History concepts they are learning. Also, by conducting my action research study in my own class, this experience helped me reflect on and add to my instructional resources and techniques. Not only did it assist in my personal professional development, my action research study adds to the base of literature on blended learning and its effect on student understanding, engagement, and mastery.

Sample Characteristics

The entire action research study took place at Roxboro Community School in Person County, NC. The participants were students in my two College Prep (CP) World History classes of 33 students, 11 in second period and 22 in third period. Some students in these two CP classes have accommodations and modifications required by an Individualized Education Plan (IEP) or a 504 Plan. Overall, I was concerned about these students because they are more easily distracted and can become off-task more frequently than students in my other classes.

Research Questions

The following research questions guided my study of the implementation of the Flex model of blended learning into a World History class:

RQ#1: What is the impact of the Flex model of blended learning on eleventh-grade students' understanding of a unit on the Enlightenment and Revolution?

RQ#2: How does the use of the Flex model of blended learning affect the students' engagement with the unit on the Enlightenment and Revolution?

RQ#3: How does the use of the Flex model of blended learning impact mastery of the concepts included in the unit on the Enlightenment and Revolution?

Data Collection Methods

My action research study was an explanatory sequential mixed methods design (Creswell, 2018). The quantitative data was collected first, explained by the qualitative data (Merriam and Tisdell, 2016). I collected my quantitative data through a pre-test / post-test method, through which descriptive statistics were used and through a Likert scale survey, rating statements on a 1 through 5 scale. My qualitative data was collected in the form of exit tickets and student artifacts, providing a rich description of how the quantitative data was attained. I used these methods to determine if the implementation of blended learning activities would produce greater understanding, engagement, and mastery of the historical concepts presented to the students.

Data Analysis Results

The results of my action research study were positive. The Likert scale survey, which was used to measure understanding, was based on Keller's (1987) ARCS model of motivation, and the responses showed that my students understood the concepts presented

to them through the blended learning activities, yet the connections they made were not as specific as I had hoped. The students' engagement level with the historical concepts, measured qualitatively by the exit tickets and the student artifacts, increased as the blended learning activities were incorporated, but their engagement went down slightly as they progressed through the unit and as they encountered the same material they have in previous history classes. Mastery of the historical concepts was the ultimate goal; if students are engaged and if they understand the material, they will be likely to master the concepts. Mastery was measured by the quantitative pre-test / post-test tool. According to the data I collected, nearly 85% of my students (28 out of 33) grew in mastery, and over 20% of my students (7 out of 33) grew by nine points or more.

Results Related to Existing Literature

Relating my action research study to the existing literature on blended learning focused my reflection on the significant areas to which my study was connected. These areas were authentic instruction, more significant feedback, and classroom structure and teacher practices.

Authentic instruction. Authentic instruction has been shown to increase student engagement (Marks, 2000; Newmann and Wehlage, 1993; Preus, 2012; Myers, 2005; Dennis and O'Hair, 2010). Newmann and Wehlage (1993) suggest five standards that belong under the category of authentic instruction: higher-order thinking, depth of knowledge, connectedness to the world, substantive conversation, and social support for student achievement (p. 8-10). Since my action research study included activities that incorporated higher-order thinking and connectedness to the world, it fits in to what Newmann and Wehlage define as authentic instruction: "achievement that is significant

and meaningful…[as opposed to] that which is trivial and useless" (p. 8). The students in my action research study had to initiate a higher-order thinking strategy to come up with original memes, drawings, and presentations, so that element connects it to Newmann and Wehlage's work. Another connection I made was to Preus (2012) study of select schools that used and daily implemented authentic instruction. She found that teachers who used authentic instruction worked in schools that had administration and policies open to new techniques and instructional strategies. Roxboro Community School has been welcoming and open to my action research study, encouraging my blended learning approach to teaching while I was pursuing my doctorate degree. Since they transitioned to a new Learning Management System (LMS), Canvas, with the assignability that makes it user-friendly for teachers, they have encouraged and supported the authentic instruction I sought to teach through my implementation of blended learning in my World History classroom.

Classroom structure and teacher practice. Another area of my action research study's literature review that increased student engagement was classroom structure and teacher practices. Roxboro Community School, the context of my action research study, ensures small classrooms. In a publication on why parents should choose Roxboro Community School, the school promises that "the faculty and staff would provide a small, nurturing environment for students." This fact connects my action research study to a study by Finn and Voelkl (1993), whose data indicates that smaller school enrollment promotes lower absenteeism, better classroom participation, and more positive feeling from students toward the school environment. Attending Roxboro Community School almost guarantees that a student will be in a small, positive, engaging classroom where teachers care about their students. A way that teachers care about their students is to have them engaged in

learning. Using the Flex model of blended learning effectively, as I did in my action research study, ensures that students will be engaged. Also, my action research study connected to a study by Skinner and Belmont (1993) who examined teacher involvement, classroom structure, and support for student autonomy on 144 students' behavioral and emotional engagement. Skinner and Belmont concluded that teacher involvement was crucial to student engagement and that the establishment of student autonomy enhanced student experiences in the classroom. With my action research study, I established my involvement and the students' autonomy early on because my action research study was very similar to the way I normally teach. I always incorporate technology, and incorporating the Flex model of blended learning was simply an extension of the way I teach. I am a facilitator of my students' learning, and my students have autonomy in my classroom, supported by my modeling and scaffolding structure through the inclusion of the Flex model of blended learning.

More significant feedback. My action research study's purpose was to measure students' engagement and mastery of the historical topics that I taught through a unit of blended learning activities dealing with the Enlightenment and Revolution. I found a connection to a study by Umek, Tomaževič, Aristovnik, and Keržič (2017) that examined Slovenia's institutions of higher education and how blended learning, specifically teacher feedback in blended learning environments, was utilized in students' learning outcomes and performance—thus, how the students mastered and engaged with academic content. The researchers found that students with higher grades in the courses expected the teachers' feedback to be richer and more useful, and the students with lower grades found the teachers' feedback to be useful and more formative to assess their needs. This finding

relates to the participants in my action research study because the level of student that participated was more easily distracted and had more off-task behavior than the other classes. Just like Umek and his colleagues found that students with lower grades perceived the teachers' feedback to be of more use to their mastery of academic content, I intentionally chose this level of student because I wanted them to experience engagement through blended learning that would lead to mastery.

Practice Recommendations

The North Carolina Department of Public Instruction (NCDPI) approved the Digital Learning Competencies (DCL) for Teachers in June 2016. These competencies were informed by the International Society for Technology in Education (ISTE), International Association for K-12 Online Learning (iNACOL), and the NC Professional Teaching Standards. The NCDPI's (2019) website claims that "the underlying assumption of leadership and excellence with regard to digital citizenship" runs throughout the entire Digital Learning Competencies, and that teachers should use the competencies "to improve their practice and drive student learning within their classrooms." Since I am a teacher in North Carolina, I must follow by these guidelines, and this action research study has given me an opportunity to do this. The following paragraphs correspond to the DLC that I am expected to follow.

Leadership in digital learning. As a North Carolina educator who takes her profession seriously, I took "initiative with [my] own professional growth to improve [my own] practice" (NCDPI, 2019). My action research study was borne out of my desire to see my CP World History students engaged in learning the concepts I was teaching. My students had been floundering, not motivated to learn; they were more interested in social

media and playing games on their cell phones than learning about history that seemed to be completely removed from their real lives. I designed my action research study around blended learning in the hopes that the teaching strategy would interest them and get them engaged in learning. This hope for my students relates well to the Flow theory put forth by Shernoff, Csikszentmihalyi, Schneider, and Shernoff (2003).

Knowledge and application of digital tools and resources for instruction. For the past four years ever since Roxboro Community School began transitioning to their new LMS Canvas, I have been able to "identify, evaluate, and utilize appropriate digital tools and resources" for my students to be able to engage with the ideas that I was teaching and master the concepts they learned. My action research study was the culminating strategy to incorporate blended learning into a unit in my World History class to determine if this teaching technique would engage my students and help them master the historical concepts contained within the unit.

Technology to reflect upon their practice. My action research study has given me more than a few opportunities to reflect on how my teaching practice has improved or if it has become more or less effective. At each stage in planning my action research, I reflected on how I would implement the Flex model of blended learning into my teaching, I reflected on what unit I was going to incorporate the intervention in, and as I wrote this dissertation, I reflected on the overall experience, the results, and the entire process of my doctorate degree. Through using my action research study in my professional development, I was able to see improvement in my teaching. I found that through using the blended learning technique effectively, my teaching was more focused on the process of student learning, instead of the outcome. Even though the research was focused on

mastery and engagement, I found myself more involved in the learning, the day-to-day activities of my students, and the clarification of students' misunderstandings. If I had not completed this action research study, I feel my teaching would have suffered by not being as involved with the students' learning and focusing more attention on completion of the assignments.

Limitations of the Research

There were many limitations to my action research study. First, I should have performed the action research earlier in the school year. Due to the cohort-based structure of the doctorate program at the University of South Carolina, Cohort I—of which I am a part—was required to perform data collection in the spring of 2019. Because my action research study did not get approved by the Internal Review Board of the University of South Carolina until late March, I couldn't begin my research until April 9, 2019. This later date proved to be a challenge because my Spring Break was in the second week of my action research plan, and my students forgot the information they learned prior to leaving for the break. Also, upon reflection on my action research study, another limitation was giving my students a choice on the last blended learning activity they completed. Normally, student choice is an appropriate technique to use if a teacher wants her students engaged in what they are learning. But at the end of the year, my students took the easiest route to just get it done rather than challenging themselves with the more difficult blended learning activity. The last blended learning activity was to use Flipgrid or Screencastify, tools that I had modeled throughout the year, to explain the chapter on the Industrial Revolution, or they could create a Google slides presentation for the information they had read. My students had used Google slides in the past and felt more comfortable and confident using

this presentation tool; therefore, all of them chose it. I felt disappointed at the fact that no student took on the more challenging presentation route, but it was close to the end of the year, and my students were tired, stressed, and overwhelmed with preparations for final exams. The last limitation I faced while doing my action research study was personal. I had gone through a separation from my husband in November 2018. The marriage of 15 years was an abusive relationship; my husband never physically abused me, but the emotional, verbal, and mental abuse I endured had—and still have—effects on me that affected my work, my studies, and my action research study. I do a good job at compartmentalizing my life, but when I left him, I found it difficult and the lines around the compartments in my life were blurred.

Recommendations for Future Research

Even though blended learning has been proven effective in science and math classes (Bottge, Ma, Gassaway, Toland, Butler, and Cho, 2014; Chen and Wang, 2015), the teaching strategy of implementing blended learning has not been adequately researched in history, English, and other liberal arts areas. I would like to see more research to determine if blended learning really helps students with making these courses more relevant to their lives and to their future careers. Like Whitman's study (1978), history can be thought of as irrelevant and not connected to a young person's future, and I would like to see the various learning outcomes that can come from blended learning. Bartlett (2016) suggests that using technology is not enough; he states that "technology is simply a medium that will be used to facilitate students' creative expression" (p. 6). Research should be done to show that students can handle the great responsibilities of using, creating, managing, and implementing various blended learning activities in their real lives. Overall, I think my

action research study just touched the surface of the iceberg of blended learning: what blended learning can do and what students can accomplish through this process.

Summary

Chapter Five gave an overview of my action research study with its results that students are more engaged, understood more about the historical concepts, and grew in mastery when the Flex model of blended learning was used in a World History class. Then, my action research study was related to the literature on blended learning by having concepts and ideas that coincided with the areas of authentic instruction, classroom structure and teacher practice, and more significant feedback. Practice implications were discussed as they related to North Carolina's initiative to infuse technology in the curriculum as Digital Learning Competencies, and limitations to my own action research study were presented. Chapter Five concluded with areas of future research related to blended learning.

References

Agosto, D. E., Copeland, A. J., and Zach, L. (2013). Testing the benefits of blended education: Using social technology to foster collaboration and knowledge sharing in face-to-face LIS courses. *Journal of Education for Library and Information Science, 54*(2), 94-107.

Allen, I. E. and Seaman, C. A. (2007). Likert scales and data analyses. Quality Progress. Retrieved from: http://rube.asq.org/quality-progress/2007/07/statistics/likert-scales-and-data-analyses.html

Ames, C. (1984). Achievement attribution and self-instructions under competitive and individualistic goal structures. *Journal of Educational Psychology, 76*, 478-487.

Bartlett, J. L. (2016). Teaching for tomorrow, today. *Education Digest, 81*(6), 4-8.

Bottge, B. A., Ma, X., Gassaway, L., Toland, M. D., Butler, M. and Cho, S. (2014). Effects of blended instructional models on math performance. *Exceptional Children, 80*(4), 423-437.

Brogan, D. R. and Kutner, M. H. (1980). Comparative analysis of pretest-posttest research designs. *The American Statistician, 34*(4), 229-232.

Castle, S. R. and McGuire, C. J. (2010). An analysis of student self-assessment of online, blended, and face-to-face learning environments: Implications for sustainable education delivery. *International Education Studies, 3*(3), 36-40.

Chandler, P. and Sweller, J. (1991). Cognitive load theory and the format of instruction. *Cognition and Instruction, 8*(4), 293-332.

Chang, C., Shu, K., Liang, C., Tseng, J., and Hsu, Y. (2014). Is blended e-learning as measured by an achievement test and self-assessment better than traditional classroom learning for vocational high school students. *International Review of Research in Open and Distance Learning, 15* (2). 213-231.

Chen, C. and Wang, C. (2015). Employing augmented-reality-embedded instruction to disperse the imparities of individual differences in Earth science learning. *Journal of Science Education and Technology, 24*, 835-847.

Christensen, C. M., Horn, M. B., and Staker, H. (2013). Is k-12 blended learning disruptive? An introduction to the theory of hybrids. *Clayton Christensen Institute*. Retrieved from http://www.christenseninstitute.org/wp-content/uploads/2014/06/Is-K-12-blended-learning-disruptive.pdf

Clayton Christensen Institute for Disruptive Learning. (2015). *Blended learning definitions*. Retrieved from http://www.christenseninstitute.org/blended-learning-definitions-and-models/

Constructivism. (2016). *Learning Theories.* Retrieved from http://www.learning-theories.com/constructivism.html

Corbin, J. and Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). Thousand Oaks, CA: Sage.

Covington, M. V. (1984). The self-worth theory of achievement motivation: Findings and implications. *The Elementary School Journal, 85*(1), 4-20.

Creswell, J. W. (2015). *A concise introduction to mixed methods research*. Thousand Oaks, CA: Sage.

Creswell, J. W. and Plano Clark, V. L. (2018). *Designing and conducting mixed methods research*. 3rd ed. Thousand Oaks, CA: Sage.

Dana, N. F. and Yendol-Hoppey, D. (2014). *The reflective educator's guide to classroom research: Learning to teach and teaching to learn through practitioner inquiry*. (3rd ed.) Thousand Oaks, CA: Corwin.

DeBaun, B. (2012). Inseparable imperatives: Equity in education and the future of the American economy. *Alliance for Excellent Education*. Retrieved from http://all4ed.org/wp-content/uploads/2013/06/InseparableImperatives.pdf

Deci, E. L., Nezlek, J., and Sheinman, L. (1981). Characteristics of the rewarder and intrinsic motivation of the rewardee. *Journal of Personality & Social Psychology, 40,* 1–10.

Dennis, J. and O'Hair, M. J. (2010). Overcoming obstacles in using authentic instruction: A comparative case study of high school math and science teachers. *American Secondary Education, 38*(2), 4-22.

Dewey, J. (1938). *Experience and education*. New York: Simon & Schuster.

Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychiatrist, 41*(10), 1040-1048.

Eccles, J. S., Wigfield, A., Midgley, C., Reuman, D., MacIver, D., and Feldlaufer, H. (1993). Negative effects of traditional middle schools on students' motivation. *The Elementary School Journal, 93*(5), 553-574.

Edutopia. (2015). Gaining understanding on what your students know: Quick, ungraded assessment help teachers know what their students understand from the day's lesson. George Lucas Educational Foundation. Retrieved from https://www.edutopia.org/practice/exit-tickets-checking-understanding

E-Learning Theory. (2016). *Learning Theories.* Retrieved from http://www.learning-theories.com/e-learning-theory-mayer-sweller-moreno.html

Entress, C. and Wagner, A. (2014). Beyond "hitting the books": Teaching science students strategies for studying independently. *Science Teacher, 81*(4). 27-31.

Erdem, M. and Kibar, P. N. (2014). Students' opinion on facebook supported blended learning environment. *Turkish Online Journal of Education Technology, 13* (1). 199-203.

Faircloth, B. and Hamm, J. (2003). Sense of belonging among high school students representing 4 ethnic groups. *Journal of Youth & Adolescence, 34*(4), 293-309.

Farman, G., Natriello, G., and Dornbusch, S. M. (1978). Social studies and motivation: High school students' perception of the articulation of social studies to work, family, and community. *Theory and Research in Social Education, 6*(3), 27-39.

Finn, J. D. and Voelkl, K. E. (1993). School characteristics related to student engagement. *The Journal of Negro Education, 62*(3), 249-268.

Fredericks, J. A., Blumenfeld, P. C., and Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74* (1). 59-109.

Furrer, C. and Skinner, E. A. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology, 95*, 148–162.

Glaser, B. G. and Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.

Greene, M. (2017). Curriculum and consciousness. In D. J. Flinders and S. J. Thornton (Eds.), *The curriculum studies reader* (pp. 147-159). New York: Routledge.

Hatziapostolou, T. and Paraskakis, I. (2010). Enhancing the impact of formative feedback on student learning through an online feedback system. *Electronic Journal of e-Learning, 8*(2), 111-122.

Hidi, S. and Harackiewicz, J. M. (2000). Motivating the academically unmotivated: A critical issue for the 21st century. *Review of Educational Research, 70*(2), 151-179.

Jaggers, S. S. and Xu, D. (2016). How do online course design features influence student performance. *Computers and Education, 95*, 270-284.

Johnson, A. P. (2005). *A short guide to action research*. 2nd ed. Boston: Pearson.

Journall, W. (2008). Facilitating historical discussions using asynchronous communication: The role of the teacher. *Theory and Research in Social Education, 36*(4), 317-355.

Journall, W. (2012). Walk, don't run—to online learning. *Phi Delta Kappan, 93*(7), 46-50.

Kaiser, C. (2010). Redrawing the boundaries: A constructivist approach to combating student apathy in the secondary history classroom. *The History Teacher, 43* (2). 223-232.

Kazu, I. Y. and Demirkol, M. (2014). Effect of blended learning model on high school students' academic achievement. *Turkish Online Journal of Education Technology, 13* (1). 78-87.

Keller, J. M. (1987). Development and use of the ARCS model of instructional design. *Journal of Instructional Development, 10*(3), 2-10.

Keller, J. M. (1987). The systematic process of motivational design. *Performance Improvement, 26*(9-10), 1-8.

Kemmis, S. (2010). What is to be done? The place of action research. *Educational Action Research, 18*(4), 417-427.

LaBerge, D. and Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology, 6*(2), 293-323.

Lloyd, C. V. (1998). Engaging students at the top (without leaving the rest behind). *Journal of Adolescent and Adult Literacy, 42*(3), 184-191. Retrieved from http://www.jstor.org/stable/40014677

Machi, L. A. and McEvoy, B. T. (2009). *The literature review: Six steps to success*. Thousand Oaks, CA: Corwin.

Marks, H. M. (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American Educational Research Journal, 37*, 153–184.

Mayer, R. E. (2003). Elements of a science of e-learning. *Journal of Educational Computing Research, 29*(3). 297-313.

Means, B., Toyama, Y., Murphy, R., Bakia, M., and Jones, K. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. U.S. Department of Education. Retrieved from https://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

Merriam, S. B. and Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation.* (4th ed.) San Francisco, CA: Jossey-Bass.

Mertler, C. A. (2014). *Action research: Improving schools and empowering educators*. (4th ed.) Los Angeles: SAGE.

Miller, G. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *The Psychological Review, 63*(2). 81-97.

Miller, W. (2011). Mode neutral and the need to transform teaching. *Public Administration Quarterly,* 35(4). 446-465.

Mills, G. E. (2014). *Action research: A guide for the teacher researcher*. (5th ed.) Boston: Pearson.

Moreno, R. and Mayer, R. (2007). Interactive multimodal learning environments. *Educational Psychology Review, 19*(3), 309-326.

Murphy, R., Snow, E., Mislevy, J., Gallagher, L., and Wei, X. (2014). *Blended learning report*. Retrieved from http://www.edweek.org/media/msdf-blended-learning-report-may-2014.pdf

Myers, D. (2008). Lifespan engagement and the question of relevance: Challenges for music education research in the 21st century. *Music Education Research, 10*(1), 1-14.

Myers, J. (2005). Doin' the DBQ: Small steps towards authentic instruction and assessment in history education. *Canadian Social Studies, 39*(2), 1-7.

NEA Policy Brief. (2008). Class size reduction: A proven reform strategy. *National Education Association*. Retrieved from http://PB08_ClassSize08.pdf

Newmann, F. M. and Wehlage, G. G. (1993). Five standards of authentic instruction. *Educational Leadership, 50*(7), 8-12.

Nisbit, J. (2005). What is educational research? Changing perspectives through the 20th century. *Research Papers in Education, 20*(1), 25-44.

North Carolina Department of Public Instruction. (2019). NC digital learning competencies for educators. Digital Teaching and Learning. Retrieved from http://www.dpi.state.nc.us/dtl/digitallearningnc/competencies/

North Carolina School Report Card. (2015). Roxboro Community School. Retrieved from https://ncreportcards.ondemand.sas.com/snapshots/73B000_2015_K-12-Charter.pdf

North Carolina State Board of Education. (1998). *Code of ethics for North Carolina educators*. Retrieved from http://www.ncpublicschools.org/docs/effectiveness-model/ncees/standards/code-of-ethics.pdf

Ottesen, E. (2007). Reflection in teacher education. *Reflective Practice, 8*(1), 31-46.

Potter, J. (2015). Applying a hybrid model: Can it enhance student learning outcomes? *Journal of Instructional Pedagogies, 17*, 1-11.

Preus, B. (2012). Authentic instruction for 21st century learning: Higher order thinking in an inclusive school. *American Secondary Education, 40*(3), 59-79.

Roxboro Community School. (2016). Mission and vision statements. Retrieved from http://www.roxborocommunityschool.org

Roxboro Community School. (2018). Sustaining excellence: A guide to Roxboro Community School. Retrieved from https://core-docs.s3.amazonaws.com/documents/asset/uploaded_file/329280/Why_Choose_RCS.pdf

Ryan, A. M. and Patrick, H. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *American Education Research Journal, 38*, 437–460.

Schmerling, R. A. (2014, October 13). First, do no harm. [Web log comment]. Harvard Health Publications. Retrieved from http://www.health.harvard.edu/blog/first-do-no-harm-201510138421

Self-Brown, S. R. and Matthews, S. (2003). Effects of classroom structure on student achievement goal orientation. *The Journal of Educational Research, 97*(2), 106-111.

Shernoff, D. J., Csikszentmihalyi, M., Schneider, B., and Shernoff, E. S. (2003). Student engagement in high school classrooms from the perspective of flow theory. *School Psychology Quarterly, 18*(2), 158-176.

Skinner, E. A. and Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology, 85*(4), 571-581.

Solomon, H. (2015). Cognitive load theory (J. Sweller). *Instructional Design*. Retrieved from http://www.instructionaldesign.org/theories/cognitive-load.html

Stevens, M. and Rice, M. F. (2016). Inquiring into presence as a support for student learning in a blended learning classroom. *Journal of Online Learning Research, 2*(4), 447-473.

Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science, 12*(4). 257-285.

Taylor, L. and Parsons, J. (2011). Improving student engagement. Current Issues in Education, 14(1). Retrieved from: http://cie.asu.edu/

Umek, L., Tomaževič, N., Aristovnik, A., and Keržič, D. (2017). Predictors of student performance in a blended-learning environment: An empirical investigation. Paper presented at the International Association for Development of the Information Society (IADIS). *International Conference on E-Learning*. Lisbon, Portugal.

United States Census Bureau. (2016). Quick facts: Person County, North Carolina. United States Department of Commerce. Retrieved from http://www.census.gov/quickfacts/chart/RHI625214/37145

Van Straaten, D., Wilschut, A. and Oostdam, R. (2016). Making history relevant to students by connecting past, present, and future: A framework for research. *Journal of Curriculum Studies, 48*(4), 479-502.

Vygotsky, L. (1978). Interaction between learning and development. In M. Gauvain and M. Cole (Eds.), *Readings on the development of children* (pp. 34-42). New York: Worth Publishing.

Whitman, R. (2013). Closing the Achievement Gap: Perceptions of Faculty Members and School Leaders of Small Learning Communiy [sic] Implementation in an Urban High School. (Doctoral Dissertation). Retrieved from ERIC (EBSCO). UMI Number: 3574904

Yair, G. (2000). Educational battlefields in America: The tug-of-war over students' engagement with instruction. *Sociology of Education, 73*(4), 247-269.

Yilmaz, K. (2009). A vision of history teaching and learning: Thoughts on history education in secondary schools. *The High School Journal, 92* (2). 37-46.

Appendix A: Pre-test / Post-test

Name: _____Date: _____Class: _____

Pretest on Enlightenment and Revolutions

Directions: *Using only your previous knowledge, answer the questions to the best of your ability.*

1. The use of a logical procedure for gathering and testing ideas is known as
    a. The scientific method.
    b. Heliocentrism.
    c. Geocentrism.
    d. An experiment.
2. Efforts to apply the scientific method to society created the movement called
    a. The Scientific Revolution.
    b. The social contract.
    c. The Enlightenment.
    d. The Reformation.
3. An idea found in the writings of both Locke and Rousseau is
    a. The social contract.
    b. Government by popular consent.
    c. The natural goodness of people.
    d. The rights of women.

4. In contrast to the baroque style, the artistic styles of the late 1700s emphasized

    a. Order and simplicity.

    b. Drama and grandeur.

    c. Richness of color.

    d. Elaborate imagery.

5. The system of checks and balances in the United States federal government was derived from the ideas of

    a. Locke

    b. Rousseau

    c. Voltaire

    d. Montesquieu

6. The bourgeois members of the Third Estate in France were unhappy with the Old Regime because

    a. They did not like Marie Antoinette.

    b. They wanted to help the poor.

    c. The other two estates had privileges which were denied them.

    d. They supported the American Revolution.

7. The major goal of the French Revolution was

    a. To execute the king.

    b. To create a more democratic government.

    c. To liberate the people of Europe.

    d. To get rid of slavery.

8. After the Reign of Terror, French public opinion

    a. Remained the same as before.

    b. Became more conservative.

    c. Became more liberal and radical.

    d. Shifted to other concerns.

9. French voters supported Napoleon's decision to appoint himself emperor because

    a. They supported expansion in the New World.

    b. The Pope had become less powerful.

    c. He had successfully restored order and peace to France.

    d. They wanted to restrict the new rights established during the Revolution.

10. All of the following were goals of the Congress of Vienna EXCEPT

    a. Restoring monarchy throughout Europe.

    b. Preventing the future expansion of France.

    c. Punishing the government of France.

    d. Creating a balance of power among European nations.

11. The first industry to benefit from industrialization was

    a. Transportation c. agriculture

    b. Textiles d. communications

12. The expansion of industry into Europe was delayed by

    a. The absence of key natural resources.

    b. Limited access to transportation.

    c. The dominance of agriculture.

    d. The Napoleonic wars.

13. The people who benefitted least from industrial expansion were

    a. Factory owners.

    b. Merchants.

    c. Workers.

    d. Landowners.

14. Laissez-faire thinkers supported

    a. Free trade.

    b. Child labor.

    c. Minimum wage laws.

    d. Better working conditions.

15. The belief that government should promote the greatest good is a characteristic of

    a. Socialism.

    b. Utilitarianism.

    c. Marxism.

    d. Communism.

Appendix B: Likert Scale

The statements I created were included on a Google Form and distributed to students three times.

- I maintained active participation in the lesson.
    - 1 – Not at all.
    - 5 – I was in to it!
- I was able to connect something that I learned to either previous experiences or what is going on today.
    - 1 – Nope…I got nothing! :-(
    - 5 – Yep, connections were made! :-)
- I am proud of what I accomplished today!
    - 1 – Accomplished? What? :-(
    - 5 – Proud…with a capital P! :-)

Appendix C: Exit Ticket Responses

First Exit Ticket (April 26, 2019)

Statement #1: I maintained active participation throughout this last week.

Responses:

-I answered this way because I did everything given to me and completed it but some of it I did not try my best.

-Because it was different way of how we did things, but it felt like the same way we have always done things

-because projects arent my favorite but it want that hard

-I like the new format because it's less repptative and it feels like yo get more info this way

-I only worked on it some in class and I turned in the assignment late because I forgot about it.

-its always interesrting

-I thought the project and the whole meme thing was not relevent but the way the information was given to us was very detailed and well thought out.

-Was certainly interested and dedicated to finishing the assignment

-BEcuase i did it the day it was due and I git alot of help from Mrs.Davis

-I feel like i have a lot more time to do work

-I did everything

-I turned in everything on time

-I was out of class doing my senior pictures and also working on my graduation stuff

-I answered this way because I feel like that sometimes I was in on the lesson and then others times I was zoned out of the lesson.

-I answered this way because because i kept getting distracted it didn't really keep my interest

-I did my work but I did not like the meme project

-I learned a lot and i spent a lot of effort into the lesson.

-I got destracted on wednesday but maintained focus the rest of the week

-It was very interesting.

-I have tried my best to participate and get my work done as fast and efficient as possible.

-Because I'm not a big fan of memes

-Loved the lessons and the way they were taught

-It was fun to do this project, but it was very hard to come up with a meme.

-I took a while to find examples

-I was very much into this activity but I came a day in late to it so that made it a little hard to understand it completely but eventually I got it.

-Because I was able to focus on the task at hand in a more interactive way that kept me interested in the subject

-Because its boring

-It was like normal class

-I couldve been more active

-idk it was fun but kinda boring.

-I like memes

Statement #2: I was able to connect something in the past week that I learned to either previous experiences or what is going on today.

Responses:

-I learned that feminism was apart of that time period as well as it is today.

-I don't think I made a connection

-my connection to understand what the enlightenment thinks did

-im really into goverment and this was mainly about how the influced goverment and poltics

-I made many connections with this assignment because I was able to use what I learned to help me do the assignment.

-things i knew or heard about

-I thought the meme thing was childish and not something that should be in a high school classroom setting

-I've always encouraged change that was for the better, this is that

-Becuase i was kinda confused

-I feel like i have more time to study the assignment

-I was very engaged and learned

-I didn't because I don't really understand history

-Stuff i already knew on the topic

-I answered this way because I feel like I was able to connect to what each of the three people did that I created memes for.

-I answered this way because i made connections to the way we learn. We still use some methods from before.

-I just did my work

-I can connect to some of the things the people fought for like the freedom of religion.

-I made no connection

-I made a connection with Baron de Montesquieu.

-I made the connections with the ¨Enlightenment Thinker Memes"assignment because I see memes in my everyday life on the internet.

-There was only one person that I made a connection to. The connection I had was with women's rights.

-History is one of my favorite subjects and i have had classes like this before that i enjoyed

-I learned more then just taking notes.

-I answer this way because I made a connection to society and how people think.

-there were connections made. I learned more about these people than I did before.

-I didn’t really make a connection. Long story short, I just want to pass

-Because I didn't connect to the people

-related to memes

-I somewhat made a connection because i understood the context of what was happening

-the meme's i made were connected to the persons philosophy

-The memes had to do with history so its a connection

Statement #3: I am proud of what I accomplished today.

-I am proud that I completed everything and hopefully maintain my good grades.

-Because I did a good job and worked hard

-because usal it not on time

-I finished all of my work on time and had the best memes

-I actually finished the project instead of not doing it at all.

-finished project

-I have a pride in all of my work but as I said the whole meme thing kind of irritated me so I have less push to do it

-Not quite sure what's being asked but we are most definitely better off then we were centuries ago

-Im just glad i got it done so i wont get a 0 .

-Because I wont have a late grade

-I got everything done effeciently

-Because I managed to keep a good grade because I had turned in everything and got a good grade

-I stilll have more work to complete to be caught up

-I answered this way because I am proud of my work and reseaarch that i did on these philsophers.

-I answered this way because i haven't given this week my all

-I just did my work

-I tried and I put what I thought the best I could do was.

-I should've gotten my work done sooner

-I finished everything!

-I answered this way because I finished the assignment on time but I procrastinated until the last minute.

-Because I didn't finish it and turn it in.

-I was able to complete a project that i was happy to submit

-I am very proud of how it turned out, but the memes could have been a little funnier.

Plus I was proud that I did it in two days.

-I could have done better on the description

-Because I probably did not do the best that I could. But I will next time.

-Because normally focus is hard for me

-Because im not interested in the work

-did some work

-Because i got alot of things done today

-it pretty easy.

-I felt kind of proud but i know i can do better

Second Exit Ticket (May 10, 2019)

Statement #1: I maintained active participation throughout this last week.

-because i was not here last wednesday

-it was not just your class it was this week in general

-i got way ahead of everyone

-Because it was fun

-hard work pays off

-I stayed focused, learned some stuff on the way.

-I participated

-because i think so

-I feel like I didn't participate as much as I could have.

-I have not been doing all of the work like I need to do.

-because i was distracted because its friday.

-The lesson allowed me to work in my own way

-I did my work

-Because I was a day late on turning in on an assignment

-I was out one day and i fell off a little

-I answered this way because I feel like I was very active in this lesson.

-I feel I have completed all my work on time.

-I was in to this assginment because I like learning about the time of the boston tear party.

-bc i did my work

-I felt pretty good about this assignment and felt like I learned a decent amount about all of this.

-I stayed on task and got my work done before the due date even though I was out two days. I did not feel like I was far behind.

-I was doing the work

-I don't know it was kinda boring

-because there were days were i would zone out then there were days i was focused

-i could've done better

-idk

-I worked as hard as i could but had alot of other school work stressing me out

-Because I have been sick all week and still don't feel too good.

-I got all my work done on time

Statement #2: I was able to connect something in the past week that I learned to either previous experiences or what is going on today.

-yes the scientific method and the revolution relates to us now.

-i try and stay with the whole history not repeating itself

-leared about this in 7th grade

-Because I made connections

-adding onto things i knew about it

-Our government, society, social classes, so on...

-I made conections to how the government is run today

-i made a connection to our history

-There wasn't really much to make connections to today and thats really what I thought about.

-I wasn't really able to make a connection with the work this week.

-Becuase it related to other stuff ive learned

-I made a connection to the subject and was able to throw myself into my work

-I did my work

-I don't understand history

-I liked the propaganda poster

-I didn't really get a connection to anything.

-I didn't make very many connections to this lesson.

-I didn't really make a connection but I understood what happend and where the people were coming from.

-bc i havent been to war

-I learned about the main topics and grasped that but I can not really make real life connections.

-Some things people wanted back then others still want today.

-I made a connection to equal rights/fair treatment and how important they are to us now as they were back then.

-I was clueless the entire time

-in a way i connected due to the fact that people were fighting for what was right to them

-It helped my knowledge grow on history from what i already knew

-idk

-With stuff i learned in the previous years

-Because I didn't really do my work today because I still don't feel really good.

-revolutionary war

Statement #3: I am proud of what I accomplished today.

-because i have not completed last weeks work that i was not here for

-i feel like I could have worked harder

-finished early

-Because I worked hard and was proud of my accomplishment

-i got right much done

-I did a good amount

-I did good work

-because i'm proud of what i have done

-This was one of those weeks where I had no motivation.

-Because I haven't done all of the work this week.

-Because i got most my work done

-i was able to excel in class

-I did my work and finished a day early

-because I got everything done

-I feel good about the poster

-I am proud of what I accomplished because I did my work to my best of my abilities.

-I have gotten done all my work.

-I got a lot accomplished this week

-Because dont care

-It probably could have been better but I still got everything turned in on time so I feel good about that.

-I felt like I worked hard this week and the work I turned in was good.

-I just need to work more effectively as I learn the new format

-I didn't really do anything this week.

-i got alot of things done today

-I could've done better

-idk

-I definitely could have done more

-Because I was out all week.

-i got my work done

Third Exit Ticket (May 22, 2019)

Statement #1: I maintained active participation throughout this last week.

-interesting got work done

-yes i have participated

-I did not turn in much work for this section

-because it was an ok week

-Yes, because I got like half of the vocabulary done for the Exam Study Guide in 1 day.

-Did my work

-work wasn'y interestint to me

-I participated at certain points a lot.

-I participated

-Im tired done with school so im not working to hard

-Because I was not that into it

-I got it done on time

-Because I was just going through the motions not really trying.

-I did all my work.

-I worked hard and tried my best

-I did my work

-I answered this way because I was very productive in doing my work and turned it in on time.

-i have stayed on task with everything

-I was kinda on top of everything but I was also having to do other work.

-i was a little uninterested in the unit

-I did everything but I did not do the notes very well.

-i gotten alot of things done but i could've got more done if i was more focused on the subject

-haven't really

-bc i dont care

-i was fully focused

Statement #2: I was able to connect something in the past week that I learned to either previous experiences or what is going on today.

-used what i already knew to what i learned

-because i focused really hard and caught up.

-none

-to history

-Yes, I used what I learned to help me fill out my Exam Study Guide.

-The subject had some cool history

-back to seventh grade history andthe french revolution

-I didn't make any connections.

-I made connections to what we learned about the french revolution

-I dont know what we did last week

-I was able to learn the material with the things my teacher had us do

-No because i feel without them being talked about I didnt learn much

-Idk

-there were no strong connections

-Yes i made a connection to WWI

-I did my work

-I answered this way because I didn't make a connection to previous experiences.

-I don't understand history at all

-Because I didn't make a connection.

-helps to understand why things are what they are and the reason behind them

-I learned new things but did not really make any connections

-the connection i had was that the french revolution had a lot of gory fights and disputes but all together it was good to connect with a a little bit of history

-bc i didn’t do it

-because i didnt

-Just learning about topic from past

Statement #3: I am proud of what I accomplished today.

-got alot done

-i am proud that i caught up

-I wish I would have done a better job keeping up with my work

-for what i remeber i think i did

-I am very proud of what I have done.

-Got my work done, didn't slack off, feels good

-no becuase i really wasnt much to be proud of

-I feel like I didn't accomplish what I should have.

-i'm proud of what i accomplished

-i didnt work to hard bc i give up

-Even though it was a little more work than I usually do, I learned about the unit.

-Im happy I got it done

-I didn’t really do a lot

-I got all my work done so I am happy with what I did.

-I got all my work done

-I did my work

-I answered this way because I am very proud of my notes that I did this week.

-I turned everything in on time

-I didn't do as much as I hoped I would.

-almost done with school

-I could have done more and focused more but I am very stressed and just need breaks sometimes.

-I have turned in alot of things

-because i didn’t do it

-because i dont care

-got work done

Appendix D: Instructions for Blended Learning Activities

Enlightenment Thinkers Memes

For your review of the section "Enlightenment in Europe," you will create Enlightenment Thinker Memes.

Follow these steps to create your memes:

1) Research the following people: Thomas Hobbes, John Locke, Baron de Montesquieu, Voltaire, Ceasar Beccaria, Mary Wollstonecraft. (include their views on government or education or society AND any important information that they wrote, added to the society, or changed perspectives of certain people / ideas)

2) Go to this Google Drawing: https://docs.google.com/drawings/d/1ZRMHD7PpmVC1kzlfemAsJwDWZN63esKK6wBo1QqI1qU/edit (Links to an external site.)

3) Make a copy for yourself, title the drawing "Enlightenment Thinkers Memes by _____", and put your name in the blank.

4) Fill out the THREE (3) boxes on the left side of the drawing with THREE OF THE ENLIGHTENMENT THINKERS you researched. Summarize what you learned...this has to be in complete sentences.

5) Find a picture online of each of the three Enlightenment Thinkers you chose and figure out a creative slogan or phrase that summarizes what each thinker did.

6) Submit your final project here.

Rubric for Enlightenment Thinkers Memes

Criterion	**Points**	**Earned**
Followed Directions	25	
Has Research Document	25	
Original Meme	25	
Relates to Research	25	
	Total:	

American Revolution Hyperdoc

What inspired the American Revolution??? What happened after the Revolution???

The American Revolution is a turning point in the history of not only the United States, but the world. Together, we are going to explore the causes and effects of this revolution.

Engage

It's too Late to Apologize… Watch the video here. This will set the stage for what happens next. This is the basis of the Declaration of Independence. (ONE of the END results)

Explore

Now, you are going to explore some primary sources, images, and timelines of the revolution. As you work through it, I want you to fill out the chart that you will find here. You will be visiting a variety of sites to witness the Revolution firsthand.

Timeline
Stamp Act
Sugar Act
Boston Massacre
Paul Revere's Engraving
Tea Act
Sons of Liberty
Personality Quiz
Continental Congress
Intolerable Acts
9 Things you May Not Know about the Declaration
No More Kings
6 Unsung Heros of the Revolution
Battle of Saratoga
Infographic
Interactive Revolution
Buzzfeed Quiz

Explain

The American Revolution was inspired not only by the Age of Enlightenment but also the persons living in the colonies at the time. The musical Hamilton includes several songs (that are not quite school appropriate) about the ideas and beliefs of the people. Your roadmap to the Revolution is part of

	understanding the Revolution. The idea of Revolution came from the Enlightenment as did many of the ideas included in the founding documents of the newly formed United States of America.

Apply

Now, I want you to write a journal from the perspective of either a Patriot or a Loyalist. Think about what you might have experienced. Include the following: where you live, what side you are on, who might represent you in a meeting or congress, and what you would do to support the revolution. Talk about your feelings and frustrations.
OR, you can analyze a primary source of your choosing from the time period.
OR, you can create a propaganda poster for the side of the Patriots or Loyalists.
OR, you can create a NEW application that demonstrates your understanding of the events that inspired the Revolution.

Share

When you have finished your notes and your journal, I want you to download as a PDF or Word document and upload to Canvas. The DUE DATE for this assignment will be determined in class.

Extend

Add links to more activities and online resources to **extend** the learning.
If you want to continue exploring the Revolution, check these out:
History Channel American Revolution
US History.org
Liberty!

Rubric for American Revolution Hyperdoc

Criterion	Points	Earned
Followed Directions	25	
American Revolution Notes Chart completed	25	
Additional Assignment Completed	25	
Quality Content	25	
	Total:	

Industrial Revolution Teaching

Using a video-based technology tool (Screencastify, Flipgrid, etc.), create a 5- to 10-minute video explaining the major points in your section of the reading. This must be done individually and be submitted as a link to Canvas by May 16th at 11:59 pm.

OR....

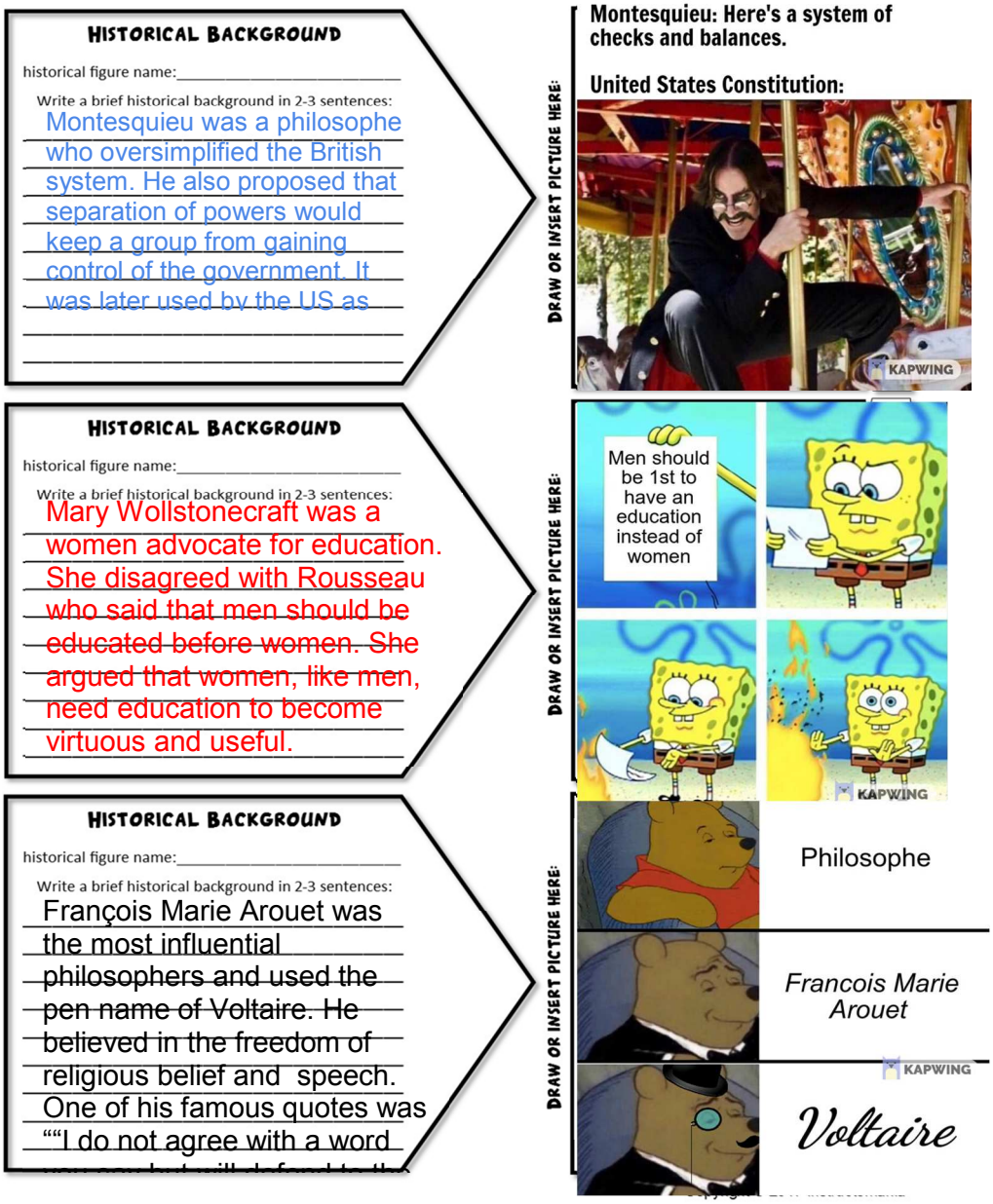
Create a Google Slides presentation where you explain (in writing) the major points in your section of the reading. This must be done individually and be submitted as a link to Canvas by May 16th at 11:59 pm.

Rubric for Industrial Revolution Teaching

Criterion	Points	Earned
Followed Directions	25	
All Sections Covered	25	
Explanations Complete	25	
Comprehensive	25	
	Total:	

Appendix E: Student Work

Enlightenment Thinkers Memes



Research:

Thomas Hobbes- He believed that the only true form of government was monarchy. He argued his opinion in his work, *Levitian*.

John Locke- He believed that people should learn from experience and improve themselves that way. He believed that people could govern their own things and protect their own society. Locke says that all people are born free and equal with life, liberty and property.

Ceasar Beccaria- He was a philosopher who helped form a society called "the academy of fists" which was dedicated to political and economic reform. He also believed that the idea of freewill and rational individuals made a choice to live in society.

Memes (Since their blurry and I can't fix it):

- Montesquieu
  - Montesquieu: Here's a system of checks and balances
    US Constitution:
- Mary Wollstonecraft
  - Spongebob as Wollstonecraft: *reads paper which says "Men should be first to have an education instead of women". Then throws it in a fire
- Voltaire
  Just a meme of how you say his name:
  - Philosophe
  - *Francois Marie Arouet*
  - **Voltaire**

American Revolution Hyperdoc

American Revolution NOTES

Event / Person / Resource	Interesting Information / Notes Include 3 - 5 facts or new pieces of information
Timeline - Name 5 events that seem the most important to you.	Stamp Act Tea Act Sugar Act Boston Tea Party Boston Massacre
Stamp Act	The Stamp Act was a new Act placed by the British Parliament to make colonists pay taxes to put an official stamp on printed material including newspapers, legal documents, licenses and other publications.
Sugar Act	The Sugar Act was a new Act placed to crack down on smuggling, constrain commerce in a broad range of goods, and a lot of other things too. The Merchants feared that it would take their profits.
Boston Massacre - How many people died? Was it really a massacre?	The Boston Massacre was the first outrage between the British and the Colonists and was the event that would lead to the Revolutionary War. It began as a riot with 50 citizens attacking the British sentinel. More soldiers were called into the "mob" and they killed 3 citizens on the spot.
Paul Revere's Engraving	One of Boston's politicians was Paul Revere. Now that the Boston Massacre has happened, there was a chance to highlight British tyranny. Revere makes his engraving to look close enough to the Massacre as possible, while also adding major details to help show what really happened.
Tea Act and Boston Tea Party	The Tea Act was also a new act passed

	by the Parliament to raise tax on tea. The Sons of Liberty were compelled and lashed out by disguising themselves as Mohawk Indians. They went aboard 3 British ships in the Boston Harbor and dumped over 92,000 pounds of tea.
Sons of Liberty	The Sons of Liberty was a group of politicians who organized the Boston Tea Party.
Sons of Liberty Personality Quiz - Which one are you?	Link Doesn't Work
Continental Congress - Name 5 people who attended and why they are important...	Silas Deane, Benjamin Franklin, Thomas Paine, John Adams, French Foreign Minister Comte de Vergennes
Intolerable Acts	The Intolerable Acts were five influential acts. It included the Boston Port Act, the Massachusetts Government Act, the Admission Of Justice Act, the Quartering Act, and the Quebec Act.
Schoolhouse Rock - No More Kings	This was a good video explaining the Revolutionary War with Britain and the Patriots
Declaration of Independence - COMING next week...	The Declaration of Independence was signed on July 4, 1776. When the Declaration was signed, people started riots.
Unsung Heros	The Unsung Heros were six amature soldiers who betrayed the British for the American Revolution. There were six heros, which were: Henry Knox, Nathanael Greene, John Stark, Daniel Mogan, Anthony Wayne, and Benedict Arnold.
Battle of Saratoga	The Battle of Saratoga happened in 1777 and it fought for eighteen days. It started when the British General won victory over American forces. The British was weakened fighting the battle, but they kept attacking. The British was then defeated and then surrendered.

American Revolution by the Numbers	Declaring Independence (1775-1776) Battle of Saratoga (1777-1778) Stalemate in North, Battle in South (1778-1781) Revolutionary War comes to an end (1781-1783)
Interactive Sites	http://interactivesites.weebly.com/revolutionary-war.html

Industrial Revolution Presentation

This is in a link to a Google Slides presentation.

Student: SB

https://docs.google.com/presentation/d/1EaoSZpaWZOTGREFxbsNSDffgOOSUlaU3ALFzh5Ch0xw/edit#slide=id.p

Student: JC(1)

https://docs.google.com/presentation/d/1nPSTy1JJdMfQHm8m_xFR5uplCXXZSyFLoP4-183yg8o/edit#slide=id.p

Student: PC

https://docs.google.com/presentation/d/1kIjcuvgLbI0U6sUOSXvDcgqkCKyUVv1pbqBmDu2scbo/edit#slide=id.p