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STUDENT ENGAGEMENT AND PROJECT-BASED LEARNING IN THE SOCIAL STUDIES CLASSROOM

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STUDENT ENGAGEMENT AND PROJECT-BASED LEARNING IN THE SOCIAL STUDIES CLASSROOM

By

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A capstone submitted in partial fulfillment of the requirements for the degree of Master of Arts in Education.

Hamline University
Saint Paul, Minnesota
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CHAPTER 1
INTRODUCTION

Project-Based Learning

When I began my journey to become an educator I enrolled in Metropolitan State University where the teacher program was focused on urban education. Through this program I was able to volunteer and work with urban students in Minneapolis, Minnesota. I discovered a passion for working with urban students who really struggle to stay on track. I began to see a disconnection between getting students ready for college and their culture’s definition of education.

While studying in college, education students focus on lesson plans with rigor, requiring critical thinking, and units that inspire students to learn. When I began teaching, I discovered a different reality, reality where teachers were pushed to have students succeed on tests, and where we focused on each student’s reading scores. In our Professional Learning Community, we focused on worksheets and basic note-taking skills. We discussed what the students “should be able to do at this level” and not what we could do to help the students reach this level. Many teachers refused to take students to computer labs because it was difficult to manage some student’s behavior. During my first year, I was frustrated and becoming burnt out, constantly battling my colleagues about how to engage our students.

The following year the school district introduced National Urban Alliance (NUA). The NUA philosophy is to help build a community of educators that will help all students become high intellectual performers (National Urban Alliance, n.d.). NUA believes in authentic tasks, and active learning, they also encourage schools that incorporate a student’s culture, community and family (National Urban Alliance, n.d.). One of my colleagues in PLC was a part of an NUA
cohort. She believed in their message and vision for our students. We began working together, creating a unit in which the students were allowed a choice of topic, a choice of how to present the material, and the choice to investigate the information individually, I was amazed and delighted with the student’s interest in this unit and the amount of quality work they produced which showed their critical thinking skills. This unit helped to validate the importance of Project-Based Learning as a tool to help our urban students connect to the curriculum and help them be successful in school.

This was a turning point for me as a teacher. I realized that without more data to support my idea, I would not be able to convince my other colleagues of the importance of engaging our students. This is why my capstone has such importance to me as an educator. We need to allow the students’ voices and their learning styles to be amplified in order to help them be prepared for college, their personal and professional futures.

I teach social studies to 11th and 9th graders in an urban high school. An urban high school is defined by its proximity to a city. Such Minnesota schools have become challenged and high percentages of low-income students and English language learners. Urban high schools have a high diverse student body. In the Minnesota Report Card for 2014, my high school reported approximately 70% of the school population being of color including Black, Hispanic, Asian, and Native American. The school also reported in 2014 approximately 60% of the student population was on free and reduced lunch and 5% were classified as English language learners.

My urban high school students were struggling to connect to the curriculum. From my experience, the students did not feel that their personal histories and perspectives are represented in the studies. When speaking with my colleagues we agreed that we desperately needed a way to help the students engage in their learning. Also, we begun to see a lack of critical thinking
skills in our students. They preferred that the information be given and then they respond. We want to teach our students skills that will be relevant and useful as they go forth into their communities.

To help students the social studies curriculum, we have begun using more Project-Based Learning in our Professional Learning Communities. But, it was met with push back and hostility. Many of my colleagues wanted to stick to the usual curriculum that covers the basics and is purely a white, European perspective. I believe by conducting my research for my capstone I will help create awareness for the importance for Project-Based Learning in social studies curriculum. Today's students are constantly engaged in the use of technology. While incorporating PBL we as teachers may be able to incorporate more technology and help engage the students with their learning.

We choose to teach the students a specific reading strategy. This reading strategy was called “marking the text”, which allowed the students to identify main ideas and write summaries. Upon reading my students’ exit tickets, I discovered that many of them struggled with the main ideas and vocabulary of the section. Each of them had been hard at work and going through the motions of marking the text, but they did not comprehend the main ideas.

Also, they were not engaged and excited about the material. They were bored and so was I. I wondered more than ever how to engage my diverse learners with different cultural backgrounds and abilities into their World History curriculum. I began talking with other teachers and soon discovered Project-Based Learning. Project-Based Learning (PBL) “puts equal emphasis on academic learning goals and on the competencies students need more than ever in the 21st century” (Boss, 2013, p. 1). PBL puts the student in the center of the learning and hopes to drive them through their personal curiosity about the content. When teaching through PBL I
hope to become more a project manager and help facilitate the project toward an end result. PBL also allows me to provide my student’s choice. We utilize investigation through technology, all while the learning the required concepts and skills that have been designed by my PLC and the state. “Through well-designed project experiences, students learn how to contribute to team efforts, think critically, solve problems creatively, and communicate effectively while engaging in deep learning of important content (Boss, 2013, p. 1) These skills will help my students be better prepared for their future endeavors beyond the classroom whether working in a business or working with their families. Project-Based Learning will allow my students voice, choice, and a chance to explore world history in a new light.

**Research Question**

*How is student engagement affected through Project-Based Learning in an eleventh grade social studies classroom?* This research question will allow me to explore alternative curriculum options while looking through a multicultural lens. In my opinion, many of the students in my classroom are struggling to connect with the social studies content. They feel their history is not represented or even discussed. When working with a culturally diverse classroom it is difficult to continually teach all perspectives. Project-Based Learning will allow students to focus on specific perspectives that would help them engage in the learning process while still learning the appropriate skills and ideas. This will have a direct impact on the students sitting in my classroom and will allow me to better meet their needs and help them be successful.

This research question about Project-Based Learning and student engagement will help me as a teacher assess my students’ engagement and consider the implication of curriculum that infuses technology, research, and choice. We are in the process of moving towards a more digital
world that includes people being connected to the internet via their personal electronic devices. This connection to the internet is creating an imbalance in the classroom. Many teachers are battling for control due to the distraction of electronic devices such as cell phones and other mobile devices. While implementing Project-Based Learning we hope to provide the students the ability to utilize their electronic devices positively and enrich their learning and education.

Conclusion

The research question that I have proposed, *how is student engagement affected through Project-Based Learning in the social studies curriculum?* I believe my research will provide validity that urban learners will engage in their social studies curriculum if they are introduced to the content via Project-Based Learning. I will implement several units based on Project-Based Learning, and conduct surveys on students’ engagement with the social studies curriculum. When considering incorporating Project-Based Learning into my classroom, I need to evaluate the research literature regarding student engagement and Project-Based Learning within the social studies curriculum.
CHAPTER TWO
LITERATURE REVIEW

Introduction

This chapter will look at various literature regarding Project-Based Learning, student engagement, and social studies curricula. Project-Based Learning is successful in enhancing student engagement. When considering social studies curriculum, teachers are constantly working to help the students engage in their learning and be successful in their education. The research question, how is student engagement affected through Project-Based Learning in an eleventh grade social studies classroom? Will explore the concept of PBL in social studies classroom. Through the following literature review we will explore Project-Based Learning, social studies curriculum, student engagement, and the combination that will allow all students to become critical thinkers.

Project-Based Learning

Project-Based Learning is a concept to help students engage in a curriculum while reinforcing critical thinking skills. “Project-Based Learning (PBL) puts equal emphasis on academic learning goals and on the competencies students need more that even in the 21st century” (Boss, 2013, p. 1). PBL has been used in multiple forms and over the course of the United States education system. “PBL is learning by doing, an idea championed by such education hard-hitters as Socrates and John Dewey” (Light, 2014, p. 50). The PBL strategy focuses on the importance of creating engaging curriculum while incorporating critical thinking skills that can help solve real world problems. PBL is an effective approach and is in line with
John Dewey's philosophies, to which many educators have subscribed for enriched learning (as cited in Bell, 2010, p. 39-40).

Fundamentally, PBL is a student-driven, teacher-facilitated approach to learning. This strategy allows the students the opportunity to explore topics of world history while choosing what they learn and how they prove what they have learned. A teacher must allow the student to be in control of their learning and the process of finding answers. Student are in control of the inquiry and this allows them to problem solve, investigate, and communicate. While the students are in control of the learning, the teacher remains a very important figure who is constantly conferencing or checking on students’ as they proceed with their inquiry. “Students flourish under this child-driven, motivating approach to learning and gain valuable skills that will build a strong foundation for their future in our global economy” (Bell, 2010, p 39).

PBL is not a tool or enrichment but a curriculum that will allow the student to take control of their learning. Student will explore the themes of world history by exploring ancient civilizations, creating communities and governments, they will compare the role of religion, politics, economics, in our current society to these the past. PBL will allow the students choice in their investigation and presentation medium. Student will solve real-world problems by designing their own inquiries, planning their learning, organizing their research, and implementing a multitude of learning strategies.

This approach has been researched all over the world, including Britain, Italy, and the United States. When PBL curriculum was introduced in an inner city school in Boston, the eighth grade student test scores were reported as the second highest in the district (Bell, 2010, p. 32). In another study,
findings in Maine concluded that a middle school using a PBL approach showed significant increases in all achievement areas on the Maine Educational Assessment Battery after only one year using the approach. The gains made by this school were three to ten times higher than the state average. (Bell, 2010, p. 40)

There has been research supports Project-Based Learning as a vehicle to produce high achievement among students.

PBL has proven successful and yet many schools and teachers are reluctant to allow their students to lead the inquiry. There are many different barriers for teachers including state standards, testing, classroom management, and content. These barriers are issues that all educators are face when inspiring students to succeed and to participate in their education. “In measuring basic academic subject proficiency, standardized testing shows that students engaged in PBL outscore their traditionally educated peers” (as cited in Bell, 2010, p. 40). In today’s world the students must be pushed to problem solve and analyze a multitude of situations. PBL is an essential tool educator can use to teach the four C’s of 21st century skills — critical thinking, communication, collaboration, and creativity (Light, 2014, p. 51). It is these critical thinking skills that will help students analyze, comprehend and find solutions to issues that they themselves face, their families, and our communities. The students must be able to apply their knowledge and skill into everyday situations. PBL will give my students the opportunity to control their learning. The teacher will be a project manage and will help the student with the investigation skills and scaffold the steps required to be successful with goals of the project. The students will investigate, journal, create, present, and evaluate their process of investigation and their final product. When considering incorporating Project-Based Learning this type of
curriculum needs to align with state, district, and my buildings curriculum that has been designed to create critical thinker for the 21st century.

**Social Studies Curriculum**

Social studies curriculum is designed to create critical thinkers that will become effective citizens in society. Many times social studies curriculum is not culturally relevant or engaging for the students. Research into different aspects of the social studies curriculum include, “advocating an inquiry and activity-based view of social studies teaching that respects the points of view of students and teachers” (Singer & Hofstra, 2009, p. 1). This section will provide an overview of social studies curriculum in the United States, Minnesota, and finally an example of a curriculum idea in a school district.

According to the National Council for the Social Studies (NCSS) social studies is defined as “the promotion of civic competence—the knowledge, intellectual processes, and democratic dispositions required of students to be active and engaged participants in public life” (National Council for Social Studies, Executive Summary, n.d., para. 2). The NCSS is a proponent for critical thinkers who are actively involved in helping their communities. Also NCSS says that, “the primary purpose of social studies is to help young people make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world” (National Council for Social Studies, Executive Summary, n.d., para. 2). It is through a social studies curriculum that teaches our students to become involved in making decisions for themselves, their families, and finally their communities.

When thinking about teaching social studies, it is important to align a curriculum with state standards as well as the federal standards. According to the Minnesota K-12 Academic Standards for Social Studies, “Social Studies connects student thinking with real world contexts
from local to global scales” (Minnesota K-12 Academic Standards Social Studies, 2011, p. 3). The state standards is emphasizing critical thinking and making real work connections to the students. Furthermore, “Minnesota's social studies standards embrace this focus on citizenship along with deep thinking about how people live together on earth” (Minnesota K-12 Academic Standards Social Studies, 2011, p. 3). It is this focus on deep thinking that aligns with Project-Based Learning and Minnesota's standards for their students.

Within the state of Minnesota each school district has organized the federal and state standards to align with the school districts vision for today's students. Currently in a school district in Minnesota the standards have been aligned and each school has created benchmarks or power standards to align with the state and federal requirements. The unit that we will be studying for our Project-Based Learning is what forces change history? Student will be investigating revolutions from 1400 to present day. Specifically, this unit will help the student meet the following Minnesota State Standards:

11.3 Describe the independence movements and rebellions in the Caribbean and Central and South America; analyze the social, political and economic causes and consequences of these events. (The Age of Revolutions: 1750-1922) For example: Toussaint L’Ouverture in Haiti, Simon Bolivar in Venezuela.

Also, Project-Based Learning support historical inquiry that is mandated by the state and the Robbins dale school district. “Historical inquiry: is the process in which multiple sources and different kinds of historical evidence are analyzed to draw conclusion about how and why things happened in the past” (Minnesota K-12 Academic Standards Social Studies).
**Student Engagement**

In the ever changing landscape of education the roles of the student and teacher are shifting. We educators have to see that students need to be center while the teacher steps aside and allows the students to drive the learning. “Enter personalized learning, a student-centered teaching and learning model that acknowledges and accommodates the range of abilities, prior experiences, needs, and interests of each student--with the goal of moving every student to a higher standard of achievement” (Demski, 2012, p. 32). A teacher must incorporate many of these different factors into units and daily lesson plan. When a student is engaged they are better prepared to learn and be successful in and out of the classroom.

Student engagement is defined as, “the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education” (Hidden Curriculum, 2014, p 1). Allowing students to be driven by curiosity and to pursue issues of passion while learning new skills and content is empowering. In order for students to be successful in their educational journey, they must feel connected or passionate to what they are learning. Student engagement has specific roles in a student learning process, these can include emotional, behavioral, and cognitive engagement.

Emotional engagement means that the students have become passionate or connected to their learning. “Emotional engagement focuses on the extent of positive (and negative) reactions to teachers, classmates, academics, and school. Positive emotional engagement is presumed to create student ties to the institution and influence students’ willingness to work (Fredricks, McColsky, Meli, Montrosse, Mooney, & Mordica, & Mooney, 2011, p. 1; Connell & Wellborn, 1990; Finn, 1989). Emotional engagement is the personal response a person has to learning and a
desire to pursue an action or idea. This can feel difficult to encourage with high school students because they struggle with emotional responses.

Not only is emotional engagement important, but a teacher also needs to consider behavioral engagement. “Behavioral engagement draws on the idea of participation and includes involvement in academic, social, or extracurricular activities; it is considered crucial for achieving positive academic outcomes and preventing dropping out (Fredricks et al, 2011, p. 1; Connell & Wellborn 1990; Finn, 1989). Behavioral engagement is about student compliance and attendance, which may vary from classroom to classroom and a teacher needs to consider cultural pedagogy and their students in the class. Behavioral engagement can change based on the type of learners and may not necessarily align with the teachers cultural of positive behavior of learning. When a student is engaged in learning the issues of behavior or classroom management become non issues.

The final aspect of student engagement includes cognitive engagement or if the students is being exposed to rigorous academic learning. Cognitive engagement is defined as”” the student’s level of investment in learning; it includes being thoughtful and purposeful in the approach to school tasks and being willing to exert the effort necessary to comprehend complex ideas or master difficult skills” (Fredricks, Blumenfeld, & Paris 2004, p. 60). Cognitive engagement is when the student show growth in their skills and content. All of these aspects of engagement our crucial for a student to be successful and stay on track for graduation.

When considering emotional, behavioral and cognitive engagement it is important to understand that school districts and high school may have different way of measuring student engagement. Such as,
attending class, listening attentively, participating in discussions, turning in work on time, and following rules and directions may be perceived as forms of “engagement,” while in another school the concept of “engagement” may be largely understood in terms of internal states such as enthusiasm, curiosity, optimism, motivation, or interest (Hidden Curriculum, 2014, p. 1).

While many of these aspects show a student is complying we need to focus on a student cognitive engagement or classroom engagement. Is the student connecting to the units and lessons that have been designed to facilitate their learning? Many times a student may not comply with attendance or traditional student roles in a classroom but we need to assess their engagement based what they have learned and continue to grow as a student intellectually.

Specifically, in my 11th grade World History class in order to engage my students it is important that we discover more than Eurocentric point of view. While studying driving forces of revolutions the students will explore the Hattian Revolution, Latin American Revolution, also the political revolution of East Asia. While utilizing this content the student will then embark on an investigation of current world revolutions and how this applies to their lives today. Such revolutions they could possible explore include Black Lives Matter Movement, the immigration rights of Hispanics, the persecution of our Muslim American citizens. The students will be allowed to create a research plan, investigate these modern day revolutions and create a presentation to share with their peers. This is when history truly comes alive for the learning. It is overwhelming to continually study about people, facts, and dates, but when we can take our history and connect it to their everyday the lives-history becomes very real and applicable.
Incorporating Project-Based Learning

Project-Based Learning in conjunction with social studies curriculum will help educators better engage the students and in turn prepare them to be productive citizens. There have been many different strategies implemented, but when considering social studies Project-Based Learning has many benefits. Incorporating the required social studies standards and Project-Based Learning a teacher is able to put the student in the center and allow the student to control the learning. In regards to Project-Based Learning the teacher will still be scaffolding and differentiating to meet the student’s various needs.

When creating lessons, a teacher spends time considering the student hook or buy in to the unit. “Using strategies ranging from inspiration to coercion, teachers attempt to persuade students to participate meaningfully in class activities” (Toshalis & Nakkula, 2012, p. 29). Engaging the student emotional, behavioral and cognitive aspects will allow the learning to want to learn. A teacher needs a way to engage the students in their learning, “empowering youth to express their opinions and influence their educational experiences so that they feel they have a stake in the outcomes -- is one of the most powerful tools schools have” (Toshalis & Nakkula, 2012, p. 29). This type of engagement is why PBL can help be successful in the geography classroom a teacher can allow students to study consumption and waste patterns of their school and community. In world history we can connect past revolutions to the current crisis of civil rights today. In other high schools they have focused in on creating questions for the students to research requiring the student to either become investigators of history or historical actors (Hallock, 2013, para. 4). This is a fundamental concept that is utilized in a history classroom allowing students to research real world questions and connecting the content to today's issues.
PBL will help push students to become critical thinkers that will help all student engage in their education.

Conclusion

There are various articles and literature regarding introducing Project-Based Learning into the social studies classroom. PBL has a positive effect on student engagement in the classroom. Further research will determine if student engagement is increased based on PBL and specifically in my world history classroom. In regards to my research we will take a deeper look into my research setting, paradigm, tools, and analysis of the data that will collected during the process.
CHAPTER 3
METHODS

Introduction

In this chapter I will explain the research methods to help me answer my research question: How is student engagement impacted through Project-Based Learning in an eleventh grade social studies classroom? This research question stems from my desire to help engage 11th grade urban students in their classroom learning to help them succeed in high school and beyond. This study will help better gauge whether the students can engage in Project-Based Learning to help promote better social justice and community involvement as they go forth into the world. This chapter will discuss the mixed method research paradigm, the setting, research tools, analysis of my data, and finally human subject review for Hamline University in regards to action research of Project-Based Learning in the World History classroom.

The Setting

This action research will take place in 11th grade World History class. The high school is located in an urban fringe community to Minneapolis, MN. According to the Minnesota report card there were approximately 1700 students registered during October 2014. Approximately 40% student who are black, 30% who are white, 11% who are Hispanic, 11% who are Asians, and two percent that are Native Americans (“Minnesota Report Card”, 2014). The students are predominantly of color and 62% of these students qualified for free and reduced lunch (“Minnesota Report Card”, 2014). In 2014, the student body also performed at reading proficiency of 43 percent, math proficiency of 30.8%, and science scored were approximately 33.5% (2014). The graduating class of 2014 included 302 students (“Minnesota Report Card”).
Specifically, this research will be completed in my 11th grade World History Class. The class has 34 students five of whom are English Language Learners and three who are on Individual Education Plans. This class comprised of fifteen females and nineteen males. In this class there are fourteen African American students; seven Hispanic students; six Asian American Students; seven white students. The students in my class create a foundation for the different learning styles that will be utilized when creating my daily lessons and final summative. Cultural relevant pedagogy is important to reflect on to help all student to be successful.

**The Research Paradigm**

In order to better understand student engagement within my World History class I will utilize a specific research paradigm of mixed methods. As the researcher I documented the student engagement with the social studies curriculum. As the teacher I will utilize the student observation tool daily during class and will also keep a journal to reflect upon the day's instruction and student engagement, plus the students understanding of the material. I will utilize surveys, student journaling, observations, and interviews with students to analyze the student engagement in the project. The student engagement survey will be administered at the beginning of the research and again at the end of the research. The student will also complete a classroom engagement inventory at the beginning of each Project-Based Learning unit. In order to better understand student engagement, I will analyze data from two different surveys. The first survey will be a Student Engagement Inventory and the second will be a Classroom Engagement Inventory.

**Research Tools**
Student Engagement Inventory (SEI). The SEI was administered at the beginning of my action research. This helped me as the instructor understand how engaged or connected students are with their school. This tool will ask the student to evaluate their engagement level in their school. At the beginning of the action research I also conducted a survey that helped gauge student engagement in the school. The following tool will help better understand the students’ engagement in the building versus the classroom.

Classroom Engagement Inventory (CEI). The CEI was created by Wang, Bergin, and Bergin (2013) at the University of Missouri. The researchers utilized a specific group of questions to help teachers identify how engaged the students are in their classroom. I will administer at the beginning and at the end of each project. “The CEI is classroom level, measures multiple dimensions of engagement, uses self-report, is relatively short, and can be readily administered in classrooms from the 4th to 12th grade” (Wang, Bergin, & Bergin, 2014, p. 517). The CEI has been adapted into several other studies including one at the University of Minnesota. This tool is a scan able survey and will be given at the beginning, middle and finally at the end of my action research with the 11th grade student in my World History Class. This CEI tool will help to understand student engagement in my world history classroom.

Student Engagement Observation Tool. I used a daily tool to help me as the instructor observe and record each student's engagement on a daily basis. This tool will help to keep track if the student is engaged in the project. I am observing whether the students are listening, writing, speaking, and participating in the activity. Also, I will be observing if the students are passive, doing work for another class, listening to others, disturbing others, or playing.

Student Investigation Journal. The student investigation journal will be utilized daily. The students filled in their goals for their investigation for that hour and then complete the journal at
the end of the hour. This will help the student assess their research skills and reflect upon what they learned. This tool will help students stay in control of their projects and their learning. The journal will help them focus. I have found that students become distracted or overwhelmed when researching.

**Research Plan Tool.** The Action Plan will help the students understand the process of their investigation is the action plan. Initially, the students will use a research plan that was created by the teacher. As they progressed students will begin identify and documenting their personal investigation process as they explore authentic problems.

**Data Analysis Technique**

I will compare the results of the research data tools. This information will help me determine the students’ engagement before we begin incorporating PBL and after. I will also read the students writing and reflect upon my observations in a journal in which I will record in daily my findings. I will report the amount of surveys completed, create a descriptive analysis, and present the results. In the classroom I will introduce the Project-Based Learning assignments to the students. This discussion will include the hook or a way to engage the student’s attention, the project's requirements, and evaluations of the rubrics being utilized for grading the investigation and the final project. Students will begin brainstorming followed by research into the areas needed to help them succeed in completing of this project. There will be two days of direct instruction on the framework of the content and the skills that will be necessary to conduct research, evaluate it and incorporate into the research project. Finally, the students will evaluate their work.
The projects the students will be working on include an artifact box for the early civilization of human society, students will investigate ancient societies, explore the three major religions that arose in ancient societies to choose and finally why civilizations rise and fall. These investigations will allow the students choice in topics and format. The students will be provided with a calendar, investigation journal and formatives that will provide scaffolding to help each student organize their research and to stay on track.

The student will need to connect their research to our current 21st century society. The student all have their own personal chrome books that have been provided by the district. A chrome book is a laptop that provides the students access to google and the internet. These will allow the students many resources to research and various methods they may utilize to present the information. Students will explore the five themes of history to help them create digital artifact boxes. Through investigations will help them connection to the five themes and a specific ancient society and in turn will be able to apply these knowledge and skills to other aspects of their academic and personal lives.

**Human Subject Review**

In order to embark on my action research, I needed to obtain approval from my school’s district, principal, my students’ guardians, and also my students. Upon their consent, the next step will have included the Hamline Human Subject Committee. I was required to submit my capstone proposal which included a signature from my advisor for my research, my letters of approval, and letter of content, and also my nonexempt application. When I receive approval from the Human Subject Committee I was able proceed with my action research.
Conclusion

When conducting this action research, I was able to use a mix methods approach. Through the various tools, I have learned that student engagement in the social studies classroom is increased when using Project-Based Learning. The data will allow me to take a critical look at how I teach and how my students learn. The following chapter will document the results and my systemization of the data.
Chapter 4: Results

Introduction

Project-Based Learning is a curriculum that allows students to engage in social studies curriculum on a personal level. The research question I have proposed, fall within Project-Based Learning: *How is student engagement impacted through Project-Based Learning in an eleventh grade social studies classroom?* In my 11th grade classroom I threaded in Project-Based Learning into a unit revolving around World War 2. I met with this group of student for one class period five days a week for one semester. The class has 34, students five of whom are English Language Learners and three who are on Individual Education Plans. This class is comprised of fifteen females and nineteen males. This class there are fourteen African American students; seven Hispanic students; six Asian American Students; seven white students. This chapter will analyze the result of the Project-Based Learning about World War II. We will look at the following elements: artifacts, observational data, patterns and themes and finally my conclusion of this action research in my classroom.

Project-Based Learning

As stated earlier in my paper Project-Based Learning “Project-Based Learning (PBL) puts equal emphasis on academic learning goals and on the competencies students need more that even in the 21st century” (Boss, 2013, p. 1). The PBL strategy focuses on the importance of creating engaging curriculum while incorporating critical thinking skills that can help solve real world problems. PBL is an effective approach and is in line with John Dewey's philosophies,
to which many educators have subscribed for enriched learning (as cited in Bell, 2010, p. 39-40).

**Minnesota Standards utilized in World War II Project-Based Learning**

The following standards were used to help design this specific Project-Based Learning for an 11th grade World History class in Minnesota. These standards were adopted in 2013 by the state of Minnesota. We reached two standards and several different benchmarks.

- **Standard Historical Thinking Skills:** Historical inquiry is a process in which multiple sources and different kinds of historical evidence are analyzed to draw conclusions about how and why things happened in the past.
  - **Benchmark:** Pose questions about topics in history; suggest possible answers and write a thesis; locate and organize primary and secondary sources; analyze them for credibility and bias; corroborate information across the sources; use sources to support or refute the thesis; and present supported findings.

- **Standard World History:** A rapidly evolving world dominated by industrialized powers, scientific and technological progress, profound political, economic, and cultural change, world wars, and widespread violence and unrest produced a half century of crisis and achievement. *(A Half Century of Crisis and Achievement: 1900—1950)*
  - **Benchmark:** Describe the social, political and economic causes and main turning points of World War II. *(A Half Century of Crisis and Achievement: 1900—1950)* For example: Causes—Rise of totalitarianism,
invasion of Manchuria, appeasement, invasion of Poland. Turning points—Stalingrad, Battle of Midway.

- Benchmark: A rapidly evolving world dominated by industrialized powers, scientific and technological progress, profound political, economic, and cultural change, world wars, and widespread violence and unrest produced a half century of crisis and achievement. (A Half Century of Crisis and Achievement: 1900—1950)

- Benchmark: Identify major developments in science, medicine, and technology; analyze their benefits and dangers. (A Half Century of Crisis and Achievement: 1900—1950) For example: Developments—electricity, automobile, hydrogen bomb, vaccines.

These are the standards that were met upon completion of our World War 2 Unit. Each student will use historical inquiry skill while investigating different aspects of this time period. These standards are comprised from the Minnesota K-12 Academic Standard in Social Studies. These standards were revised and put in effect in May of 2013

**Research Paradigm**

In order to conduct my research on Project-Based Learning and student engagement in the social studies classroom I applied a mixed method approach. I utilized student surveys, observations, journaling, and the final products, and grades as a reference point.
**Student Engagement Inventory:** This survey was administered via a google form. This allowed my students to access and complete the survey quickly. The survey allowed me to understand how the students felt about their high school at large. This allowed me to compare how student feel about the school and about our classroom. When looking at the results of students answers and their engagement in their high school majority feel a disconnect between their peers and teachers. Overall, this is alarming because in order for student to feel connected or engaged, they need to feel supported and cared for in their environment.

The students all seem to agree that being successful in high school is important for their successful future. One question in particular caught my attention: “What I am learning in my classes will be important for my future. Fifty percent of the student agreed with this statement. Also, the majority of students agreed they are learning important information in school that will benefit their futures. However, when you look at attendance a grades the student numbers were extremely low. They are struggling to engage in the curriculum. We need to help the student connect and feel personally invested in what they are learning at our high school. Project-Based Learning provided this outlet and opportunity for my students to engage in their learning.

**Classroom Engagement Inventory:** This survey was administered via google forms. Also, this survey was administered at the beginning of our World War II project and again at the end. The students who completed this survey showed some engagement in their World History class. The first time this survey was administered 20 students were present and the second time there were 22 students. This created a variance on some of the data. Also, the student struggled with only four options as choices on the first time they took the survey. However, I reflected on this and adjusted the scale for the second survey. The results
remained the similar. In my world history class, the students feel interested and are having fun. What I worry about this type of survey is the fact that several students commented that they wanted their teacher to look good. They were concerned about what the results would say about me their teacher. While this is touching and I am glad they care for me-this does not lend itself to trustworthy results.

Measuring Student Engagement

Student engagement is defined as, “the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education” (Hidden Curriculum, 2014, p 1). Allowing students to be driven by curiosity and to pursue issues of passion while learning new skills and content is empowering. In order for students to be successful in their educational journey, they must feel connected or passionate to what they are learning. Student engagement has specific roles in a student learning process, these can include emotional, behavioral, and cognitive engagement.

In order to measure student engagement, I administrated several surveys, student journals, and observed of the students working in my classroom. The survey of student engagement in my classroom had asked questions that could be classified as emotional, behavioral and cognitive. I administered this survey at the beginning of the project and at the end. When I analyzed this data, I discovered on average that five student opinion changed from disagree to strongly agree when considering their emotional, behavioral, and cognitive engagement. When looking at specific question from each category we can better observe the change in student’s opinion. Question 1, which is classified as an emotional engagement
measurement, “In this class I feel excited.” In the initial survey only three students strongly agreed, by the end of this unit 12 students strongly agreed. The behavioral question, “In this class I just pretend like I’m working” initially nine students strongly disagreed they pretend to be working. But, at the end of this project 13 students strongly disagreed. Finally, the cognitive question, “In this class if I make a mistake I try to figure out where I went wrong”, initially two students strongly agreed and in the end 10 students strongly agreed. These results support the idea that Project-Based Learning allows students to better engage in their social studies classroom.

Observations

The students all showed varying levels of engagement during this project. When I observed the students in action, many of them were actively working, researching, and sharing information. Also, with the help of the research plan many students showed various levels of prioritizing their school work. I spoke with several students who utilized class time to complete other homework or prep for a test because they were able to complete the task in class before or the following day.

Many of my students have responsibilities that are very pressing and take precedent over school work. It is important to help them understand what needs to be completed and why. Many of my students thrived during this project because it allowed them to work at their own pace and on their own time. If they needed to miss class due to helping with their families or a work conflict, they could and still meet the high expectations of our class. However, with our previous unit which was much more traditional in learning style with lectures, notes, videos and notes, along with supporting worksheets. Many students’ struggled to complete the
summative the first time with a passing grade or even attempt it on the due date. Many of my student’s attendance issues hold them back when it is so important that they are in class every day for the required material.

I work very hard to keep material posted to our class web page. But, this does not replace the daily activities of notes and lecture. I do believe that lectures are irrelevant or a waste of time. I believe this style of learning has its benefits for students when preparing them for their future roles as college students. However, there needs to be a balance between traditional classroom and the classroom of the 21st-century learner. The classroom must evolve and change with the students and their world.

**Project-Based Learning World War II Unit:**

In order to begin this research, I needed to receive permission from my students’ parents. I worked with my professional learning community which consists of two other world history teachers. We have been slowly incorporating various skills to help our students become strong investigators and communicators. Throughout the year we have introduced research skills that include evaluating sources, citations, and organizing research. The students choose a topic of their choice that was related to World War II. They then researched their topic by creating a research journal, and a final project that would show me what they had learned. The final project was a digital infographic. A digital infographic is a document created on the computer that provides the reader with information about a topic quickly, and is pleasing to the eye.

I began this unit with two specific engagement surveys. One survey was about their engagement in their school and the second survey was about their engagement in our world history class. This project or unit was designed to last two weeks. We began the project with an
overview of World War II. This overview was about the countries involved and the impact the war had on civilians and governments. Students utilized a pop-culture reference to help teach themselves about World War II. This use of pop-culture was outlined in a video titled “Crash Course: World War II,” featuring John Green. John Green is a young adult fiction writer who has written “The Fault in Our Stars, Paper Town, and Looking for Alaska. His Crash Course videos are short and to the point. He is also very funny making the material interesting and engaging.

In world history it is crucial the students focus on the international aspect of history. We tend not to look at the direct involvement of the United States but to focus on the international aspect or the world. We also utilized sheltered learning where we introduced specific vocabulary words that are relevant when studying World War II. We followed up the vocabulary practice with a vocabulary quiz.
Unit 5: Fascism & World War II

Instructions: Each student needs to write a sentence that accurately used the following vocabulary words.

Vocabulary Terms to use: communism, fascism, propaganda

1. ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

2. ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

3. ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

MYP Criterion A: Knowing and Understanding

<table>
<thead>
<tr>
<th>Achievement Level</th>
<th>Descriptors</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>The student does not reach a standard described by any of the descriptors below.</td>
<td>The student provided no evidence of understanding the vocabulary.</td>
</tr>
<tr>
<td>Score</td>
<td>Description</td>
<td>Comments</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>----------</td>
</tr>
</tbody>
</table>
| 1-2   | The student:  
- makes a **limited** attempt to use some relevant terminology | It is clear by the way I use the vocabulary words that I have a **limited understanding** of their definitions and rarely use them successfully in a sentence. |
| 3-4   | The student:  
- uses terminology that is accurate and/or appropriate | It is clear by the way I use the vocabulary words that I understand **some** of their definitions and **how to use some** of them successfully in a sentence. |
| 5-6   | The student:  
- uses a **range** of terminology **accurately** and **appropriately**. | It is clear by the way I use the vocabulary words that I **understand** their definitions and how to use **most of them** successfully in an accurate sentence. |
| 7-8   | The student:  
- uses a **wide range** of terminology **accurately** and **appropriately** | It is **very clear** by the way I use the vocabulary words that I **understand their definitions** and how to use them successfully in an accurate sentence. I have written a sentence that connects the vocabulary word to “the real world.” |
WWII Vocabulary Formative Part 2

Name:___________________

Unit 5: Fascism & World War II

Instructions: Each student needs to write a sentence that accurately used the following vocabulary words.

Vocabulary Terms to use: Aggression, Appeasement, Isolationism, and Sanction

1. __________________________________________________________________________

_____________________________________________________________________________

2. __________________________________________________________________________

_____________________________________________________________________________

3. __________________________________________________________________________

_____________________________________________________________________________

4. __________________________________________________________________________

_____________________________________________________________________________

MYP Criterion A: Knowing and Understanding

<table>
<thead>
<tr>
<th>Achievement Level</th>
<th>Descriptors</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>The student does not reach a standard described by any of the descriptors below.</td>
<td>The student provided no evidence of understanding the vocabulary.</td>
</tr>
</tbody>
</table>
The students were then introduced to the project, infographics, and the requirements of this assessment.

This specific project allows the students to choose any topic pertaining to World War II and does not have United States focus. The students needed to create a research question,
research plan, research journal, citations, and an infographic. The students each created a World War II-word cloud to help jump start their thinking concerning topics. When creating the world cloud, they initially used information from their personal knowledge base and then began exploring the internet, textbook, and other sources they had access too. This is an example of a word cloud

The students all placed World War II in the center of their cloud. They were required to use our vocabulary words. The students then created their clouds based off their own knowledge. They utilized the internet, class videos, or the textbook. When the students had completed their word clouds, they were asked to choose three topics and write these on a note card for their exit ticket. I collected the notecards and provided feedback or suggestions and possible places to begin their research on their various topics. At this point the students had several topics in mind that they would like to research for this project and we needed to backward plan and understand what the final product would be. The topics included: animals involved in the war, Hitler,
Stalin, Concentration Camps, Atomic Bomb and its impact on Japan and its people, Holocaust, Battle of Normandy, BMW involvement in the war, penicillin, radar, rockets, submarines, Germany’s weapons, Battle of Stalingrad, Kamikaze’s, and military strategies, and propaganda.

We began by looking at the basic requirement for an infographic. We started by introducing infographics. The students were each given a handout that they needed to complete either individually or with a partner.

**Infographics Inventory & Notes**

**Name _________________________________**

**World History Spring 2016**

<table>
<thead>
<tr>
<th>What are the subjects of the Infographics that you find?</th>
<th>Sample Infographics</th>
<th>Notes From Class</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Answers Varied:</strong> Soda, healthy food, populations, pregnancy, education</td>
<td>Notes provided by teacher: There are many different subjects with information being shared via infographic</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What are the components that you find in all of the Infographics?</th>
<th>Sample Infographics</th>
<th>1. Tell a story.</th>
<th>2. Include accurate and interesting data represented in graphs and charts.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Answers Varied:</strong> Charts, graphs, images, colors, summaries, fonts</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


3. Create a visual design based on the story you tell.
   a. design elements (shapes, layouts)
   b. colors
   c. fonts
   d. images

4. Citations (brief though!)

| What do you like most about the Infographics? | Answers Varied: easy to read and learn information fast, colorful, interesting | This is an opinion question. |
| What do you like least about the Infographics? | Answers Varied: unsure how to create, too much information, | This is an opinion question. |

**What is an Infographic?**

We ran out of time during this lesson. I gave the students the definition for us, An infographic is artwork for the brain. It is a way to show information of all kinds into a one-page, easy to read and fun to look at graphic.
The students worked on this worksheet utilizing their chrome books for help with internet research. Each student worked on this individually or with a small group. Initially, they were very unsure of this task. But, once they typed infographic into google they became engaged. I also had created a wall in the back of our classroom with examples of infographics that they could utilize if they did not have their personal technology.

The students worked independently for about 20 minutes. Then we regrouped as a large group and shared our responses and I provided clarification in the notes from class. During this lesson we ran out of time so I provided the initial definition of an infographic for them to write in the box. The following day we began with this definition and created our class definition of an infographic. As a large group we played “Shout it out” where all students are invited to shout out information or answers and I try to write them down on the whiteboard. The activity is always loud and fun. We have practiced this many times and they understood the expectations and protocols. I find as this strategy gets going everybody usually gets caught up in the excitement and even the introverts participate. Our final definition was an infographic is artwork for your brain.

I found this task to be very important in laying the groundwork for their summative. Many students have not been formally introduced to the idea of an infographic. This scaffolding technique allows all students to investigate and discover the
information appropriate to their skill levels. Also, they enjoyed sharing the information they had discovered versus me just providing them notes in class. This lesson is highly engaging and many students were excited that they would get to create an infographic. This idea is new and fresh and very different from your usual paper or power point presentation.

I then introduced the summative assignment to the class.

**Summative #4**

**World History Spring 2016**

**Directions:** Create an infographic that tells the story of a World War II topic that interests you. Remember to incorporate all elements of a good infographic:

1. Tell a story. (Select only the most important facts and tell about them in your own words.)
2. Include accurate and interesting data represented in graphs and charts. (Remember that you may use quantitative data - numbers - and qualitative data - facts.)
3. Create a visual design based on the story you tell. Do this as best as you can even though you are making the poster by hand.
   a. design elements (shapes, layouts)
   b. colors
   c. fonts
   d. images
   e. title (Your research question.)
4. MLA Citations (Owl Purdue)

**Infographic Checklist:**

_____ 4 Articles
The checklist is very important for the students to understand exactly what is expected of them for this project. At this point I discovered the students were very overwhelmed and were concerned they had the skills to proceed or be successful. I reminded them of the tasks we had completed this past year or semester. I also promised that we would take this step by step together. We broke down the assignment into two parts:

**Part 1: How Should I Get Started?**

1. Choose a World War II topic that interests you.

2. Make a research plan. Use the attached Cornell Notes page to share your plan for this project. You must get teacher approval of your plan before moving on.

3. Research
   - Use reliable sources to investigate your topic.
     - World History Schoology >Unit 4: WWII Folder- click on infographic link to visit our class database.
4. Select information from your research that you will include on your infographic. Make sure to choose interesting information that answers your research question. (Research Notes)

Part 2: Design your infographic.

a. Go to piktochart.com.
b. Create an account with your school-provided Google Account information. This is how you will sign in in the future.
c. Take the tour.
d. You could “Create Your Own Infographic.” or use one of the templates.
e. Then create your Infographic using the components listed above! Make sure to save your Infographic as you work on it.
f. Share your infographic with Mrs. Nelson via e-mail: Noelle_Nelson@rdale.org

The summative assignment felt very overwhelming and the students needed a moment to reflect and gather their bearings. I introduced a personal reflection piece. I asked the student to respond to the following question, share with a partner, finally we clarified any remaining questions in a large group discussion.
**Instructions:** The is when we look at a large assignment or task and we break it down into specific tasks. This strategy allows us to remain on track and ready to turn in an assignment on time. This skill can also be applied to projects in our everyday life.

1. Please write a summary of the assignment in your own words (be prepared to share this with a partner):

________________________________________________

________________________________________________

2. How do you feel about the summative? What question do you still have?

________________________________________________

________________________________________________

This reflection allowed me to gauge my students’ understanding of the summative and what questions still needed to be addressed. Through the course of this last year I have found student reflection to provide strong feedback when in written format. This allows the student a voice and is still protected from judgment of their peers. When looking at the first question many students understood they would be conducting research and creating an infographic. The questions they had, included where would they be looking for research and how to create an infographic. I addressed these questions in our next lessons. This was a massive project, and I felt it was important that we take it in small steps.

The students at this point had brainstormed topics and investigated what an infographic was so we needed to begin our research plan. For the research plan, we utilized a backward planning graphic organizer from AVID. Unfortunately, the students struggled with the backward
planning worksheet. Many were unable to recognize the various steps of the project and the graphic organizers layout.

**Backward Planning Handout**

**Instructions:** The is when we look at a large assignment or task and we break it down into specific tasks. This strategy allows us to remain on track and ready to turn in an assignment on time. This skill can also be applied to projects in our everyday life.

<table>
<thead>
<tr>
<th>Major Pieces of the Project:</th>
<th>Due Dates For Main Pieces of the Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Infographic</td>
<td>5. Task to Complete</td>
</tr>
<tr>
<td>2. Create Infographic/Research</td>
<td>Choose Topic</td>
</tr>
<tr>
<td>3. Research</td>
<td>Hand in research plan</td>
</tr>
<tr>
<td>4. Research</td>
<td></td>
</tr>
<tr>
<td>5. Choose topic/Research plan</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal Calendar Conflicts:</th>
<th>4. Task to Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. math test</td>
<td>Research: Locate two articles</td>
</tr>
<tr>
<td>2. Work schedule</td>
<td>TOPVL WK</td>
</tr>
<tr>
<td>3. Grandma’s birthday party</td>
<td>Research Question</td>
</tr>
<tr>
<td></td>
<td>Research Notes</td>
</tr>
</tbody>
</table>
This graphic organizer allowed the students to break the project into five pieces or steps to complete, visualizing the end due date. It was important that the students were also aware of other deadlines in other classes or personal commitments such as family or work outside of school. This would allow them to prioritize and stay on track.

This form created some confusion, and the students needed to be guided through each steps, piece by piece. While reflecting on this I wonder if the layout of the handout could be revisited to help the students focus on just the steps needed to complete this project. The steps for this project included but could change: create an infographic, find four credible articles to help answer research questions, research journal, create a research question, and choose a topic. These step were plotted out from the final due date so each student understood what needed to be completed by specific dates. Several students found this process helpful and they
felt organized and in control of the project. Many students struggled with this process. These students just wanted to be told what to do and when to do it. This is a skill we will continue to work on with our 11th grade students. The skill to organize a project in the classroom can very easily be translated into everyday life. A project such as this can feel very overwhelming and daunting but by breaking it into smaller steps, it helps the student to engage and participate in the entire process.

Once we completed the backward planning research plan, the students began their research to help them narrow in on a topic that interested them. In a mini lesson we reviewed research questions and what constitutes a quality question. I began this lesson asking the question - What is a research question? The students shared their understanding and many had a strong understanding that it needed to be a question that went beyond yes and no answers. I provided them with the following definition: A research question guides and centers your research. It should be clear and focused, to present your unique argument.

Once you have conducted preliminary research, start asking open-ended “How?” “What?” and Why?” questions. Then evaluate possible responses to those questions. We then reviewed several research questions from the students. One that was proposed was Why was Anne Frank in a concentration camp? The students rewrote this as Who was Anne Frank and how was she involved in World War II? Another question proposed was How many people died in the battle of Stalingrad? This question was rewritten to state: How was the Battle of Stalingrad so significant for the outcome of World War II? At this point I asked the students to write three research questions on a note card and hand them into me at the end of the hour. I planned to review these question and provided clarification or suggestions. Here are some examples of the final research questions that my students researched:
- How did different war tactics affect the outcome of the war?
- How did Adolf Hitler rise to power?
- What role did medical experiment play at Auschwitz?

The following day I handed back their notecards with their examples of research questions. I was very pleased with the students’ research questions. Students who were struggling were able to get immediate feedback and we were able to create our research plans.

### My Research Plan

<table>
<thead>
<tr>
<th>Questions:</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is my research question?</td>
<td><em>How were animals used during the battles of World War II?</em></td>
</tr>
<tr>
<td>Why is this question important to me?</td>
<td><em>I would like to learn more about animals.</em></td>
</tr>
<tr>
<td>How will I collect information that helps me</td>
<td>I will research using the databases and internet.</td>
</tr>
<tr>
<td>answer my question?</td>
<td></td>
</tr>
<tr>
<td>How will I keep track of</td>
<td></td>
</tr>
</tbody>
</table>
what I am learning, where I am collecting information and other notes? | *I will keep track of my information in a google doc.*
---|---
I conferred one on one with each student and reviewed their research plans. This allowed me to understand where each student was in the process. Several students were still struggling with topics and I helped by providing a list of possible topics. Other students were stuck on their research questions so we reviewed sentence stems. Many of the students had begun their research and we were able to discuss if the sources were credible or if they answered their research questions. Majority of students were able to find information but they struggled to find information that helped answer their questions. My students found this to be frustrating. I then spent the next mini lesson discussing research and how exhausting and frustrating it can be for the investigator. Many times we read several articles and while they are about a specific topic the information does not pertain to our research.

We then pair-shared with a partner. Each student was asked to share their research question with a partner and then read an article that the partner had found and see if this article was helpful for their research. This created a dialog among their peers and was very exciting to listen to them discuss what information they had learned at this point about their topics. Students were very passionate about their topics and wanted to share this information with their peers. The students began with a brief summary of their topic and research question. They then switched and the other peer share their research question and summary. The students then swapped articles and utilized marking the text strategy to provide feedback for their peers.
Marking the text is a reading strategy, students highlight main ideas, circle vocabulary words, write notes in the margins and finally a summary. This activity was modified. The students each wrote their partners’ research question at the top of the page, then they proceed to highlight information that answered the question. They also provided feedback on the credibility of the article. After this activity the students then gave their opinions on the articles and they each had a better idea of what they needed to do next.

I was noticing that the majority of the students were engaged and actively participating in the topic. As I walked around the room, I was excited to hear them share information with their peers, “like this information directly answers your question” or “how they felt the article pertained to the topic but not the writer’s specific question”. The students really enjoyed sharing information about their chosen topics and what information they had found. I saw excitement as they taught this information to another person. It was exciting to watch and realize that they were learning about World War II and retaining the information.

Each day through this Project-Based Learning, we began as a large group and discussed our daily goal. Initially, I created the research goal for the day, and the students wrote them down. This gave them specific direction on what they needed to do that day. However, they soon needed to create their own goals because each student was at a different stage in the process. I and the students found the large group discussion to be very useful and helped ground us in the work we were doing. The students had the opportunity to ask questions, and many times other students were able to provide the answers. Some of the help they provided each other included sources, MLA citation questions, reminder of the summative assignment, and also technical questions about creating the infographic. The conversations were one of my favorite aspects of this project. It was interesting to see them all come together and collaborate or share
As this routine progressed I noticed my introverted students became more involved and would participating in these discussions. The students were required to complete a daily journal.

**Investigation Daily Journal**

**Research Topic/Question:** ____________________________________________________________________

<table>
<thead>
<tr>
<th>Entrance Ticket: Complete these questions at the beginning of the hour:</th>
</tr>
</thead>
</table>
| **What is my research goal for today?** | **Examples of Students work:** I will create a research question.  
I will find two articles to help create my infographic.  
I will create my account for piktochart to create my infographic.  
I will find two more articles for my research.  
I will create my infographic on piktochart. |
| **What will I do to reach my goal? (be specific and a list is fine)** | **Examples of Student Responses:** Research on media center data base, watch a video on history.com, read article from encyclopedia Britannica |

**Exit Ticket:** Complete these questions at the end of the hour.

| What did I do today? (Please be honest) | **Examples from student responses:** I found one article. I did not find any useful information. Nothing. I tried to learn how to use piktochart. |
| What did I learn today about my topic? | **Examples from Student responses:**  
I found information that helped answer my research question. |
I researched information on concentration camps.
I looked for images for my infographic.

<table>
<thead>
<tr>
<th>How will today’s information help me with my infographic?</th>
<th>Examples from students’ work: The information allowed me to reach my goal for today. I found an article but I did not have a chance to read the it entirely. I began creating my infographic.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLA Citation:</td>
<td>This section was challenging for students. They did not like writing this by hand on a piece of paper. I adapted this and allowed them to keep a running list of citations in their research notes or works cited page.</td>
</tr>
</tbody>
</table>

The investigation journal became very cumbersome for my students. They felt hindered by this type of busy work. However, the students who actively completed the journal were on track and able to hand in the infographics on time. I had used this investigation journal through the course of the year and when reflecting I wonder for this last project if my students were ready to create their own journals using the questions I created.

After each large group discussion, the students began working on their projects independently. This was a difficult phase because I had to let my students take control of their learning. I created a conferencing schedule and allowed students to sign up and conference with me if needed. However, I did encourage the students to talk with each other and problem-solve
together. I really enjoyed helping my students find information about their various topics. It was exciting to hear them ask questions and to dig deeper into an issue.

At the end of each hour we grouped as a class and shared what we learned and discussed what needed to be done the next day. It was during these conversations that I was able to gauge who was on track and if we were going to need more time to succeed. We had a due date; however, I am usually flexible due to the fact that I want the students to succeed and truly embrace what they have learned. I have found this flexibility can create controversy with my colleagues. My colleagues fear that extended deadlines allows students to be lazy or nonproductive. I have found, however, that most of my students when engaged in the work are more relieved and excited by this extension. The students truly want to show me what they learned and we work together as a community to succeed. The following is a sample of the infographics that were turned in at the end of the project.
BMW's Involvement of WW II

German manufacturer BMW made its Big Deal during the Second World War through the Nazi war machine, making a great amount of profit from the forced labor of thousands at concentration camps.

Wat! DEE HEck!?!?

In 1943, with support from the US, the Bundes had established a company-owned concentration camp directly by their battery works in Bavaria.

The company BMW grew suuperr rich in the Nazi area!

50,000 forced civilian laborers, prisoners of war and concentration camp workers. Most forced laborers were Jews.

50,000

WW2

Spandau 1945

50,000

WW2

How were animals used in WW II

Dolphins: They use dolphins to locate underwater mines

Seals / sea lions: Used to fetch underwater objects
The Masterminds of the Pearl Harbor Attacks

Admiral Yamamoto Isoroku initiated the attacks of Pearl Harbor. He was precise and calculated with the way he planned and assigned a group of people to attack Pearl Harbor, but not just attack but study Pearl Harbor. Plan of attack, attacking the U.S. with no warning of any kind. He had Minemoto who helped give more ideas and strategies for the attack, and Chiaki who was also an Admiral who launched his forces into our attack.

Commander Vice Admiral Nagumo was the chief of staff. He was also the Captain as well. He trained forces by using techniques required to do so for the attacks on Pearl Harbor, Japan has been planning to attack for many months. They practice flying their planes, and perfecting bombing.

The attack wasn’t on any random day; they planned on a specific day, and specific time of day to launch their surprise attack. They planned to launch their attack on a Sunday, a time of leisure, when people are less aware, and getting ready to go to church. They attacked where people were least expecting it.

The success of our surprise attack on Pearl Harbor will prove to be the Waterloo of the war to follow. For this reason, the imperial navy is missing the cream of its strength in ships and planes to assure success.

Chiaki Nagumo was one of the people responsible for initiating the attacks on Pearl Harbor. Before attacking Pearl Harbor, he and his troops departed into sea across the Pacific Ocean and positioned their forces on into position before it was time to attack. It was a very risky move but they successfully sneaked in their forces without getting discovered.

Launched out into sea 11 days before attacking. Launched on November 26, 1941

Attacked with no warning of any kind, with no declaration of any kind.
Japan launched two waves of attacks between 7:55am to 9:45am. The attack lasted a total of 110 minutes. (1.8 Hours)

40 Torpedo Planes

Total of 94 Bombers

Total of 229 dive bombers

40 Torpedo Planes

Japan only lost 29 Aircraft

A Successful tactic, strategic attack for Japan's forces.

Work Cited:


In what ways were the children affected in concentration camps during the Holocaust?

Children of the Holocaust were tormented, hurt, killed and abused. The Germans had no mercy against the children. They would give no pity or sympathy at all. The things that have happened to these children in different camps were horrific.

What Nazi’s did to the children:

The Nazi’s separated children from their parents and sent them to different camps all over. They suffered from starvation, brutality, and dehumanization at all. Long term survival was rare to the children or to anyone actually. They even used children as shooting targets. They would throw the babies in the air and shoot them.

How this affected them; These are quotes straight from the children:

"I was helpless back in Pragia. And who was left behind, then a poor soul, left in Europe, left with no home and broken heart. Nobody’s bruised and none."

- Kolben (1944)

"And there was no time... without sleep, there is no life, you made me wish... that I could see..."

- Anna Schindler

"If I die to go away, there is no Helen, there is no love, and I, for ever and ever will remember you, and I will kiss the yellow sunflower that you gave me, and I will be..."

- Anna Schindler

"At Auschwitz..."
Conclusion

As I perused these infographics created by my students I was very happy to see the growth their historical investigations and creativity showed. The students were able to find credible sources, summarize and utilize their research to create an infographic. I think, however.
the most important aspect of this project was how much they learned and wanted to share this knowledge with me. One student in particular was sharing his infographic with his family and discovered that his Grandfather had served in Europe during World War II. Another student discovered that history could be fun and pertain to topics that he enjoyed such as automobiles. Project-Based Learning allowed my students to study topics that interested them while reaching the required Minnesota standards. Their engagement had improved greatly and we enjoyed the learning together.
Chapter 5

CONCLUSION

Introduction

I began this action research with the following question, *How is student engagement affected through Project-Based Learning in an eleventh grade social studies classroom?* I was looking for a way to help engage my 11th-grade urban high school students with the curriculum. After analyzing the data and reflection, I believe that Project-Based Learning does increase the engagement of students in an eleventh-grade social studies classroom. I also believe it improves the students’ learning for academic and life skills. With the conclusion of my action research, I would like to look at my personal growth as an educator, review the literature, consider the limitations of my study, and imagine future applications of Project-Based Learning in our classrooms.

Personal growth as an educator:

The concept of incorporating Project-Based Learning into the social studies classroom was a daunting undertaking. Many of my colleagues doubted our students could be successful. I learned that not only could they be successful, but that they also would rise to the occasion and enjoy learning. PBL curriculum is challenging and exhausting work. As a teacher, I was constantly helping the students research, organize, and create. I was managing a classroom that was chaotic and lively. I had to let go of traditional classroom management/ideas and allow the students to converse and interact with each other. I also had to allow students to make mistakes and discover errors on their own. Several times students had stumbled across research that was inaccurate, and through learning how to analyze credible sources, they were able to determine the information was wrong.
Sometimes, we as teachers get caught up in what the students should be doing vs what they are actually learning through trial and error. I believe the most important lesson I learned during this research is that my students can become engaged and excited about their World History class. In the course of my career as a teacher I have discovered that many students are afraid to try or learn something new because they may fail. Failure is important aspect of growing as a person. Students need to fail and learn how to overcome this barrier. This skill will help prepare for the life beyond the classroom.

**Literature in Review:**

Project-Based Learning has been discussed and proven successful for many years. “Using strategies ranging from inspiration to coercion, teachers attempt to persuade students to participate meaningfully in class activities” (Toshalis & Nakkula, 2012, p. 29). Engaging the students emotional, behavioral and cognitive aspects does allow them to want to learn. A teacher needs to engage students in their learning: “empowering youth to express their opinions and influence their educational experiences so that they feel they have a stake in the outcomes -- is one of the most powerful tools schools have” (Toshalis & Nakkula, 2012, p. 29). When I allowed students to truly engage in their learning, as seen with the WWII unit, and to take control of their learning, I discovered that they could develop a passion for their topics. They were excited to share information. Utilizing, PBL helped my students connect the past to events surrounding them in their families and communities. This is a fundamental concept that is utilized in any history classroom, allowing students to research real-world questions and connect the content to today’s issues. PBL has helped push students to become critical thinkers and so engage them in their education.
The student demographics of my high school are relevant to my research of Project-Based Learning in my classroom. Approximately 40% of the student are black, 30% are white, 11% are Hispanic, 11% are Asians, and two percent that are Native Americans (“Minnesota Report Card”, 2014). The students are predominantly of color and 62% of these students qualified for free and reduced lunch (“Minnesota Report Card”, 2014). The students-of-color population has been increasing in our school district for the past ten years. This has caused teachers to reevaluate culturally relevant teaching. “Culture” consists of values, beliefs, and ways of perceiving (Irvine and York, 1995). Cultural differences in children's learning styles may develop through their early experience (Guild and Garger, 1998). A cultural group's values and traditional lifestyle may, through child-rearing practices, influence the learning styles the individual will develop (Worthley, 1999). While observing my students during our Project-Based Learning I began to notice patterns and specific differences in the different cultures in my classroom.

The Hispanic students preferred to work in small groups, discussing their investigation, while helping each other with the creation of the infographic. The African America students were very vocal and desired constant reassurance that they were finding the needed information and creating the correct final project. The Asian American and White students tended to work independently. The Asian American students worked thoughtfully and easily followed a research plan. The White students worked quickly and were very focused on accuracy. These differences in learning styles allowed me as an educator to help push them to succeed. The students were able to rely on their preferred learning styles while completing the summative. This may be one of the most important factors of Project-Based Learning allows for different styles of learning.
Considering limitations of the study:

In the course of this past school year, I met many challenges that did not allow me to implement Project-Based Learning as many times as I had hoped. In my classroom we were required to facilitate the MCA Math Test and the ACT Test. Each of these took us away from our content learning for several weeks. I also had the obligation to collaborate with my Professional Learning Community. These obligations required that I take time away from content and skills and focus on required state tests. My Professional Learning Community is comprised of four other teachers. Each teacher has his or her own objectives and goals. We must collaborate and work together to help the students succeed. This may mean that I as a classroom teacher, may not always have the freedom to explore Project-Based Learning when we are required to have common assessments.

I had hoped to keep a daily journal tracking my students’ activities. This did not happen in the form of a checklist but was more holistic in my personal reflections after class each day. Originally, I believed this action research would begin during fall semester and I would be able to utilize ancient civilizations unit. This did not come to pass, but I was able to utilize a World War II unit. This project allowed the students to have ample access to credible sources and make personal connections to the material.

This study had specific limitations such as I was only able to conduct my observation and collect data from one section of 11th-grade students. Also, this research was conducted only in my classroom. In order to better grasp the impact of Project-Based Learning and student engagement, we need further studies of this type of curriculum being implemented. I am excited to report at this time that my high school is actively pursuing this option and will be offering an
academe in our school that is based purely on Project-Based Learning for a specific group of students.

Going forward with Project-Based Learning:

As I reflect on the benefits of Project-Based Learning and how I will incorporate this further into my classroom, I am excited about the prospects for future students. Working within an urban high school, we have many different types of wounds to help heal. My students’ daily lives are touched by the injustice of poverty and racism. In our city there have been two shootings of African American men by police officers, and justice is in short supply.

Education is a powerful tool that can help propel people forward. As a social studies teacher it is my job to help students learn to think critically, to ask difficult questions, and connect their learning with the need for change or social justice. Project-Based Learning will allow students to find daily applications of their skills and knowledge to everyday life. Project-Based Learning needs to be implanted into every classroom, especially as students mature. Allowing students to think critically and take on projects individually or in small groups are skills they will need in order to be successful in future employment.

Project-Based Learning is valuable and needs to be considered when looking at curriculum and state standards. We need to allow educators to have the freedom to explore different avenues of teaching, especially that will help push our student towards their future. Our world is constantly changing. In the history of the United States, we have moved from an industrial nation to a service industry. Our workforce will continue to change and evolve. Educators are charged with preparing the students for the unknown. Many of my students will have jobs that may not have been dreamed up yet. When we propose a question or idea and
allow students to investigate, organize, collaborate and present their information, they are learning life skills that will improve their careers and contribute to our communities.

Now, it is time to discuss how to align curriculum with state standards and how to incorporate Project-Based Learning more fully into our teaching. Teachers want students to engage in the material; however, it is difficult to push teachers away from doing the same things that have proven to be successful in the past. When we consider the students of today, we see that classrooms are more racially and culturally diverse than ever before. Within the school district where I teach in an outer suburb of a large city. The student population has drastically changed in the last five years. The classroom of today also has more technology and access to information than before. Our students need to be prepared to use technology ethically and efficiently. I believe this information gained from my project can help other teachers begin to consider Project-Based Learning in their classroom. The application to all subject areas is exciting. The work is hard, but the outcome is rewarding. The future of education is exciting as we help prepare our learners for their futures.

**Conclusion:**

In conclusion, Project-Based Learning has greatly improved and my student’s engagement. As I begin planning my lessons for the upcoming semester, I will be incorporating PBL into my work. The students will be exposed to PBL by scaffolding this idea of investigations, credible sources, research questions, reflections and choice. I will continue to focus on the standards and aligning our work to fit the state requirements. I will engage the students emotionally, cognitively, and behaviorally. I will also help share my knowledge with other colleges. I believe in this work and am determined to help my students succeed inside and outside of the classroom. I want my students to understand how to think critically, organize, and
determine an outcome. I want my students to be able to express their ideas and opinions. I want them to be heard and to be productive members of our society.
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http://education.state.mn.us/MDE/EdExc/StanCurri/K-12AcademicStandards/SocialStudies/index.html


APPENDIX A

STUDENT ENGAGEMENT TOOL
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>21.</td>
<td>Overall, adults at my school treat students fairly.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>22.</td>
<td>I enjoy talking to the teachers here.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>23.</td>
<td>I enjoy talking to the students here.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>24.</td>
<td>I have some friends at school.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>25.</td>
<td>When I do well in school it's because I work hard.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>26.</td>
<td>The tests in my class do a good job of measuring what I'm able to do.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>27.</td>
<td>I feel safe at school.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>28.</td>
<td>I feel like I have a say about what happens to me at school.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>29.</td>
<td>My family/guardian(s) want me to keep trying when things are tough at school.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>30.</td>
<td>I am hopeful about my future.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>31.</td>
<td>At my school, teachers care about students.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>32.</td>
<td>I'll learn, but only if my family/guardian(s) give me a reward.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>33.</td>
<td>Learning is fun because I get better at something.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>34.</td>
<td>What I'm learning in my class will be important in my future.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>35.</td>
<td>The grades in my class do a good job of measuring what I'm able to do.</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
## APPENDIX B

### CLASSROOM ENGAGEMENT INVENTORY

**Table 1**

*Standardized Factor Loadings (Pattern Coefficients) in the Four-Factor Confirmatory Factor Analysis Model for the Classroom Engagement Inventory in Study 1*

<table>
<thead>
<tr>
<th>Item</th>
<th>Affective engagement (α = .91)</th>
<th>Behavioral engagement (α = .84)</th>
<th>Cognitive engagement (α = .83)</th>
<th>Disengagement (α = .86)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel excited (W&amp;C, B&amp;B)</td>
<td>.75</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I feel interested (W&amp;C, B&amp;B)</td>
<td>.75</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I feel happy (W&amp;C, B&amp;B)</td>
<td>.70</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I have fun (W&amp;C, B&amp;B)</td>
<td>.80</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I feel proud (W&amp;C, B&amp;B)</td>
<td>.79</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I get really involved in class activities (S)</td>
<td>.72</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I actively participate in class discussions (P&amp;V), (S)</td>
<td>.78</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I form new questions in my mind as I join in class activities (P&amp;V)</td>
<td>.71</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I compare things I am learning with things I already knew (S&amp;G), (D&amp;C)</td>
<td>.64*</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I work with other students and we learn from each other (P&amp;V)</td>
<td>.65</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. If I make a mistake, I try to figure out where I went wrong (L)</td>
<td>.80</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I go back over things I don’t understand (S&amp;G)</td>
<td>.78</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I think deeply when I take quizzes in this class (P&amp;V)</td>
<td>.75</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I ask myself some questions as I go along to make sure the work make sense to me (S&amp;G)</td>
<td>.76</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. I search for information from different places and think about how to put it together (P&amp;V)</td>
<td>.73</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. If I’m not sure about things, I check my book or use other materials like charts (S&amp;G)</td>
<td>.67</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. I judge the quality of my ideas or work during class activities (P&amp;V)</td>
<td>.65</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I try to figure out the hard parts on my own (P&amp;V)</td>
<td>.56</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I am “zoned out”; not really thinking or doing class work (P&amp;V)</td>
<td>.87*</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. I let my mind wander (S)</td>
<td>.82</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. I just pretend like I’m working (S)</td>
<td>.75</td>
<td>.14</td>
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</tbody>
</table>

*Note.* All items begin with the stem “In this class.” The eight items for Cognitive Engagement are on a 7-point scale. The other items are on a 5-point scale. Reliability coefficients calculated as McDonald’s omega (McDonald, 1999). Sources from which items were adapted were: W&C, B&B = Watson and Clark (1994) and Bégina and Berzin (2000); S = Skinner et al. (2000); P&V = Pearson and Valentina (1988); S&G = Striplak and Graiinski (1956); D&C = DaRusakar and Crowson (2006); L = Linenbink (1965).

* Items had unstandardized loadings fixed to unity.
APPENDIX C

STUDENT ENGAGEMENT OBSERVATION TOOL

<table>
<thead>
<tr>
<th>Time</th>
<th>Student Names</th>
<th>Teacher Action</th>
</tr>
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<tbody>
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</tbody>
</table>

Total

On Task Behaviors:  
N1 – on task: listening / watching  
N2 – on task: writing  
N3 – on task: speaking  
N4 – on task: reading  
N5 – on task: hands-on activity  
N6 – on task:  

Off Task Behaviors:  
F1 – off task: passive  
F2 – off task: doing work for another class  
F3 – off task: listening to others  
F4 – off task: disturbing others  
F5 – off task: playing  
F6 – off task:  

Observations:  

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APPENDIX D

STUDENT INVESTIGATION JOURNAL

Name: ________________  Date: _____________

**Investigation Daily Journal**

**Topic:**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is my research goal for today?</td>
<td></td>
</tr>
<tr>
<td>How will I reach my goal?</td>
<td></td>
</tr>
<tr>
<td>What did I do today?</td>
<td></td>
</tr>
<tr>
<td>What did I learn today about my topic?</td>
<td></td>
</tr>
<tr>
<td>How will today’s information help me with my presentation?</td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX E

**STUDENT RESEARCH PLAN**

<table>
<thead>
<tr>
<th>Steps</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Create a taxonomy of interests.</td>
<td></td>
</tr>
<tr>
<td>2. Choose one interest. Write it in the box. →</td>
<td></td>
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<tr>
<td>3. Brainstorm possible research questions based on that interest.</td>
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<tr>
<td>4. Choose one good question to guide your research. Write it in the box. →</td>
<td></td>
</tr>
</tbody>
</table>
| 5. • What resources will you use to gather information in order to answer your question?  
• How will you keep track of what you learn and how you are learning it?  
• How will you know if a resource is reliable? | |
| 6. Research. | |
| 7. Plan how you will share your research findings and your research methods in a report format of your choice.  
• Informal Paper  
• Presentation  
• Video  
• Poster  
• Other? | |
| 8. Create the report. | |
| 9. Share and get feedback from classmates on your report. Make changes if necessary. | |
| 10. Present your report! (turn it in, present in class, send teacher video, etc.) Share via Google Docs or hand in a paper copy of your Bibliography. | |
| 11. Evaluate your project. | |