

Summer 2017

# Learning Through Student Driven Inquiry In A Spanish Immersion Fourth Grade Classroom

Anne McGinn  
*Hamline University*

Follow this and additional works at: [http://digitalcommons.hamline.edu/hse\\_cp](http://digitalcommons.hamline.edu/hse_cp)



Part of the [Education Commons](#)

---

## Recommended Citation

McGinn, Anne, "Learning Through Student Driven Inquiry In A Spanish Immersion Fourth Grade Classroom" (2017). *School of Education Student Capstone Projects*. 4.  
[http://digitalcommons.hamline.edu/hse\\_cp/4](http://digitalcommons.hamline.edu/hse_cp/4)

This Capstone Project is brought to you for free and open access by the School of Education at DigitalCommons@Hamline. It has been accepted for inclusion in School of Education Student Capstone Projects by an authorized administrator of DigitalCommons@Hamline. For more information, please contact [digitalcommons@hamline.edu](mailto:digitalcommons@hamline.edu), [lterveer01@hamline.edu](mailto:lterveer01@hamline.edu).

LEARNING THROUGH STUDENT DRIVEN INQUIRY  
IN A SPANISH IMMERSION  
FOURTH GRADE CLASSROOM

by

Anne McGinn

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

Hamline University

St. Paul, Minnesota

August, 2017

Primary Advisor: Susan Manikowski

Secondary Advisor: Rachel Studnicka

Peer Reviewer: Kelley Johnson

Copyright by  
ANNE McGINN, 2017  
All Rights Reserved

To my students, whose curiosity and passion for learning is the reason I teach.

## TABLE OF CONTENTS

CHAPTER ONE: Introduction.....	6
Background of the Researcher.....	9
Summary.....	12
CHAPTER TWO: Literature Review.....	14
Introduction.....	14
Student Driven Inquiry.....	15
What is Student Driven Inquiry?.....	15
Key Elements of Student Driven Inquiry.....	17
Choice.....	17
Emphasis on Learning Process.....	18
Student Autonomy.....	19
Teacher as Guide.....	20
Models of Student Driven Inquiry.....	21
Genius Hour.....	22
Passion-based Learning.....	22
Project Based Learning.....	23
Problem Based Learning.....	24
Personalized Learning.....	24
Benefits of Student Driven Inquiry.....	25
21st Century Learning.....	27
21st Century Skills.....	28

Recommendations for 21st Century Learning.....	29
Student Driven Assessment.....	31
Benefits of Student Driven Assessment.....	32
Rubrics.....	33
Summary.....	37
CHAPTER THREE: Methods.....	37
Introduction.....	37
School Setting and Participants.....	37
District Values and Philosophy.....	38
Design Methods.....	39
Unit Overview.....	41
Map Design Project.....	42
Student Choice.....	42
Emphasis on Learning Process.....	43
Student Autonomy.....	43
Teacher as Guide.....	44
Summary.....	44
CHAPTER FOUR: CONCLUSIONS.....	45
Introduction.....	46
Personal Learnings.....	47
Connections to Literature Review.....	48
Connections to Elements of Student Driven Inquiry.....	49

Plans for Implementation and Assessment.....50

Implications.....51

Limitations.....52

Suggestions for Future Projects.....53

Summary.....54

REFERENCES.....55

LIST OF APPENDICES

APPENDIX A: UBD Template 2.0.....61

APPENDIX B: Overview Planning Guide and Student Learning Guide .....64

## CHAPTER ONE

### Introduction

In this study I will explore the nature of Student Directed Inquiry in elementary schools and develop curriculum that will allow my students to engage in meaningful learning while still meeting the needs of my district standards and common assessments. The essential question that will guide my research is: *“How can I design a Spanish immersion social studies unit to bring Student Driven Inquiry to a suburban elementary school while still meeting state and district requirements?”* The goal of this study is to bring my elementary curriculum into alignment with the needs of 21st century learners and to foster a lifelong love of learning.

The first section of this chapter will introduce the importance of Student Driven Inquiry in modern classrooms based on my current experiences and goals as a teacher. The introduction will provide a big picture idea of why Student Driven Inquiry is necessary in today’s schools and will serve as the impetus for my research. The second section of this chapter will describe my personal background and provide insight into why I chose to investigate this specific research question. Understanding who I am and how I arrived at this question will shed light on my own personal perspective as an educator and researcher.

As young children, humans are curious about the world around them. Our thirst for knowledge is insatiable and we seek out novel experiences, challenges, and try new things with enthusiasm (Saltman, 2012). School should be a place where kids continue to foster a love for learning and nurture their curiosity. Instead, school is often a place



where students are told what they are doing is right or wrong, and students begin to learn that taking risks can result in negative outcomes in a school environment. Therefore, through schooling many kids have lost a love of learning and instead are driven to look for the “right” answers instead of posing their own questions and fueling their curiosity.

As a teacher in an elementary school, I see this extinguished curiosity, even amongst nine and ten-year-old fourth graders. My students do not see school as a place to build and develop their own questions and passions, they are not doing their own research on topics that interest them, and building skills that they genuinely want to pursue. My students’ passions are funneled into language arts, math, social studies, health and science at separate times of the day and according to district, state, and national standards.

I myself was a student like this. I always did well in school, but never realized that really I was just good at doing what was expected of me. As an educator I now see that there is a very big difference between being able to get good grades and being a lifelong learner. Arriving at college I was amazed by others around me with clear passions, interests and experiences and only once given the opportunity to explore learning for learning’s sake did I really begin to feel excited about education again.

Our society is constantly evolving, and we no longer live in a world where we need to store information in our own brains; computers and technology do that for us and much more efficiently. We do not need to calculate basic operations. We need an entirely unique set of skills. We need to be able to find information, decide its value, synthesize it with other information and ultimately make meaning of it in our own context. Students

today need to be prepared to work with information and tools we do not even know exist yet (Partnership for 21st Century Learning, 2016).

Students can learn these essential skills through a variety of mediums and the content of school can be flexible and molded to fit what students are passionate about. Through their passion they can practice reading, writing, manipulating, evaluating and asking and answering questions. As early as elementary school, students are limited to learning information, instead of cultivating knowledge and even wisdom. It pains me to see many students who do not see themselves as capable learners because they have not figured out how to “do school” well and their way of thinking and interests do not align with the direction of their classroom.

When I think of the students this current system is harming, a particular example comes to mind. I think of a student in my class who loves to cook and wants to be a chef when she grows up. She is not the best reader, nor the best math student, but she has a passion. In her eyes, the assessment tasks she is doing at school do not show her that she is capable and bright. They show her that she is a lower reader for 4th grade and that her math skills could improve. I know she will be able to read complex texts as an adult; kids grow at different rates and with time and practice she will get there. She will be able to solve complex math problems, just maybe later than some of her peers. Will she be so beaten down by the funneling effect of school, even in fourth grade, that she loses sight of her passion? What if she could spend time in elementary school learning chef skills and math through cooking? What if she would practice reading and writing through recipes and her own food blog?

Keeping a student like this in mind, school should be a place where students are free to cultivate their passions, ask meaningful questions, solve real world problems, and improve upon their skills through a variety of topics and mediums. Today information is at our fingertips. Instead of demanding students know the same set of facts, school can be a place where students build the skills to utilize information and make something of it in accordance with their passions and interests and real world problems. When students are interested and have choice, they are engaged (Marzano & Pickering, 2010). When students are engaged they learn to be learners.

### **Background of the Researcher**

I began my teaching career at a small independent school in Seattle, Washington. I had the privilege of working alongside expert teachers at a school that placed students in the center of learning. Each year, teachers designed curriculum around a theme and utilized Project Based Learning to provide authentic learning experiences for students. For example, a first grade classroom worked to design new toys and pitched their proposals, mock-ups, and business plans to a real toy company. As a new teacher I was able to see how this type of learning inspired students. They weren't just writing using their best handwriting or grammar to please a teacher, they were doing it to impress potential investors. While teaching at this school was not easy, I could see how my efforts directly improved the quality of learning for my students. My students were excited to be at school, were directors of their own learning, and felt empowered to make true change in the world.

From Seattle I took a position at a brand new international school in Mumbai, India. I was one of a dozen teachers and 20 students to open the doors to this school in its first year. Our goal was to bring student-directed learning to Mumbai and to offer a model of education that was different from the traditional Indian schools. In this position I grew to see the stark difference between students who are told what to learn and exactly how to do it, and the freedom of growth and curiosity when student learning is authentic and flexible. In my first year of teaching I had a co-teacher and only three students. While I recognize this is far from the typical classroom, this experience helped me see the power of student-directed learning and differentiation. Because we were so small, we could nimbly adapt to the needs of our students and empower them to pursue their curiosity.

I loved my job as a teacher in this setting. I worked hard and saw my students grow in incredible ways. They were excited to be at school. In contrast, many of them had previously attended other schools where they had dreaded every minute. They were taking charge of their own learning, they were curious, they asked questions and had the opportunity to seek out their own answers. While I often found myself ending the workday feeling tired, I was also energized by the passion and drive of my students. Working with them in this model of open investigation and inquiry showed me how teachers and students can work together, learn from each other, and build an environment where meaningful learning and preparation for life is at the center.

Upon my return to the United States I found employment as a paraprofessional in the district where I grew up. This district is ranked among the best in the nation and I was

surprised to find that not much had changed from my own elementary experience twenty years prior. Yes, technology has been updated, in general students are more engaged in projects and movement, but the overall structure felt the same. I was disappointed. Within weeks of returning to this school I felt stifled. I was working with Kindergartners and either holding them back with the content of our lessons or moving way past them. I saw that students began to see themselves as “good at school” or “not” very early on. To me this system of assessments and curriculum helps kids find out what they are not good at. It also tries to funnel students’ thinking into a specific answer that a test is looking for. Instead of fostering and nurturing the innate curiosity and drive to discover of our youngest learners, students are worried about getting right answers and pleasing teachers.

After deciding to get my teaching license and moving into a full-time teaching position, I am currently faced with internal conflict as I lead my class through my district mandated assessments and curriculum that do not always match the needs of my students. I find myself surrounded by many teachers who share my same frustrations around the discrepancy between the demands of testing, and taking the same tests across the district, and the desire to create meaningful and engaging learning experiences for our students.

Many more seasoned teachers do find ways to incorporate student centered learning into their classrooms and take risks to modify curriculum and design new units. However, they are still bound to give the same test at the end of the unit, often with content that is very specific and requires memorization from students more than allowing them to show what they know and understand. While I have been able to make small adjustments in my classroom, I am excited to have the opportunity to design a unit that

can be used in my district that will bring the kind of learning that works best for kids to my students.

I am surprised by my experience at the elementary level in my district since the high school level seems to be doing much more in alignment with student centered learning. The high school recently approved an entire research quality science lab, and has a program that offers off campus internships for credit. If my district is expecting students in high school to be able to pursue their own passions, ask important questions and make plans for researching them, why cannot these skills begin in elementary school? What would it look like if our students had years and years of practice honing their skills and desire to learn, instead of worrying about test scores and right answers?

I see this discrepancy as a disservice to our students and teachers and it has inspired me to pursue the opportunity to bring Student Driven Inquiry to the elementary school level. I see the need for common understandings, but this does not have to mean common assessments or tests. We can expect students to achieve standards and arrive at them in unique ways. I am excited to pursue the opportunity to develop a curricular unit that allows my students to build skills and follow their curiosity.

### **Summary**

Chapter one provided an overview of who I am as a researcher and called for change in our schools. This chapter explored the rationale for creating curriculum for elementary students in my district and highlighted the researcher's past experience and interest in the topic of student centered learning in elementary schools.

Chapter two provides an in-depth look at research around Student Directed Inquiry in elementary schools, 21st Century Learning, and student driven assessment. Chapter three will outline the methods used to design my curricular unit based on my research. Chapter four will summarize the implementation of the unit in a fourth grade classroom.

## CHAPTER TWO

### Literature Review

#### Introduction

I am committed to providing the best possible educational opportunities for my students and am creating curriculum that will meet this expectation. In this chapter I will explore the background literature that helped me investigate my research topic: *“How can I design a Spanish immersion social studies unit to bring Student Driven Inquiry to a suburban elementary school while still meeting state and district requirements?”*

The first sections will review Student Driven Inquiry, its characteristics, specific models, and benefits for students. Researching Student Driven Inquiry drove my understanding of best practices within this framework and the multiple models through which students can be the directors of their own learning. Investigating the large scale and concept of Student Driven Inquiry and its specific models helped inform my decisions around the structure of my curriculum design.

The next section will explore 21st Century Learning and the necessary skills for learners in a modern society. The recommendations for learners in the 21st Century further call for a need to engage students in their own learning and to develop skills beyond traditional academic measures. Understanding the demands of 21st Century Learning further justifies the implementation of Student Driven Inquiry in my contemporary classroom.

The final sections will explore assessment in Student Driven Inquiry and the use of rubrics as assessment tools. In my district, common assessments are the norm among



our six elementary schools. Understanding how rubrics can be used as common assessments to measure a variety of learning products helped me create rubrics that can both meet the assessment needs of my students as they work within a model of Student Driven Inquiry and meet the assessment needs of my district through the creation of rubrics that can be used as common assessments.

### **Student Driven Inquiry**

Student Driven Inquiry is a term applied to a variety of constructivist learning experiences that “share the common belief that students should have some choice, time and measure of autonomy to support deeper, meaningful learning that leads to skills and knowledge critical for the modern student and world citizen” (Buchanan, Harlan, Bruce & Edwards, 2016, p. 25). Understanding Student Driven Inquiry and its variations (Genius Hour, Project-based Learning, and Passion-based Learning among others) will inform the development of engaging and rigorous curriculum. The first section will provide an overview of Student Driven Inquiry practices in their current implementations. The second section will explore characteristics of Student Driven Inquiry in more detail. The third section will provide overviews of specific models of Student Driven Inquiry commonly used in classrooms today. The final section will describe the benefits for students and teachers who practice Student Driven Inquiry.

#### **What is Student Driven Inquiry?**

At its core, Student Driven Inquiry puts students at the center of learning and draws from constructivist theory that students learn best from doing and exploring (GSI Teaching & Resource Center, 2017). Student Driven Inquiry builds upon the idea that,

“children are naturally active learners who, from infancy, make choices and set goals to solve problems” and provides opportunities for students to pursue learning through this lens of curiosity for the world around them (Saltman, 2012, p. 4-5). From the start of our lives, we are curious beings and given proper nourishment we will continue to be lifelong learners. Through Student Driven Inquiry, students are able to continue to explore the world around them through the lens of curiosity.

Student Driven Inquiry supports a broad ideal for the role of education to instill a lifelong love for learning. From this perspective, education should “support the growth of healthy, engaged individuals able to contribute to their communities as satisfied, productive students, citizens and lifelong learners” (Buchanan, Harlan, Bruce & Edwards, 2016 p. 25). With this task in mind, educators must provide opportunities for students to grapple as learners, “to make determinations about the problems, challenges, and issues they investigate, helping move students toward meaningful engagement and deeper learning” (Buchanan, Harlan, Bruce & Edwards, 2016, p. 24).

Student Driven Inquiry acknowledges that learning is a messy process and that not all students are alike. Student Driven Inquiry shifts the framework of schools from teachers as gatekeepers and sole directors of learning to a place where students are responsible and valued as capable of taking charge of their own learning. It breaks from the model where “teachers are being held totally responsible for the students’ learning while students have accepted little or no responsibility” (Katz, 1996, p. 440). Students are expected to be active in their own learning process, to experience failure, to persist

through obstacles, revisit their own ways of thinking, and to be creators and innovators (Buchanan, Harlan, Bruce & Edwards, 2016).

Placing emphasis on the role of students requires a shift of focus from the teacher to the student. Shifting control from teachers to students can be mischaracterized as a loss of control of the learning environment. Contrary to this perspective, Student Driven Inquiry places high demands on teachers and students with clear boundaries in place and learning requirements (Gibson, 2011). It is not “random” or “disorganized,” rather it takes intense planning on the part of teacher and students (Van Deur, 2008, p.141). Student Driven Inquiry, therefore provides the necessary opportunities for students to engage in meaningful learning with support from teachers, and the necessary experiences to nourish their natural curiosity.

### **Key Elements of Student Driven Inquiry**

Researchers have identified specific elements of inquiry models that aid in their success in creating meaningful learning experiences for students (Brookhart, 2016; Checkley, 1995; Katz, 1996; Gibson, 2011; Núñez & Leon, 2015; Roth, 2017; Saltman, 2012; Small 2009; Thomas, 2000; Turner, 2011; Vigil & Mieliwocki, 2015; Zafra-Gomez, Roman-Martinez & Gomez-Miranda, 2014). In reviewing the literature, four characteristics emerged as common elements of Student Driven Inquiry: choice, emphasis on the learning process, student autonomy, and the role of the teacher as a guide. The following sections will describe each of these elements in more detail.

**Choice.** Student choice has been identified as a key factor in increasing engagement and motivation in academic work (Zafra-Gomez, Roman-Martinez &

Gomez-Miranda, 2014). When students make decisions about their studies they are better able to “make meaningful and personalized connections with content” which leads to further engagement and deeper learning and builds upon students’ intrinsic motivation (Vigil & Mieliwocki, 2015, p. 1).

Student Driven Inquiry models utilize student choice through a variety of means such as; which content students will study, the pace of their learning, the process by which they will learn and even the format of assessment (Katz, 1996; Saltman, 2012). Choice does not mean a full freedom of study and still utilizes boundaries and expectations put forth by the teacher. Choice in Student Driven Inquiry allows students to choose within a range of potential objectives (Checkley, 1995) and still have clear expectations that encourage students to rise to a challenge (Roth, 2017).

While students are allowed choice, they still are expected to meet specific standards. Student Driven Inquiry allows for personalized learning in which students address the same standard but can take individual pathways and study unique content to attain that standard (Bray & McClaskey, 2013; Zmuda, Curtis & Ullman, 2015). Thus, Student Driven Inquiry places emphasis on the process of learning through choice, and not necessarily the content (Saltman, 2012; Vigil & Mieliwocki, 2015).

**Emphasis on the learning process.** Student Driven Inquiry embodies the learning process in which students are allowed to make decisions, make mistakes, and see learning as a journey (Saltman, 2012). Importantly, Student Driven Inquiry adopts best practices from Learning Sciences and fits with what we know about how students learn best (Turner, 2011). Through Student Driven Inquiry, students practice asking

meaningful questions, exploring answers through a variety of means and sources, and summarizing and sharing their findings with others. This process is messy and unveils how humans find new information and make meaning of our world; students themselves become researchers and active learners.

Student Driven Inquiry helps students build a healthy attitude around failure, and the ability to see failure as, “part of the process, not a final destination” (Vigil & Mieliwocki, 2015, p. 2). Through Student Driven Inquiry, students build resilience as questioners, thinkers, and creators and build skills to pursue learning throughout their lives. Students see themselves as responsible for their learning, not their teachers, and develop an understanding of their own academic needs and interests (Saltman, 2012; Turner, 2011; Vigil & Mieliwocki, 2015).

**Student autonomy.** Student Driven Inquiry supports students’ autonomy as learners, empowers students and allows them to be self-directed (Vigil & Mieliwocki, 2015). Students are the “focus of their own learning” (Roth, 2017, p. 9). They have a “sense of control over their direction and progress” and “are drivers of their learning” (Vigil & Mieliwocki, 2015, p. 1-2). This autonomy leads to development of knowledge and process skills as well as development of self-confidence as students ask meaningful questions, solve problems and acquire skills and knowledge through the learning process (Núñez & Leon, 2015; Small 2009; Thomas, 2000).

As autonomous learners, teachers can invite students to be a part of the planning process. As Platz (1994) states, “children are more motivated and learn more when they have input and make contributions to their learning activities” (p. 420). When students

have a *why* behind their learning they become more active learners (Gibson, 2011; Turner, 2011). It becomes part of the students' responsibility to monitor their own progress through reflection and evaluation and to incorporate and reflect upon their own strengths and interests (Turner, 2011). Student Directed Planning trains students to take ownership of their learning and to "include students in the HOW of the learning process" and provides "students the opportunity to plan creative, student preferred activities to reinforce required skills" with scaffolded release of support from the teacher (Platz, 1994, p. 420).

**Teacher as a guide.** In Student Driven Inquiry, the role of teacher becomes one of advisor, guide, co-learner and "someone who [is] there to learn with them and aid them in finding their own answers" (Checkley, 1995; Roth, 2017, p. 10). Teachers in Student Driven Inquiry environments set expectations, provide guidance, and shape curriculum while also allowing students space and freedom to pursue their own interests. Teachers who practice Student Driven Inquiry "strategically create structure but do not determine the path" (Vigil & Mieliwocki, 2015, p. 2).

The role of the teacher in Student Driven Inquiry shifts the locus of knowledge and learning from the teacher to the individual student. Teachers thus become consultants, who help students "find their own answers rather than giving them [theirs]" (Roth, 2017, p. 10). Teachers are not absent, but rather help students build pathways for their own learning and pose "purposeful problems" that foster learning (Brookhart, 2016, p. 13). Teachers in a Student Driven Inquiry model grow to be more creative as they work with and alongside their students (Vigil & Mieliwocki, 2015).

This shift of control can be difficult to implement and teachers can feel overwhelmed by a different set of responsibilities in the classroom. Working alongside students as a guide requires teachers to tackle a range of skills that may be new, “from carving out the time needed for extended inquiry to developing new classroom-management techniques” (Barron & Darling-Hammond, 2008). Additionally, teachers must work to allow students freedom to pursue their own interests while guiding them toward mastery of key concepts and evaluating progress along the way (Barron & Darling-Hammond, 2008).

### **Models of Student Driven Inquiry**

Student Driven Inquiry can take many forms and has been implemented in a variety of methods in classrooms (Buchanan, Harlan, Bruce & Edwards, 2016). While specifics and details vary, Student Driven Inquiry has a basic structure that includes a driving question; authentic, situated inquiry; learner ownership of the problem; teacher-support, not teacher-direction; and artifact creation (Buchanan, Harlan, Bruce & Edwards, 2016).

All these inquiry-based models share the common belief that “students should have some choice, time and measure of autonomy to support deeper, meaningful learning that leads to skills and knowledge critical for modern student and world citizen” (Buchanan, Harlan, Bruce & Edwards, 2016, p. 25) In a literature review of common inquiry models, Buchanan, Harlan, Bruce & Edwards (2016) grouped these models of learning under the title “Student Driven Inquiry” as “this term better captures the power and heart of such student-centered frameworks” (Buchanan, Harlan, Bruce & Edwards,

2016, p. 25). The following sections will describe specific models of Student Driven Inquiry in more detail.

**Genius Hour.** Genius Hour is an example of Student Driven Inquiry that is based on Google's "20% time" (Genius Hour, 2017). This time is allotted to employees for exploration of a project of personal interest. Based on the success of projects as a result of this unstructured time, schools have adopted Genius Hour to provide time for students to explore their own academic interests. Genius Hour can be implemented in classrooms as young as Kindergarten and is based on the premise that "when people work on something they are passionate about, they are much more invested and engaged" (West & Roberts, 2016, p. 227). Genius Hour capitalizes on students' natural curiosity and brings their questions from the periphery into the heart of learning experiences.

Genius Hour provides structure for students to pursue topics of their own interest and opportunity for authentic research while also allowing teachers to guide students toward specific academic outcomes and standards (West & Roberts, 2016). During Genius hour students pose a research question based on a topic of interest, select two mentors to guide their research, conduct research or experimentation, and share their findings (Juliani, 2014; Vigil & Mieliwocki 2015). The elements of Genius Hour provide structure and gradual release of responsibility and provide students with authentic opportunities to build skills as readers, writers, and thinkers (West & Roberts, 2016).

**Passion-based Learning.** Closely linked to Genius Hour, Passion-based Learning provides opportunities for students to learn about what interests them (Maiers & Sandvold, 2011). This model highlights the importance for students to care about what



they are doing at school. Passion-based Learning works to shift the mindset of students who come to class and do what they have to to get by. Passion-based Learning allows students to build necessary academic skills through the pursuit of learning that is meaningful to individual students (Maiers & Sandvold, 2011). Maiers and Sandvold (2011) argue that this requires schools and educators to re-think what matters most at school and to provide experiences that empower students to pursue learning through their unique interests and talents.

**Project Based Learning.** Project Based Learning (PBL) is another example of Student Driven Inquiry that has become very popular in schools (Buck Institute of Education, 2017). In an initial review of Project Based Learning in 2000, John W. Thomas identified five criteria of Project Based Learning: centrality, driving question, constructive investigations, autonomy, and realism. These elements fit within the framework of Student Directed Inquiry and encourage students to pursue topics of interest as well as providing students with a structure and support to answer a meaningful question.

Project Based Learning is additionally defined as “a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging and complex question, problem, or challenge” (Buck Institute of Education, 2017, p. 1). PBL shifts the premise of an engaging project from the “dessert” at the end of the unit to the “main course”, the project is the actual learning (Larmer & Mergendoller, 2010). Through Project Based Learning, students pursue learning through inquiry that is meaningful and allows students

to grow standards-based skills while engaging in authentic learning (Buck Institute of Education, 2017).

While Project Based Learning found a natural fit in the domains of math and science, PBL, like other models of Student Driven Inquiry, can be applied across the curriculum, and not just limited to STEM topics (Duke, Halverson & Strachan, 2016). The capacity of learning through Project Based Learning is diverse and expansive and can serve as a model of learning across the curriculum. The flexibility of PBL, along with its effectiveness as a tool for meaningful learning has led to its expansion throughout schools in the United States and around the world (Buck Institute of Education, 2017).

**Problem-based Learning.** Problem-based Learning is centered around an unanswered question. John L. Savery's (2006) overview of Problem-based Learning highlights the roots of this model, originally stemming from the field of medicine, as a meaningful learning process in which students works toward a solution to a specific problem. Savery (2006) additionally cites the importance of working with an "ill-structured" problem which is typical of the real-world and leads to deep student engagement (p. 13). Problem-based Learning fits with the goals of Student Driven Inquiry and follows a similar structure to Project-based learning, with the emphasis on working toward a meaningful solution.

**Personalized Learning.** Personalized Learning models work to put students at the center of their own learning. Personalized Learning, unique from differentiation and individualization, puts students at the center as drivers of their learning (Bray & McClaskey, 2013; Zmuda, Curtis & Ullman, 2015). Specifically, Bray & McClaskey

(2013) highlight elements of Personalized Learning as including opportunities to utilize technology to “meet students where they are, to teach them all in the ways that they learn best, and to facilitate optimal learning experiences for everyone, anytime and anywhere” (p. 13). Personalized Learning helps empower students as learners; instead of seeing school as a “series of required experiences,” students build real skills as learners that will carry over into their post-secondary lives (Zumba, Curtis & Ullman, 2015 p. 5).

Personalized Learning fits with the Student Driven Inquiry model, as students are given voice and choice around their learning activities, products, and process. Bray & McClaskey (2013) highlight an example of a Personalized Learning classroom in which a teacher, Kevin McLaughlin, a primary teacher at Old Mill Primary School in Leicestershire, England, divided his classroom into sections that reflected the learning needs of his students. Included in the learning environment is space for student discussions, investigation, extra help, creation, and presentation. Through this model, students are able to assess their own needs, take charge of their own learning, and engage in the learning process.

### **Benefits of Student Driven Inquiry**

Student Driven Inquiry has academic and social benefits for students. The academic benefits have been better studied and more research needs to be done about the social skills students develop from their experiences with Student Driven Inquiry (Buchanan, Harlan, Bruce & Edwards, 2016). As Buchanan, Harlan, Bruce & Edwards (2016) describe in their Literature Review of Inquiry Based Learning and models of Student Driven Inquiry, “much of the IBL research conducted thus far shows consistently

positive findings regarding academic achievement in the form of grades and test scores” (p. 27). Their findings highlight the existing research using the academic measures of grades and test scores, and call for more qualitative measures. Additional research suggests that “student gains in factual learning are equivalent or superior to those of students in more traditional forms of classroom instruction” (Barron & Darling-Hammond, 2008).

Student Driven Inquiry leads to development of specific academic and thinking skills that serve students as lifelong learners. Benefits of Student Driven Inquiry include: “knowledge and skills development; increased intrinsic motivation; development of expertise; notable self-efficacy; task commitment; positive attitudes about learning; perceived competence or expertise; and greater creativity” (Buchanan, Harlan, Bruce & Edwards, 2016, p. 27). In addition to academic outcomes, Student Driven Inquiry results in “development of personally, socially, and professionally valuable skills” (Buchanan, Harlan, Bruce & Edwards, 2016, p. 28). Students also experience positive emotions, dynamic school relationships, satisfaction, and deeper learning (Buchanan, Harlan, Bruce & Edwards, 2016).

Practicing Student Driven Inquiry molds students as lifelong learners and shapes their attitudes toward learning (Jiusto & DiBiasio, 2006). Brookhart (2016) argues, that students find that the type of higher order thinking in Student Driven Inquiry models “is actually fun” and leads to increased motivation and engagement (p. 10). Saltman (2012) posits further, “when students manage their own learning, they become more invested in their own academic success” (p. 4). Students who are more engaged are also those who

learn to value their own effort and place themselves at the center of their abilities to learn (Skinner, Wellborn & Connell, 1990). Students persist through learning challenges as self-directed learners. They “deploy critical-thinking skills more readily when confronted with challenging schoolwork” (Saltman, 2012, p. 4).

According to the Buck Institute of Education (2017), Project Based Learning as a model of Student Driven Inquiry, holds many positive outcomes for students including making school more engaging; improving learning; building success for college, career, and life; providing opportunities to use technology, connecting students with their communities and the world, and promoting educational equality. For teachers, PBL also allows for the incorporation of standards into engaging and meaningful learning experiences (Buck Institute of Education, 2017).

When students are drivers of their own learning their engagement, confidence levels and grades increase (Patall, Cooper & Wynn, 2013), and they are more self-reliant (Saltman, 2012). Students are able to see their own growth and recognize the improvement of specific academic skills (Jiusto & DiBiasio, 2006). The vast and varied benefits of Student Driven Inquiry support the need to implement curriculum that allows students to engage in learning and build skills for lifelong learning.

### **21st Century Learning**

There is a growing call for a shift in focus on education, a shift toward education models “that actively engage students in authentic, relevant work” and this type of instruction “is considered supportive of skills development necessary for effective and satisfying participation in an increasingly complicated, global society” (Buchanan,

Harlan, Bruce & Edwards, 2016, p. 24). Many argue that we currently face an academic focus on high stakes testing when we should be using time for holistic, authentic learning experiences that foster creativity, innovation, and that inspire imaginative and critical thinking (Kim, 2011). The first section will outline 21st Century Skills and how they are incorporated in Student Driven Inquiry. The final section will highlight the recommendations for implementing 21st Century Skills in a modern classroom.

### **21st Century Skills**

We now live in a world where students need to be innovators and resilient problem solvers who are able to research, use metacognitive and self-evaluative skills (Checkley, 1995; Juliani, 2014). This call for skills aligns with the Framework for 21st Century Learning's (2016) guidelines for teachers and fits with the outcomes of Student Driven Inquiry. The Framework for 21st Century Learning (2016) identifies specific skills that students should be building in schools in order to thrive in our modern society. Among these skills are: Learning and Innovation Skills, Life and Career Skills, Key Subjects and 21st Century Themes, and Information, Media and Technology Skills.

Learning and Innovation Skills include the "4Cs" of critical thinking, collaboration, communication, and creativity. Life and Career Skills include non-academic factors that help prepare students to be productive citizens through development of "flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, leadership and responsibility" (Partnership for 21st Century Learning, 2016, p. 2). Key Subjects and 21st Century Themes address the need for common content understanding in many "traditional" school

subjects and furthermore the study of “global awareness, financial, economic, business and entrepreneurial literacy, civic literacy, health literacy, and environmental literacy” (Partnership for 21st Century Learning, 2016, p. 2). Information, Media and Technology Skills include “information literacy, media literacy, and ICT - information, communications and technology literacy” (Partnership for 21st Century Learning, 2016, p. 2).

### **Recommendations for 21st Century Learning**

The Partnership for 21st Century Learning (2016) also outlines recommendations for schools to help students develop these skills. The Partnership for 21st Century Learning’s (2016) suggestions include: emphasizing core subjects, emphasizing learning skills, using 21st Century tools to develop learning skills, teaching and learning in a 21st Century context, teaching and learning 21st Century content, and using 21st Century assessments to measure 21st Century skills.

Emphasizing core subjects is encouraged to align with academic content standards that help ensure students in elementary school are preparing for subjects in high school. This mastery of specific content areas is connected to later success in future careers. The Emphasis of Learning Skills demonstrates the need for learning that goes beyond content. In our modern world, students need to focus on, “thinking critically, applying knowledge to new situations, analyzing information, comprehending new ideas, communication, collaborating, solving problems, and making decisions” (Partnership for 21st Century Learning, 2016, p. 9). These important skills are “knowing how to learn skills” (Partnership for 21st Century Learning, 2016, p. 10). As the Partnership for 21st Century

Education (2016) argues, “business leaders want employees who can continually update their skills, communicate effectively and work independently to get things done” (p. 10). It is no longer enough to know content. In our modern world content is changing so quickly that we need to know how to learn new information and have the drive to do so.

Students today need to be able to use 21st Century tools to develop learning skills. As the Partnership for 21st Century Education (2016) states, “the need for technologically literate citizens and workers increases every year” and our students will need to be ready to join that growing workforce (p. 10). The Partnership for 21st Century Education (2016) further argues that “students need to learn how to use 21st Century tools beginning in elementary school to take full advantage of the vast array of research and multimedia resources, digital content and communications options available to them” (p. 11). Many teachers make the mistake of assuming that students know how to use technology effectively to conduct research and build understanding (Dwyer, 2016). As Dwyer (2016) argues, teachers must provide students with guidance and scaffolding when using technology.

In order to thrive in the 21st Century, our students need practice learning in a 21st Century context and learning 21st Century content. The Partnership for 21st Century Education (2016) argues that the need for students to “make vital practical, emotional and social connections to skills and content is more important than ever” (p. 12). The Partnership for 21st Century Education (2016) suggests that teachers use elements of Student Driven Inquiry to bring about effective learning in a 21st Century context. Teachers can “make content relevant to student’s lives, bring the world into the



classroom, take students out into the world, create opportunities for students to interact with each other, teachers, and other knowledgeable adults in authentic learning experiences” and “use the community as a learning laboratory” (Partnership for 21st Century Learning, 2016, p. 12). This perspective acknowledges that technology allows students to “pursue topics in depth, and at times, become experts in charge of their own learning” in a way that previous generations of learners were not able to use (Partnership for 21st Century Learning, 2016, p. 12).

Through Student Driven Inquiry, students are provided with opportunities to build these essential skills for 21st Century learning. Student Driven Inquiry supports the development of the academic, social, and technological skills necessary for success in our modern society.

### **Student Driven Assessment**

When students are responsible for the direction of their own learning their participation in their own assessment becomes necessary as part of a true learning process. As Brookhart (2016) states, “students who self-assess are poised to be life-long learners” (p. 14). As teachers, this is our ultimate goal, to help shape students’ ability to be learners for the present and for the future. Investigating the best practices of assessment will identify ways to assess students based on common standards and also incorporate students themselves in the assessment process. The first section will explore how student awareness of their progress and reflection lead to better academic engagement and outcomes through involvement in the assessment process. The second section will explore the use of rubrics as a means to evaluate student progress.

## **Benefits of Student Driven Assessment**

Involving students in the assessment process is critical to developing students' sense of awareness of themselves as learners (Stover, Yearata & Harris, 2016). When students see that assessment is a form of feedback, they understand assessment as a necessary and beneficial part of the learning process (Turner, 2011). When students see the importance of assessment as a tool for growth, they become participants in the evaluation aspect of the learning process and push beyond just compliant test-takers or task-doers. Through this empowerment, students become more engaged in the process and journey of learning (Brookhart, 2016).

Additionally, student involvement in assessment develops independence and reflection (Stover, Yearata & Harris, 2016). Students who are involved in the assessment process are encouraged to see themselves as they are on their learning journeys and to take personal responsibility toward growing as learners. This independence is a skill that students will take with them as they continue to learn for the rest of their lives. There will not always be a teacher or a test to guide students through lifelong learning, thus, developing the ability to independently seek out and interpret feedback serves our students for the rest of their lives.

Reflection is a second critical aspect to student involvement in assessment (Stover, Yearata & Harris, 2016). As with independence, reflection is a skill that students will carry with them. We make choices and learn new things everyday. Taking the time to reflect upon these choices and learnings helps us grow and improve upon ourselves as

learners. When students are robbed of the ability to reflect for themselves, they are robbed of the practice of this critical aspect of assessment.

Finally, assessment is a tool for teachers as well as for students (Stover, Yearta & Harris, 2016). When teachers evaluate student progress, they are also evaluating their own progress as teachers of content and skills. When both teacher and students are using assessments as tools for improvement, the classroom culture becomes one of growth and learning.

### **Rubrics**

The use of rubrics allows teachers and students to evaluate outcomes based on specific criteria (Brookhart, 2016). Rubrics provide skill-specific feedback and can be applied to a variety of outcome tasks for the same skills or content. In lieu of using exams or prescribed projects with teacher-created rubrics, teachers and students can work together to create a rubric that will assess desired outcomes while allowing for student choice and direction in regard to the final product (Rosenow, 2014). Rubrics have been identified as successful tools for creating high quality products (Lipnevich, McCallen, Miles & Smith, 2013). Therefore, rubrics as evaluation and assessment tools fit with the Student Directed Inquiry models of teaching and learning.

Rubrics as assessment tools lead to student self-assessment (Brookhart, 2016). Students can use rubrics as individuals, in pairs, groups, or with teacher guidance to reflect upon their own work. Brookhart (2016) suggests that rubrics are a tool; they provide “clear success criteria in the form of checklists or rubrics” and “give students a tool they can use, alone or with partners, to assess the quality of their own work” (p. 14).

In contrast to checklists, which also help students meet desired outcomes through following directions, rubrics help assess “qualities that indicate learning” (Brookhart, 2016, p. 14).

To follow the path of Student Directed Inquiry, teachers and students can co-create rubrics for given learning outcomes. Rosenow (2014) suggests that this method can lead to “increased discussion about the different components of a specific assignment” and “increased understanding of the assignment’s purpose and more critical thinking” (p. 32). When students are a part of the rubric creating process they better understand the desired outcomes, have a chance to clear up misconceptions and see the purpose of the assignment and grading scale with more clarity (Rosenow, 2014).

When students are involved in the rubric creating process, by helping to develop the criteria, grades are not mysteries to students and evaluations lead to authentic reflection and further questioning (Vigil & Mieliwocki, 2015). This allows students to take ownership over their own learning and their outcomes. Co-creating rubrics de-mystifies the grading process and helps students see themselves at a point on a learning journey with next steps and more work to do instead of being evaluated as “good” or “bad” (Vigil & Mieliwocki, 2015). Student involvement in creating success criteria requires higher order thinking (Brookhart, 2016). Students are involved in evaluating quality, comparing samples, and determining steps toward success. Practice creating rubrics and identifying quality will help students self-reflect as lifelong learners.

The involvement of students in their own assessments and the use of rubrics will foster lifelong skills in students in inquiry driven classrooms. The use of rubrics will

allow my district to establish common assessments of common understandings while granting academic freedom through Student Driven Inquiry.

### **Summary**

This literature review investigated Student Driven Inquiry, its characteristics, models and benefits. This chapter also examined 21st Century Learning, its components and recommendations for modern classrooms. Finally, this chapter discussed the use of assessment as a critical tool in Student Driven Inquiry and the role of rubrics for aligning learning outcomes with student products.

This review is vital in building a foundation upon which to explore my research question “*How can I design a Spanish immersion social studies unit to bring Student Driven Inquiry to a suburban elementary school while still meeting state and district requirements?*” and create a curriculum based upon best practices. Student Driven Inquiry is a broad topic with many iterations in today’s classrooms. Exploring Student Driven Inquiry has provided knowledge of the range of possibilities for implementing curriculum through this philosophical lens. Examination of specific models of Student Driven Inquiry has increased my understanding of the breadth and depth of possibilities of ways to build a curriculum. Identifying key benefits to Student Driven Inquiry provides evidence for value of these curricular models and the positive range of outcomes for students.

Study of the recommendations for 21st Century Learning further supports the need to create curriculum that allows students to build unique skills for our modern society. The literature supports the need to provide students with learning experiences

and models that will help them develop specific 21st Century skills. The recommendations of 21st Century Learning align with the philosophy and outcomes of Student Driven Inquiry and add rationale for implementing an inquiry-based curriculum.

Studying assessment and the use of rubrics provides additional rationale for the creation of a common assessment that can be used across my district that also allows for flexibility of student output. Research on assessment supports the need for students to be involved in the assessment process and the value of rubrics for assessing common skills and understandings through a variety of products that come with Student Driven Inquiry.

Chapter three will provide more detail of my school setting and the group of students I am designing curriculum for. Chapter three will further explore the process of designing Student Driven Inquiry curriculum to align with state and district standards for learning and assessment. The next chapter will also outline the unit-design models that I utilized in the creation of my unit.

## **CHAPTER THREE**

### **Methods**

#### **Introduction**

The purpose of this capstone is to investigate the research question *“How can I design a Spanish immersion social studies unit to bring Student Driven Inquiry to a suburban elementary school while still meeting state and district requirements?”* Chapter two reviewed the current literature on Student Driven Inquiry, 21st Century Learning and assessment. Through the examination of the literature, I established a foundation and basis for creating curriculum under the Student Driven Inquiry philosophy and the utilization of rubrics.

Chapter three will provide an overview of the school setting, the district in which I will be implementing the curriculum, and the group of students I will be designing curriculum for. I will then outline the process by which I designed my curriculum and the specific considerations for its development. The methods section will outline the inspiration for the unit based on Minnesota state standards, and the Student Driven Inquiry elements of student choice, emphasis on the learning process, student autonomy, and the role of the teacher as a guide.

#### **School Setting and Participants**

The school where I am implementing my curriculum is one of six elementary schools in a large suburban district. The district serves 10,567 students and consists of 84.3% White students, 5.5% Asian students, 3.9% Hispanic/Latino students, 3.4% students of two or more races, 2.5% Black/African American students, and 0.3%

American Indian/Alaskan Native students. Of the student population, 1.7% are English Learners, 6.6% qualify for Free/Reduced Price Lunch, and 10.6% receive Special Education services. As the data show, the district is fairly homogenous with a majority of white students living in middle-class or wealthy homes (Minnesota Report Card, 2017).

At the elementary level in my district, schools offer Spanish and Chinese immersion programs. My elementary school is one of four schools that offers Spanish immersion. The large majority of the students in the Spanish immersion program speak English at home and therefore participate in the immersion program to build fluency in a second language. The students for which I am designing curriculum are fourth graders in the Spanish immersion program and have been attending school in Spanish since Kindergarten. As part of our immersion program, students perform all academic skills in Spanish. Therefore, the curriculum I will be designing is for fourth graders and is intended to be conducted in Spanish.

### **District Values and Philosophy**

The need for a common assessment is essential in my district as we value consistency in outcomes across our six elementary schools. My district also values results from standardized tests and has a strong culture of assessment as a tool to determine how to best serve students. With this culture in mind, my curriculum will utilize a rubric that allows fourth grade students across the district to learn through individual inquiry while allowing teachers to assess their learning outcomes through a rubric with common expectations and outcomes.



My district has also recently developed an Instructional Framework for learning that encourages global and personalized learning in the classroom. The Framework fits with the values of Student Driven Inquiry and my unit will serve to provide students with opportunities to learn in concordance with these values of my district. The Instructional Framework highlights eight elements that foster “meaning, engagement, and deeper learning” (Minnetonka Public Schools, 2016). The eight elements include: Authentic and real world learning, collaboration, communication, creativity, critical thinking, global learning, personalized learning, and use of technology for learning (Minnetonka Public Schools, 2016).

### **Design Methods**

To ensure that students are working toward learning outcomes as required by the state standards, I used the Understanding by Design (Wiggins & McTighe, 2005) model. This model starts “backwards” and identifies the specific learning outcomes for a unit and works from the end of the unit forward to help plan learning activities that will guide students toward these learning goals (Appendix A). I used this model to first plan a summative assessment that can be implemented as a common assessment in my district and work backward to craft a unit that utilizes elements of Student Driven Inquiry and addresses state standards.

In addition to the Understanding by Design model, I considered the models of Student Driven Inquiry that were explored in Chapter two. From these models I selected Project Based Learning as the best fit for the standards I addressed in this unit. Following the structure of PBL, students will focus on the creation of a product with specific

learning goals and skills. Students will answer a challenging question, engage in the inquiry process through research and application of information, and create a public product that is useful beyond the walls of the classroom (Buck Institute for Learning, 2017).

The research of Duke, Halverson, and Strachan (2016) suggests steps for creating a Project Based Learning unit. They highlight that inspiration can come from the unique situation of students and their local community. As experts in developing Project Based Learning units, I considered their suggested steps for creating a powerful Project Based Learning experience. Duke, Halverson, and Strachan (2016) recommend beginning with the authentic needs of a local community, state or even national issue as a starting point for a Project Based Learning project. From an identified authentic issue, educators should determine the standards they will address within the unit. Next, they suggest considering skills beyond the standard. These skills might include “flexible thinking, problem solving, strategic use of technology, informing or persuading others (orally or in writing), and collaborating” (Duke, Halverson, & Strachan, 2016, p. 18). Educators should also consider an authentic audience and purpose. Duke, Halverson, and Strachan (2016) highlight the need to make the project the focus of the curriculum, not something done only at the end of a unit. When the purpose is authentic and the end-goal is a part of the entire process, students can see where their work is leading them. Finally, Duke, Halverson, and Strachan (2016) recommend that we remember our skills as teachers outside of PBL as well. We can and should incorporate teaching around academic tools

and directly instruct valuable skills such as reading comprehension or summarizing research (Duke, Halverson, & Strachan, 2016).

The Buck Institute for Learning website hosts many resources for teachers wanting to create units through PBL. I used a unit plan template and student learning guide to assist in my unit creation (Appendix B and Appendix C). These forms help keep the end goals in mind, and allow for some structure to support students through a project, all the while ensuring there is room for students to grapple with problems and maintain autonomy as learners.

Through this process of working backward and utilizing planning steps provided by PBL experts, I was able to create a unit that fit the needs of my district, and my students through the best practices of Student Driven Inquiry.

### **Unit Overview**

This unit is based on the Minnesota State Standards for fourth grade social studies. I looked at the state standards for fourth grade and my district's current fourth grade curriculum. The Minnesota State Standards were recently revised to reflect the needs of 21st Century students and are "guided by a vision of citizenship and college- and career-readiness" (Minnesota Department of Education, 2011). In concordance with the understanding of 21st Century learning, the social studies standards "also require students to think critically about important issues and communicate their findings, and engage in the processes of problem solving and discipline-based inquiry." From these starting points I selected two standards in the substrand of Geospatial Skills to guide my unit as learning outcomes. The standards addressed are:

- 4.3.1.1.1 People use geographic representations and geospatial technologies to acquire, process and report information within a spatial context.
- 4.3.1.2.1 Geographic inquiry is a process in which people ask geographic questions and gather, organize and analyze information to solve problems and plan for the future.

### **Map Design Project**

Based on the Minnesota state social studies standards and the model of Project Based Learning, students will ask and answer a geographical question and create a map to share their findings. Using Understanding By Design (Wiggins & McTighe, 2005), I created learning activities that will guide students through their own inquiry and development of skills to research their geography question and create a map. I developed a basic rubric outlining learning goals and I will work with my students to add detail to the rubric to assess their final product and its ability to show their understanding of the standards and demonstration of geospatial skills (Brookhart, 2016; Rosenow, 2014). The map project will be implemented in my fourth grade Spanish immersion classroom over the course of three to four weeks.

**Student choice.** As emphasized in Chapter two, the literature shows the importance of student choice in Student Driven Inquiry and engaged and meaningful learning. To guide my curriculum creation, I thought about how to best allow students choices in their learning. In this unit, students will have choice around their geographic inquiry. Students will be able to select a research question of their own personal interest

and to utilize skills developed throughout the unit to design a map that reflects the results of their research. Students will also have choice around their unique final product and its presentation.

**Emphasis on learning process.** The learning process is critical in Student Driven Inquiry and this unit will allow students to grapple with new ideas, inquire, and experience failure throughout the unit. While students will be working toward production of a final product, the emphasis will be on their practice of specific 21st Century skills that help them become better inquirers, researchers, and communicators.

Students will encounter new content through this project and will also practice the process of learning through identifying a question, researching answers, and creating a product that shares their learning. As emphasized in the PBL model, students will engage in active inquiry, and also reflect and critique themselves along the way. Throughout this process, students address their own strengths and obstacles and create plans for overcoming them. The PBL model of Student Driven Inquiry encourages students to persist through challenges and develop tools to be lifelong learners (Buck Institute for Learning, 2017).

**Student autonomy.** Throughout this unit students will be taking charge of their own learning through ownership of their inquiry, process, and product. Students will be at the helm of their learning, first identifying their own research question of personal interest, then creating a plan for researching their topic, and finally deciding how best to present their findings according to the expectations of the project. Students will be responsible for following a research plan agreed upon by students and the teacher and for

input in finalizing the rubric for their project. In this manner, students are invested as the drivers of their own learning.

**Teacher as a guide.** Throughout this unit the teacher will serve as a facilitator of learning rather than producer of knowledge and information. The teacher will support students in developing their inquiries, researching their questions, and building their maps. Teacher guided lessons will support students as they acquire new knowledge and apply new skills. The teacher will serve as an additional resource for students, guiding them to helpful resources and providing structure for student organization and reflection.

### Summary

This fourth grade social studies unit will achieve the goal of reaching student outcomes identified in the Minnesota state standards and provide students meaningful learning opportunities through a model of Student Driven Inquiry. This unit will utilize the state standards as a guide and endpoint and follow the elements of Project Based Learning to shape the learning experiences for students.

Chapter two provided the background research to support the value of learning through Student Driven Inquiry and explored the research behind my guiding question *“How can I design a Spanish immersion social studies unit to bring Student Driven Inquiry to a suburban elementary school while still meeting state and district requirements?”* Chapter three outlined the process through which the unit was designed and the elements and considerations it includes.

In Chapter four I will detail how my unit utilizes the elements of Student Driven Inquiry through the model of Project Based Learning. The next chapter will outline the implementation of the unit in a fourth grade classroom, detailing the contents of the unit.

## **CHAPTER FOUR**

### **Conclusions**

### **Introduction**

Throughout this project I have been investigating the question “*How can I design a Spanish immersion social studies unit to bring Student Driven Inquiry to a suburban elementary school while still meeting state and district requirements?*” Chapter three provided an overview of the setting for the project. Chapter three also summarized my process for designing my curriculum, and the specific considerations that informed its development.

Chapter four will outline my reflections upon the capstone process. I will share my personal learnings from my investigation and curriculum development and I will highlight the connections between my curriculum and the research. Finally, I will provide my plan for implementing and assessing my unit and will discuss the limitations and implications of my project.

### **Personal Learnings**

Working through the capstone process and developing my own curriculum has broadened my understanding of the methods available for engaging students in their own learning. While I had some prior experience developing curriculum, this was my first endeavor to do it independently and with substantial research to support my ideas and decisions. Working to develop a unit that would reach specific learning goals, engage my students in Student Driven Inquiry, and supporting each aspect of my curriculum with



research helped me as a teacher and a learner better understand the choices I have in my classroom and the importance of the reasons behind them.

Working with Student Driven Inquiry, one of the hardest aspects of designing curriculum is the fact that this type of learning is “messy.” As articulated by Buchanan, Harlan, Bruce & Edwards (2016), so much of allowing students to take the lead in their learning requires teachers to be flexible and to be guides more than directors. However, the ambiguity that can come with Student Driven Inquiry, does not assume a lack of structure or support from the teacher. My practice in developing curriculum supports the claims of Gibson (2011), that Student Driven Inquiry establishes rigor through boundaries and learning requirements.

Critical elements of Student Driven Learning are choice, emphasis on the learning process, student autonomy, and the role of the teacher as a guide and much of what students will choose and how they will move through this project are unknowable to me as a teacher ahead of time (Brookhart, 2016; Checkley, 1995; Katz, 1996; Gibson, 2011; Núñez & Leon, 2015; Roth, 2017; Saltman, 2012; Small 2009; Thomas, 2000; Turner, 2011; Vigil & Mieliwocki, 2015; Zafra-Gomez, Roman-Martinez & Gomez-Miranda, 2014). I certainly can make informed predictions about student topics of interest, student support needs, and my curriculum has a clear path toward an end goal; however, this curriculum as presented lacks the daily reflection as a teacher critical for responding to individual student needs and direction.

Thus, developing an entire unit has been challenging in that I do not have the ability to observe and reflect upon how individual parts of the unit are helping students

arrive at their goals. I have had to imagine and use my past experiences in working with fourth graders to anticipate their needs and curiosities. Because of this, I expect to have many reflections and changes to make after implementing this curriculum in my classroom with students.

### **Connections to the Literature Review**

I also grew my understanding through applying my research in my literature review and investigation into the question *“How can I design a Spanish immersion social studies unit to bring Student Driven Inquiry to a suburban elementary school while still meeting state and district requirements?”* to the development of an actual unit. While I had an idea of the end goals for my students in this unit, to create their own maps based on geographic questions, inspired by state standards, my review of the literature provided me with many options for guiding my students through the process of attaining this goal.

I first considered the key characteristics of Student Driven Inquiry, including putting students at the center of their own learning and allowing them the opportunity to pursue their own curiosity, and importantly, the development of lifelong learning (Buchanan, Harlan, Bruce & Edwards, 2016). Furthermore, Student Driven Inquiry encourages students to grapple with challenging ideas and to work through failure and uncertainty (Buchanan, Harlan, Bruce & Edwards, 2016). To achieve this, I carefully considered the balance of guiding students to develop sufficient knowledge and skills, and to also allow them time to explore their new learnings, to investigate new technology, and to find solutions on their own.

To synthesize my learnings I had to consider elements of many different models of Student Driven Inquiry (including Genius Hour, Passion-Based Learning, Project Based Learning, Problem-Based Learning, and Personalized Learning) and to compare the main elements of each with the goals of my specific learning unit. This process required me to review the elements of each model of Student Driven Inquiry, and to also put the model to practical use. In considering each model, I thought through what my unit overview might be working with that model and considered how well each model allowed my students to engage deeply with the content and skills of this unit and to arrive successfully at their learning goals.

### **Connections to the elements of Student Driven Inquiry**

In this process I carefully considered the model of Student Driven Inquiry that would best fit my learning goals for this unit. While I decided to use the Project Based Learning model, many elements of other models played a key role in my development of this unit. For example, the basic premise that students may choose a topic of interest to them fits within the frame of Project Based Learning but is a key element of Genius Hour, Passion-Based Learning and Personalized Learning. The element of choice has a large role in my project in a very intentional manner. As stated by Zafra-Gomez, Roman-Martinez & Gomez-Miranda (2014), when students have choice, they are more engaged in their learning. Allowing students to make choices about their geographic questions, the pacing of their progress, and the media of their final map creation exemplify the power of choice in Student Driven Inquiry.

Additionally, my unit embodies the elements of the emphasis on the learning process and student autonomy (Vigil & Mieliwocki, 2015). These elements fit closely with Project Based Learning and allow students to take charge in the creation of their own maps that represent a geographic question of their interest. While my unit guides students through the process of creating a map to some degree, students are responsible for following a plan to achieve their goals, implementing knowledge gained from group lessons, and synthesizing their learning to create a final product that will be shared with an authentic audience.

Finally, the element of teacher as guide supported my decision to use the Project Based Learning model in my unit. As stated by Vigil & Mieliwocki (2015), teachers “strategically create structure but do not determine the path” (p. 2). The essence of Project Based Learning is the pursuit of learning through inquiry and through this model, the teacher is a support to students through this process, rather than providing all of the direction (Buck Institute of Education, 2017). My unit fits with this element as it allows students to pursue an inquiry of their choosing and to follow some teacher-given structure to arrive at the creation of a map. As a teacher in this unit I will be providing some direct instruction to my students, facilitating learning experiences that help them gain the necessary knowledge to create their own maps, and to support them as an additional resource in their research and creation of maps.

### **Plans for Implementation and Assessment**

I plan to implement this unit in my own fourth grade classroom in the upcoming school year. In addition to using this unit in my own classroom I will share it with my

fourth grade Spanish immersion teammates at my school. Through the implementation of the unit in my own classroom and other classrooms, I will be able to reflect and revise my unit with the support of my teammates.

To assess the success of this unit I will take daily notes on my reflections around the progress of the unit in my own classroom. I will also discuss the unit with my teammates and consider their perspectives and reflections. Finally, I will use my observations of my students in class and their final map creations to assess the unit's ability to support students in developing the desired skills and reaching the desired learning outcomes.

### **Implications**

The most significant implication of my curriculum development project that answers the question "*How can I design a Spanish immersion social studies unit to bring Student Driven Inquiry to a suburban elementary school while still meeting state and district requirements?*" is the potential for its implementation across my district.

Importantly, this is a curriculum for students in a Spanish immersion program. Often it is difficult to find curricular resources in Spanish that also promote Student Driven Inquiry. I took on this project because of my personal vested interest in providing students with the opportunity to learn in the most effective and meaningful way and to help them build a lifelong love of learning. To see models of Student Driven Inquiry being adopted in my district would empower our elementary school students to truly engage in learning in a new way.

I hope that implementing this unit in my own classroom and across my fourth grade team will yield positive results and feedback and that others across my district will be excited to implement this unit as well. The timing of my unit creation is apt as my district is currently reviewing our Social Studies curriculum for elementary students. This allows my unit to potentially be included in the larger scale directive for curriculum modernization in my district.

Beyond my individual unit, introducing Student Driven Inquiry to my classroom and my teammates holds potential to further influence others to take on the challenge to incorporate Student Driven Inquiry into other aspects of our curriculum. For me having witnessed first hand at my previous teaching locations the power of Student Driven Inquiry, I hope that supporting my teammates through the implementation of this unit will inspire them as well.

### **Limitations**

The primary limitation to my curriculum development project is my distance from students in my actual classroom. I have developed this unit in its entirety before implementing it with students. This process has limited my ability to reflect upon the specific elements of my lessons and the general progression of the unit. Working within the structure of a Student Driven Inquiry model like Project Based Learning requires constant reflection on the part of the teacher and students. Not having the opportunity to modify future lessons and expectations based upon experience with students is a limitation to this project.

I expect to have many revisions and suggestions after guiding my students through this unit. I hope to be able to incorporate the needs of my students into my unit and to be flexible with its timeline and structure as needed to provide the best support for my students as they work toward the goal of creating their own maps. Among my anticipated adaptations will be allowing students more or less time for certain activities, and providing more or less direct instruction based on the previous knowledge of my students and my observations of their understanding of key concepts.

### **Suggestions for Future Projects**

I know this is not the last time I will create curriculum for my students. I care so deeply about providing a nourishing and challenging learning environment that I am constantly looking for ways to bring Student Driven Inquiry into my classroom. For me and my district, a natural extension of this project would be to continue to examine the Social Studies standards for fourth grade and to design additional units to support students to attain these standards throughout the entire year.

Additionally, other future projects could include the creation of Student Driven Inquiry units in other subject areas in my own classroom or district. In addition to Social Studies our fourth grade curriculum includes Science, Language Arts, Math, and Health. There is room for the development of new units in all of these areas and could eventually provide students with meaningful Student Driven Inquiry throughout their entire fourth grade year.

I know there are many other like-minded teachers in my district and that the overall district philosophy supports Student Driven Inquiry at the elementary level. In

addition to sharing my unit with the other fourth grade teachers in my district, I would recommend that our district consider professional development opportunities for teachers in Student Driven Inquiry related areas. Relevant topics might include Project Based Learning or other models of Student Driven Inquiry, 21st Century learning, and student centered learning. The more exposure teachers have to the power of Student Driven Inquiry, the more potential they have for implementing it in their own classrooms.

### **Summary**

The creation of this unit and the capstone process has inspired me to continue to grow and learn as a teacher. My reflections on this process and my learnings demonstrate the power that teachers have in the world of education to continue to work toward creating experiences that are best for students.

I have created a unit that answers my question “*How can I design a Spanish immersion social studies unit to bring Student Driven Inquiry to a suburban elementary school while still meeting state and district requirements?*” Through an extensive Literature Review and the development of a social studies unit in Spanish, I have created an opportunity for students to learn through Student Driven Inquiry and meet the state and district requirements.



## References

- Barron, B., & Darling-Hammond, L. (2008). Powerful learning: Studies show deep understanding derives from collaborative methods. Retrieved from <https://www.edutopia.org/inquiry-project-learning-research>
- Bray, B., & McClaskey, K. (2013). A step-by-step guide to personalize learning. *Learning & Leading with Technology*, 40(7), 12.
- Brookhart, S. M. (2016). Start with higher-order thinking. *Educational Leadership*, 74(2), 10-15.
- Buchanan, S., Harlan, M. A., Bruce, C., & Edwards, S. (2016). Inquiry based learning models, information literacy, and student engagement: A literature review. *School Libraries Worldwide*, 22(2), 23-39. doi:10.14265.22.2.03
- Buck Institute of Education. (2017). Why PBL? Retrieved from [https://www.bie.org/about/why\\_pbl](https://www.bie.org/about/why_pbl)
- Buck Institute for Education. (2015) Project Design: Overview and Student Learning Guide. Retrieved from: [https://www.bie.org/object/document/project\\_design\\_overview\\_and\\_student\\_learning\\_guide](https://www.bie.org/object/document/project_design_overview_and_student_learning_guide)
- Checkley, K. (1995). Student-directed learning. *Education Update*, 37(9).
- Duke, N. K., Halvorsen, A., & Strachan, S. L. (2016). Project-based learning not just for STEM anymore. *Phi Delta Kappan*, 98(1), 14-19. doi:10.1177/0031721716666047

- Dwyer, B. (2016). Engaging all students in internet research and inquiry. *Reading Teacher, 69*(4), 383-389. doi:10.1002/trtr.1435
- Gibson, L. (2011). Student-directed learning: An exercise in student engagement. *College Teaching, 59*(3), 95-101. doi:10.1080/87567555.2010.550957
- GSI Teaching & Resource Center (2017). Cognitive constructivism. Berkeley Graduate Division. Retrieved from:  
<http://gsi.berkeley.edu/gsi-guide-contents/learning-theory-research/cognitive-constructivism/>
- Jiusto, S., & DiBiasio, D. (2006). Experiential learning environments: Do they prepare our students to be self-directed, life-long learners? *Journal of Engineering Education, 95*(3), 195-204.
- Juliani, A. J. (2014). *Inquiry and innovation in the classroom : Using 20% time, genius hour, and PBL to drive student success*. Florence, US: Routledge. Retrieved from <http://site.ebrary.com/lib/hamline/docDetail.action?docID=10879765&ppg=1>
- Katz, M. (1996). Teaching organic chemistry via student-directed learning: A technique that promotes independence and responsibility in the student. *Journal of Chemical Education, 73*, 440-445. doi:10.1021/ed073p440
- Kim, K. H. (2011). The creativity crisis: The decrease in creative thinking scores on the Torrance tests of creative thinking. *Creativity Research Journal, 23*(4), 285-295.  
Doi: 10.1080/10400419.2011.627805

Larmer, J., & Mergendoller, J. R. (2011). The main course, not dessert: How are students reaching 21st century goals? with 21st century project based learning. *Buck Institute for Education*.

Lipnevich, A., McCallen, L., Miles, K., & Smith, J. (2014). Mind the gap! students' use of exemplars and detailed rubrics as formative assessment. *Instructional Science*, 42(4), 539-559. doi:10.1007/s11251-013-9299-9

Maiers, A. (2011). Guidelines of passion-based learning. Retrieved from <http://www.angelamaiers.com/2011/07/guidelines-of-passion-based-learning/>

Maiers, A. & Sandvold, A. (2011). *Passion-driven classroom, the*. GB: Routledge Ltd. doi:10.4324/9781315856421

Marzano, R. J., & Pickering, D. J. (2010). *The highly engaged classroom* (1st ed.). Bloomington: Marzano Research.

McTighe & Associates (2011) Ubd unit template (version 2.0). Retrieved from: <https://jaymctighe.com/resources/downloads/>

Minnesota Department of Education. (2011). *Minnesota K-12 academic standards: Social studies*

Minnesota report card (2017). Retrieved from

[http://rc.education.state.mn.us/#demographics/orgId--999999000000\\_\\_groupType--state\\_\\_p--1/orgId--999999000000\\_\\_groupType--state\\_\\_p--1/orgId--10276000000\\_\\_groupType--district\\_\\_p--1](http://rc.education.state.mn.us/#demographics/orgId--999999000000__groupType--state__p--1/orgId--999999000000__groupType--state__p--1/orgId--10276000000__groupType--district__p--1)

- Minnetonka Public Schools. (2016). Instructional framework. Retrieved from <https://www.minnetonkaschools.org/district/departments/teaching-and-learning/framework>
- Núñez, J. L., & León, J. (2015). Autonomy support in the classroom. *European Psychologist, 20*(4), 275-283. doi:10.1027/1016-9040/a000234
- Padilla, V., & Mieliwocki, R. (2015). Genius Hour: A learner-centered approach to increasing rigor in the classroom. *Instructor, 124*(5), 45-47.
- Partnership for 21st Century Learning. (2016). Framework for 21st century learning.
- Partnership for 21st Century Skills. (2016). Learning for the 21st century. Retrieved from [http://www.p21.org/storage/documents/P21\\_Report.pdf](http://www.p21.org/storage/documents/P21_Report.pdf)
- Patall, E. A., Cooper, H., & Wynn, S. R. (2010). The effectiveness and relative importance of choice in the classroom. *Journal of Educational Psychology, 102*(4), 896-915. doi:10.1037/a0019545
- Platz, D. L. (1994a). Student directed planning: Fostering student ownership in learning. *Education, 114*, 420-422.
- Rosenow, C., R. (2014). Collaborative design: Building task-specific rubrics in the honors classroom. *Journal of the National Collegiate Honors Council, 15*(2), 31-34.
- Roth, N. E. (2017). Stories of exploration in a student-centered learning environment. *Art Education, 70*(1), 8-14. doi:10.1080/00043125.2017.1247559

Saltman, D. (2012). Student-directed learning comes of age. *Education Digest*, 77(7), 4-8.

Savery, J. R. (2006). Overview of problem-based learning: Definitions and distinctions. *Interdisciplinary Journal of Problem-Based Learning*, 1(1)  
doi:10.7771/1541-5015.1002

Skinner, E. A., Wellborn, J. G., & Connell, J. P. (1990). What it takes to do well in school and whether I've got it: A process model of perceived control and children's engagement and achievement in school. *Journal of Educational Psychology*, 82(1), 22-32. doi:10.1037/0022-0663.82.1.22

Small, T. (2009). Assessing enquiry-based learning: Developing objective criteria from personal knowledge. *The Curriculum Journal*, 20(3), 253-270.  
doi:10.1080/09585170903195878

Stover, K., Yearta, L., & Harris, C., (2016). Formative assessment in the digital age. *Reading Teacher*, 69(4), 377-381. doi:10.1002/trtr.1420

Thomas, J. W. (2000). A review on the research of project-based learning.

Turner, S. L. 1. (2011). Student-centered instruction: Integrating the learning sciences to support elementary and middle school learners. *Preventing School Failure*, 55(3), 123-131. doi:10.1080/10459880903472884

- Van Deur, P. (2008). Assessing the effect of explicit teaching on high reasoning primary students' knowledge of self-directed learning. *Gifted & Talented International*, 23(1), 141-152.
- West, J. M., & Roberts, K. L. (2016). Caught up in curiosity: Genius hour in the kindergarten classroom. *The Reading Teacher*, 70(2), 227-232. doi:10.1002/trtr.1497
- Genius Hour (2017) What is genius hour? Retrieved from <http://www.geniushour.com/what-is-genius-hour/>
- Wiggins, G. P., & McTighe, J. (2005). *Understanding by design* (Expanded 2. ed. ed.). Alexandria, Va: Association for Supervision and Curriculum Development.
- Zafra-Gómez, J. L., Román-Martínez, I., & Gómez-Miranda, M. E. (2014). Measuring the impact of inquiry-based learning on outcomes and student satisfaction. *Assessment & Evaluation in Higher Education*, 40(8), 1050-1069. doi:10.1080/02602938.2014.963836
- Zmuda, A., Ullman, D., & Curtis, G. (2015). *Learning personalized* (1st ed.). US: Jossey Bass Ltd. Retrieved from <http://replace-me/ebraryid=11020386>

## APPENDIX A

## Completed UbD Template 2.0

Stage 1 Desired Results		
<p style="text-align: center;"><b>ESTABLISHED GOALS</b></p> <p>Minnesota State Standards:</p> <p><i>4.3.1.1.1</i> People use geographic representations and geospatial technologies to acquire, process and report information within a spatial context.</p> <p><i>4.3.1.2.1</i> Geographic inquiry is a process in which people ask geographic questions and gather, organize and analyze information to solve problems and plan for the future.</p>	<i>Transfer</i>	
	<i>Students will be able to independently use their learning to...</i>	
	Ask and research a geographical question and design a map to communicate their findings	
	<i>Meaning</i>	
	<p><b>UNDERSTANDINGS</b></p> <p><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>● Maps are human representations of a physical space that help communicate geographic information and answer geographic questions</li> <li>● Different types of maps help us understand elements of a geographic area.</li> <li>● Maps include elements that help us interpret them. These elements include a title, orientation, date, author, legend or key, and scale (TODALS)</li> </ul>	<p><b>ESSENTIAL QUESTIONS</b></p> <ul style="list-style-type: none"> <li>● What are maps and how do we use them?</li> <li>● What geographic questions can we ask?</li> <li>● How do we answer geographic questions?</li> <li>● How can we use maps to communicate information?</li> </ul>

<i>Acquisition</i>		
	<p style="text-align: center;"><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>● Maps help communicate geographic information</li> <li>● There are many types of maps and they serve unique functions. Types of maps include political, physical, topographic, climate, economic, population, and thematic maps</li> <li>● Elements of maps help us interpret information. These elements include a title, orientation, date, author, legend or key, and scale (TODALS)</li> </ul>	<p style="text-align: center;"><i>Students will be skilled at...</i></p> <ul style="list-style-type: none"> <li>● Asking geographic questions</li> <li>● Researching answers to geographic questions</li> <li>● Reading maps of many types</li> <li>● Creating maps that answer geographic questions</li> </ul>
<b>Stage 2 - Evidence</b>		
<b>Evaluative Criteria</b>	<b>Assessment Evidence</b>	
Rubric	<p style="text-align: center;">PERFORMANCE TASK(S):</p> <p>Students will create a map that answers a geographic question. Students will use their research and knowledge of types of maps and elements of maps to create a map that effectively communicates information.</p>	
Rubric	<p style="text-align: center;">OTHER EVIDENCE:</p> <p>Students will keep a regular journal to record their findings and understandings as they develop knowledge of geographic questions and maps. Students will participate in discussions and write reflections upon their understandings and the map creation process.</p>	



## Stage 3 – Learning Plan

### *Summary of Key Learning Events and Instruction*

\*see lesson plans for specific lesson outlines

Weeks 1-2:

- As a class read a variety of articles and maps that represent geographical questions
- Practice identifying elements of maps, reading/interpreting maps/photos, discussing how maps serve as communication tools, types of maps and what kind of question they answer
- Students familiarize themselves with possible geographical questions and map basics
- Students reflect upon the use of maps in our lives and how they are communication tools
- As a class we will review the outline for the rubric and fill in more details for each criteria

Weeks 2-3:

- In partnerships, students pose their own geographical questions based on an extension/version of a question they are familiar with from our class study or a new question of their own
- Students research their question using a variety of resources - students may need to revise their questions based on available information, students may need to collect data or contact experts to better answer their question
- Students reflect on the research process and their understandings of maps as communication tools and the study of geographical questions

Weeks 3-4:

- Students create their maps based on their research using the map type and media tool that best fits their question and interests (digital map, hand-drawn map, interactive map)
- Students present their findings to the class in a “map museum.” The maps will be catalogued in our school library for future reference and student use.
- Students reflect upon their process and findings and use our class-created rubric to self-assess their final map projects. Students meet with the teacher to discuss their rubric and make any necessary changes based on teacher and student reflections.

McTighe & Associates (2011) Ubd unit template (version 2.0). Retrieved from:

<https://jaymctighe.com/resources/downloads/>

## APPENDIX B

## Completed Project Design Overview Planning Guide and Student Learning Guide

PROJECT DESIGN: OVERVIEW				page 1	
<b>Name of Project:</b> Map Design		<b>Duration:</b> 6 weeks			
<b>Subject/Course:</b> Social Studies (Geography)		<b>Teacher(s):</b> Annie McGinn		<b>Grade Level:</b> 4 - Spanish Immersion	
<b>Other subject areas to be included, if any:</b> language arts (research), art (visual design), history					
<b>Key Knowledge and Understanding</b> (CCSS or other standards)					
4.3.1.1.1 People use geographic representations and geospatial technologies to acquire, process and report information within a spatial context.					
4.3.1.2.1 Geographic inquiry is a process in which people ask geographic questions and gather, organize and analyze information to solve problems and plan for the future.					
<b>Success Skills</b> (to be taught and assessed)		Critical Thinking/Problem Solving		Self-Management	X
		Collaboration		Other: Communication	X
<b>Project Summary</b> (include student role, issue, problem or challenge, action taken, and purpose/beneficiary)		In this project students will take on the role of cartographers and design and create a map based on a geographical question of interest to them. Students will research their specific question, create a map based on their findings, and catalogue their maps in our school library for future reference for Spanish speakers.			
<b>Driving Question</b>		How can we use maps to communicate information?			
<b>Entry Event</b>		Class discussion about our current understanding of maps and lack of resources for maps in Spanish. Students will take charge to create more maps in Spanish on topics of interest to elementary students.			
<b>Products</b>		Specific content and competencies to be assessed:			
Individual: Journal reflections Research notes		*see Journal Rubric			

	Team: (Partnership) Map that answers a geographical question	Specific content and competencies to be assessed: *see Map Rubric	
<b>PROJECT DESIGN: OVERVIEW</b>			
page 2			
<b>Making Products Public</b> (include how the products will be made public and who students will engage with during/at end of project)	Students will post maps to our classroom website and catalogue them in our school library. Students will present to classmates		
<b>Resources Needed</b>	On-site people, facilities: <ul style="list-style-type: none"> <li>• Classroom teacher</li> <li>• Librarian</li> </ul>		
	Equipment: <ul style="list-style-type: none"> <li>• Computers</li> <li>• Books</li> </ul>		
	Materials: <ul style="list-style-type: none"> <li>• Question planning sheet</li> <li>• Research guide</li> <li>• Journal</li> <li>• Printed Map Samples</li> </ul>		
	Community Resources: <ul style="list-style-type: none"> <li>• Map expert/geographer</li> </ul>		
<b>Reflection Methods</b> (how individual, team,	Journal/Learning Log: <ul style="list-style-type: none"> <li>• Individual journal reflections</li> </ul>	X	Focus Group

	<ul style="list-style-type: none"> <li>• Different types of maps help us understand elements of a geographic area.</li> </ul>	<ul style="list-style-type: none"> <li>- Students share out from their journals with partners and in the whole class setting</li> <li>- Teacher observations during group activities</li> </ul>	<ul style="list-style-type: none"> <li>- Discovery and definition of understanding of types of maps and how they are used</li> <li>- Class discussion and teacher modeling</li> </ul>
	<ul style="list-style-type: none"> <li>• Maps include elements that help us interpret them. These elements include a title, orientation, date, author, legend or key, and scale (TODALS)</li> </ul>	<ul style="list-style-type: none"> <li>- Students share out from their journals with partners and in the whole class setting</li> <li>- Students record notes on the map elements in their journals</li> <li>- Teacher observations during group activities</li> </ul>	<ul style="list-style-type: none"> <li>- Discovery and definition of the elements of maps</li> <li>- Class discussion and teacher modeling</li> </ul>
Map (partnership)	<ul style="list-style-type: none"> <li>• 4.3.1.2.1 Geographic inquiry is a process in which people ask geographic questions and gather, organize and analyze information to solve problems and plan for the future.</li> </ul>	<ul style="list-style-type: none"> <li>- Research Plan</li> <li>- Map Creation Guide</li> </ul>	<ul style="list-style-type: none"> <li>- Teacher modeling for choosing an effective question and the research process</li> <li>- Teacher check-ins throughout the research process</li> </ul>

and/or whole class will reflect during/at end of project)	<ul style="list-style-type: none"> <li>Partner rubric check-ins</li> </ul>		
	<b>Whole-Class Discussion:</b> <ul style="list-style-type: none"> <li>Weeks 1/2 - what do we know about maps?</li> <li>Week 3/4 - how is our research going?</li> <li>Week 3/4 - how is our design going?</li> </ul>	X	Fishbowl Discussion
	Survey		Other:
<b>Notes:</b>			
<b>PROJECT DESIGN: STUDENT LEARNING GUIDE</b>			
<b>Project:</b> Map Design			
<b>Driving Question:</b> How can we use maps to communicate information?			
<b>Final Product(s)</b> Presentations, Performances, Products and/or Services	<b>Learning Outcomes/Targets</b> knowledge, understanding & success skills needed by students to successfully complete products	<b>Checkpoints/Formative Assessments</b> to check for learning and ensure students are on track	<b>Instructional Strategies for All Learners</b> provided by teacher, other staff, experts; includes scaffolds, materials, lessons aligned to learning outcomes and formative assessments
Reflection Journal (individual)	<ul style="list-style-type: none"> <li>4.3.1.1.1 People use geographic representations and geospatial technologies to acquire, process and report information within a spatial context.</li> </ul>	<ul style="list-style-type: none"> <li>Students share out from their journals with partners and in the whole class setting</li> <li>Teacher observations during group activities and research</li> </ul>	<ul style="list-style-type: none"> <li>Exploration of how we use maps</li> <li>Discovery and expansion of understanding of types of maps and how they are used</li> <li>Discovery and definition of the elements of maps</li> </ul>

For more PBL resources visit [bie.org](http://bie.org)

©2015 BUCK INSTITUTE FOR EDUCATION

Buck Institute for Education. (2015) Project Design: Overview and Student Learning

Guide. Retrieved from:

[https://www.bie.org/object/document/project\\_design\\_overview\\_and\\_student\\_learning\\_guide](https://www.bie.org/object/document/project_design_overview_and_student_learning_guide)