

Summer 2018

Adapting Project-Based Learning For English-Language Learners In Middle-School Social Studies

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ADAPTING PROJECT-BASED LEARNING FOR
ENGLISH-LANGUAGE LEARNERS IN MIDDLE-SCHOOL SOCIAL STUDIES

By

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

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August, 2018

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With gratitude to Michael and Phoebe for all their support and patience, to my inspirational colleagues, and to Professors Tom Wolfe and Melissa Erickson, who know how to let students learn.

“A teacher in search of his/her own freedom may be the only kind of teacher who can arouse young persons to go in search of their own.”
- Maxine Greene, *The Dialectic of Freedom*

ACKNOWLEDGEMENTS

Special thanks to all my brilliant Minnesota Studies and
U. S. History students who courageously learned along with me.

What's your next step?

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CHAPTER ONE

Introduction

In spite of its dusty reputation in some circles, social studies classes are brimming with possibilities for students to connect academic content with their real world (Sandmann & Ahern, 2002) while developing critical thinking, reading, writing, and research skills (Bloom, 1956; Boss, 2015; Governale, 1997). In addition to addressing academic goals, social studies research projects can also help develop students' intellectual tools that equip them to grow into curious, culturally-literate, confident, and well-rounded citizens of our complex, multicultural world (Gay, 2010). Despite its demonstrated potential and teachers' best intentions, we do not always make the most of these opportunities for deeper learning, especially for students who new to are learning English (Bunch, Kibler, & Pimentel, 2013).

Project-based Learning, or PBL (See Appendix A), has recently been the subject of renewed interest from educators who want to engage students in more authentic learning (BIE, 2018; Yew & Goh, 2016). Research has shown that students benefit academically and socially from PBL by creating essential questions to drive their own inquiry and collaborating to create projects that teach peers (Markham, Larmer, & Ravitz, 2003). But gold-standard PBL (See Appendix B) that yields high-quality student outcomes may seem out of reach for middle schoolers who are not yet reading and

writing at grade level. My work as a public middle-school teacher of diverse students has led me to ask: How can Project-Based Learning be adapted to enhance middle school social studies lessons and learning outcomes for English Language Learners and other struggling students?

PBL methods hold great promise for teaching middle schoolers to develop their own essential research questions, create rigorous and relevant projects, connect to their larger communities, and share their learning with peers. Outcomes for PBL include greater self-determination, improved literacy and 21st Century learning skills, more positive relationship to academics, and improved student confidence in themselves as learners (Penuel, Means, & Simkins, 2000; Blumenfeld, 1991; Woolfolk, 2011, p. 469). However, sophisticated and authentic PBL is sometimes seen to be out of reach of our ELLs and struggling readers because their language abilities are below grade level. According to the sociocultural conception of motivation, when teachers create a culture of belonging, striving and high-expectations for all students, their motivation and depth of learning improve through increased identification with their community of practice (Maslow, 1954; Woolfolk, 2011, pp. 463-464). Creating this kind of learning environment is essential in working with struggling students (See Appendix C).

Scholarly articles and sample projects that show how to adapt PBL for all learners are becoming more common as interest grows in PBL, but searching for them when one is new to the discipline of PBL can be bewildering. In the spirit of PBL leaders like The Buck Institute of Education, Teach Thought, and Edutopia, I envisioned designing a searchable, open-source site for my teaching peers to find resources in one, user-friendly

place, but with a focus on linking projects to Minnesota state social studies standards and strategies for teaching ELLs. This would help teachers to reach our particular students with high quality instruction with projects suited to their needs. Many of my colleagues share my experience in trying to adapt hands-on learning to include all students without always having tested tools available that support them in keeping rigor and independence in PBL for language learners. This research addresses that gap in supporting middle school ELLs to fully participate in mainstream classwork.

To address this gap within my own community of practice, I evaluated existing strategies for integrating PBL in the classroom and created an online resource that provides teachers with references and practical tools for adapting PBL using ELL teaching strategies like Guided Language Acquisition Design, or GLAD (See Appendix D) and Visual Thinking Strategies, or VTS (See Appendix E). More complete explanations of PBL, GLAD, and VTS follow in the next two chapters.

My project has shared other literacy-promoting strategies and social learning ideas to scaffold authentic PBL, including customized rubrics for ELLs, scalable project examples, adaptations and lesson designs to effectively promote student-driven inquiry for wider use with a variety of students. From my research and classroom experience, I have seen that project collaborations offer many possibilities for students to engage deeply and enthusiastically with content, and that accessing this kind of learning does increase their comprehension in literacy, formal and informal language acquisition, critical thinking, engagement, and other measures. Accessing PBL is often the privilege

of high-achieving learners at well-funded schools, but all learners should be able to benefit from thoughtful scaffolds integrated into the design of projects.

Rationale

Many students, whether below, at, or above grade level, face barriers when confronting a textbook- and lecture-centered curriculum in social studies. English language learners, students with 504 plans, Individual Education Plans (IEPs), and those who do not come from advantageous cultural backgrounds are only some of the groups that PBL can especially help in accessing content (Boss, 2015; Hollie, 2013; BIE, 2018). Teachers may lose students' enthusiasm for learning when they do not design to engage strengths that are particular to the middle grades, such as social learning, auditory learning, visual/symbolic learning, critical thinking, background knowledge (Moll & Gonzalez, 2004) among others. In short, reading is not the only way to connect with social studies content, and writing is not the only way to demonstrate student knowledge (Goldenberg, 2014). Educators can create entry points to the content that are alternatives to the traditional text-based ones in order to engage visual learners (Silverman, 2015) help students feel more confident with the content and build literacy skills along the way (De la Cruz, 2014; Kliebard, 2004).

Student-driven inquiry led by essential questions is a powerful means of presenting complex concepts in a few strokes (Boss, 2015). This is most effective when educators support project design processes with key scaffolds and use solid teaching tools and evaluations that are customized to be relevant in a particular classroom context. Language and conceptual supports are vital to students who are still building confidence

in their academic reading and writing abilities, as well as to their peers who already work at grade level or beyond (Echevarria, 1995; Misco & Casteñeda, 2009). Because mastery in the middle grades is not only about understanding content, but also becoming comfortable with intellectual tools and and scholarly practices that new to students at this grade level, it is not enough to work on the mechanics of language acquisition and hope students persist until the more interesting content arrives. Teachers must engage them in developmentally appropriate content and activities right now, with supports to help them overcome some of the barriers they face (Ormrod, 2003).

This research project is particularly concerned with struggling or disconnected learners who may have lower reading levels than their peers and may need to be invited into the content via alternative routes. Many of my public middle-school students have struggled in precisely this way. Their persistence has inspired me to look for feasible, research-based means for teachers to engage them in authentic learning opportunities that their more advanced peers can access more easily. With the right supports, all students have the potential to benefit from more accessible PBL.

At its best, interdisciplinary PBL reaches many different types of students with compelling, enjoyable, rigorous learning, by allowing students to research real questions of interest to them. PBL helps them to embrace social studies with greater confidence and gives students a taste of productive challenges within their proximal zone of development that forge stronger identities as capable learners (Driscoll, 1994).

Personal Narrative

My own interest in active learning and hands-on research starts with a story about identity. My mother came to the U.S. in her teens during the 1950s as a non-English speaking, stateless refugee, the youngest in a family of 10. I grew up hearing about how difficult it was for her to leave her native language and culture behind and try to understand everything anew, particularly her struggles as an ELL in public high school. A bright and determined student, she struggled mightily for a few years learning English, and endured bullying for the way she spoke for a few years. She saw this time as a major setback in terms of her future prospects, and it was. In terms of further education and career opportunities, she lost out, and was really not able to address this until 35 years later when she finally returned to finish college. So when I say how important quality language instruction is for our ELLs, I have some familial experience of what that means.

My mother and her family were Lithuanians displaced by the Soviets in 1943 and then deported by the Germans, who thankfully never realized they were from a mixed Jewish/Christian family. My grandparents' survival strategy meant that they did not tell their children about their own heritage. My grandfather found ways to acquire forged documents that changed their surname slightly to pass as German. The secrecy was originally out of fear for their safety during the war, and later for reasons known only to them. The question of ethnic identity loomed large to me as I came of age: there were signs that all was not as it seemed (other Jewish surnames and given names in the family tree, *shtetl* recipes, and cultural practices that did not fit into the typical Lithuanian ones, among others), but I was an adult before it occurred to me to wonder why our family's

story about itself had some holes in it. It was then that I began to ask questions of the surviving relatives.

Even as a young child, I loved to read history, and to listen to my family's unreliable personal narratives about their experiences, but I was always more drawn to the more trustworthy testimony of their material culture. I saw how clothing, objects, language, and food could speak to a truer history than even eyewitnesses could or would. All this uncertainty whetted my interest in researching on my own. Because they were not much discussed within my hearing as a child, or only in Lithuanian, which I could not understand, family personal histories were mysteries that I had to learn more about somehow. More than the history we studied in school, my family's tangle of ethnicities and competing narratives created a complex presence that seemed very much alive, and not to be trusted.

My early college years were spent training as an artist. Later, I worked as a historical costume technician at an opera company and then in a large design workshop that produced wearable costumes for syndicated theme parks and ice skating shows around the world. These experiences drew me even further into researching historic sewing and design techniques, including archival and primary source research at sites like the Goldstein Museum textile collection at the University of Minnesota. The Goldstein allows visitors to see historic garments from the inside out, and even to draw them in a kind of laboratory setting, which is helpful to those like me who benefit from hands-on learning (UMN: Goldstein, 2018). The practice of research was always for a purpose, and usually that purpose was to create something real that others would use.

The habit of investigating on my own served me well when I eventually returned to school full time later in life to study history at the University of Minnesota, where I turned my focus completely to research projects of another kind. As long as I built some aspect of my own curiosity and project making into my writing and research, I found history to be enjoyable and creative work.

My senior history thesis project (May, 2011) concentrated on postwar Eastern Europe and allowed me to conduct research on my own in Hungary for three months. I traveled, hired interpreters, met with archivists and historians, and took video and audio of primary sources who were young participants in the 1956 Hungarian Uprising against the Soviets. The final research paper focused on Hungary's retelling of the story of the Uprising, tracking shifts in historical accounts that were altered to suit the political agendas of changing regimes (May, 2011). I also spent a lot of time looking at material culture and art from the Stalin era up to the present, to help me understand the spirit of the times and how history has been reimagined as a political weapon in today's divisive era of ethnic politics in Hungary.

My time in Hungary helped me to discover an aptitude for more serious academic work. I learned that immersing in a culture offered surprising ways to learn a great deal within a short span of time. As a non-traditional student who saw history as a way to find my place in the larger world, I was inspired me to pursue my Master of Arts in Teaching and become a social studies educator. These days, I put my interests to use by teaching the joy of hands-on history to middle-schoolers who are finding their own scholarly identities one project at a time.

School Profile

For two years, I have served in two metro-area public school districts as a reserve teacher, and then, for the last two years, I have been a full-time, middle-school social studies teacher in a large, urban district. My teaching work has offered daily opportunities to enliven social studies classes by designing and adapting existing material to reach my students who come diverse cultural backgrounds, and most of whom have some recent immigration history in their families.

For the last two years, our school has attempted to model itself on inclusion classrooms, in an approach that may differ from the accepted inclusion models (IDRC, 2018) in many ways. If inclusion is to mean more than a word that sounds progressive, teachers, families and staff need a shared set of expectations, supports and training in order to meet the needs of all students (Mastropieri & Scruggs, 2004). In our case, special education students and English learners of all levels who had previously been taught in sheltered instruction (See Appendix F) environments by licensed special education and ESL teachers were placed in large, mainstream classes of 30 or more students with little notice. This led to staff in our building experimenting by applying some of the sheltered-instruction routines to small, heterogeneous groups of former special education students, ELLs and mainstream students in creating small groups designed to foster growth for all.

In a situation faced by many teachers in underfunded districts, there were few curriculum resources and no time for me to consult with special education or ESL teachers. Additionally, our district social studies lead position had been vacant for over

six months, so I was unsure where to seek guidance. Our school did not always have classroom texts that students could access in English, let alone a second language. I knew from networking with my middle school social studies colleagues at other district schools that each of us was becoming a curriculum designer for our particular student population out of necessity.

One of the benefits of working in such an environment was that I had some freedom to innovate in terms of how to teach. However, like other social studies educators in my district, I was often scrambling to find appropriate readings or rewrite existing ones entirely to reach students who were as much as three or four years behind grade level, or could not read in English. The more adventurous my search became for interesting content, the more I had to struggle to make it accessible. This led me and some of my social studies colleagues to share our unit and lesson planning materials online with one another. But I knew that this was not nearly enough to help my particular students succeed and make the literacy, academic, and even social-emotional gains they needed in order to find school a more positive, responsive, and productive place to be.

In my middle school classes in 2017, 96% of students were registered at or below the federal poverty level, 13% were considered homeless/highly mobile, and 98% were students of color (MDE, 2018) being taught by a majority of white teachers, like me. My own sixth- and seventh-grade students were 59% Latino, 18% East African, 12% African-American, 4% Native-American and 1% Caucasian. Additionally, 76% of my students scored below grade level in reading MCAs, 55% were English-language learners (ELLs). Ten percent of my students in sixth and seventh grade were reading at or below a

first-grade level when they walked into my class for the first time (MDE, 2018). Finally, many of my students had histories of significant negative interactions with school, teachers, and academic content, and some struggled with engagement and basic behavior expectations on a daily basis. For a first full-time teaching assignment, I had my work cut out for me to address all of their learning needs with equity, especially since my own core teaching objectives included challenging, hands-on, collaborative learning for all my students.

Project Purpose

This context for my first year of teaching drove me to search for innovative strategies that included language supports, as well as other classroom grouping and scaffolding routines that might help my students with content learning and literacy. I developed an interest in how project-based approaches could be adapted to engage struggling readers and English language learners (ELLs) while maintaining academic rigor and authenticity. I enrolled in a summer seminar from the Buck Institute of Education to learn how to use PBL to design for collaborative research and projects. Graduate coursework at Hamline led me further into a developing my constructivist teaching philosophy and using it to guide my planning and design.

I am interested in collaborating with other social studies educators in developing rigorous projects to reach more students with the rich learning opportunities that PBL offers. Giving students greater voice and choice in their learning is really an issue of equity (Boss, 2012). While many of my students may not yet be sophisticated readers, they are already sophisticated thinkers. As such, according to Piaget, they have a

developmental need for complexity and social learning (as cited in Woolfolk, 2011, pp. 49-50) in their classwork, even when they cannot easily access it through traditional text. As educators, we must also have high expectations for engaging lessons, even when our curriculum seems to lackluster, irrelevant, or just missing, and struggling students should not have fewer opportunities than others to achieve their full potential. PBL design offers so much that our students need, and it should be made accessible to all of them.

Student Outcomes

Teaching with authentic student inquiry, research and writing workshop practices invites students to develop greater sensitivity to their surroundings, respect for peers, strategic problem solving, independence, academic risk taking, self direction, and preparedness (Boss, 2012; Kane, 1992). Through close observation of primary sources, discussion, in-class writing, research, academic conversations between peers, and scholarly routines, students bond as a classroom community, develop their individual creative processes and move beyond the traditional lecture format to achieve deeper understandings together. They also learn how to share their research to extend our social studies classroom out into the community (Cruz & Thornton, 2009; Milner, 2014). The relationship of literacy to full participation in higher-order thinking, discussion, and writing is clear: they go hand in hand. Language acquisition theory focuses on the mechanics of how students acquire language, and social studies is a wonderful discipline for supplying the requisite content that is interesting and relevant to students.

Literacy and Fluency. Literacy and fluency are goals that can be addressed by effective PBL in social studies to construct classroom cultures that foster growth (Lee,

2007). The two are interrelated concepts that Cummins reported rely on the simultaneous building of both basic interpersonal communications skills (BICS) and cognitive academic language (as reported in Lenski, et al., 2011, p. 6) through use in the classroom in multiple ways that build academic confidence (p. 5). All students require clear and modeled instruction of academic skills that involve reading and syntax as well as academic language and routines, and ELLs require more. Incorporation of daily modeling, practice and repetition is required to make significant literacy gains for ELLs in particular, but is beneficial for all students (Rupley, Blair, & Nichols, 2009). Lenski et al. (2011) describe the effectiveness of “critical socioliterate approach” as specific to each discipline, and recommend viewing each social studies classroom as being a subculture based on its specific world of ideas (Lenski, et al. 2011, p. 6). Specific instruction to develop literacy and fluency in ELLs will be developed in the next chapter.

Student Self-Concept. Social learning frameworks supply much of the emphasis that PBL has on helping students construct their own inquiry as well as their need for belonging within the classroom and larger communities (Maslow, 1954). Roles routines of academic study are instrumental in making social learning optimal, and inquiry-based learning like PBL is an excellent framework to incorporate those roles, routines, and habits of mind that improve students’ self-conception as scholars (Savitz, 2016).

Collaborative learning helps students who are not confident with reading for academic content at grade level who may have been pulled out of mainstream classes in order to receive sheltered instruction (Gay, 2010; Misco, 2014), especially ELL learners or those with IEPs (See Appendix G). These learners showed gains in metacognition, logically

evaluating information, problem solving, and choosing selecting appropriate strategies or solutions for themselves and their learning teams when heterogeneous groups were constructed to scaffold students and play to their strengths, according to Ennis (as cited in Yang & Gamble, 2013, pp. 398-399).

Building Community. Because a key function of gold standard PBL is to share final projects outside the classroom, students begin to see identify themselves as knowledgeable members within the larger contexts of schools and communities. This step of PBL can address some of the isolation that ELLs can feel when negotiating their own places within the new language and culture. Scaffolding and supportive groups and routines create classroom community with norms of striving, respect, acceptance, and scholarship that has relevance to the world around them - all of these outcomes embody constructivist core values. Family and community members are invited to make connections to school and show how they value students' achievements in academics, further helping students to see themselves as achievers.

Cultural Literacy. Cultural literacy means fluency in a particular culture through being aware of the shared symbology, means of discourse, and general societal context. Hirsch maintains that language literacy is a vital connection to cultural literacy, and that those of us who who have this fluency in both language and culture have an ethical obligation to help others achieve it (Hirsch, 1987, pp. 25-26). It is difficult to imagine one without the other, but many ELL reading strategies focus so much on method that the content can seem to be an afterthought. Social studies supplies an ample amount of cultural content from the second culture while drawing on the funds of knowledge that

students already have about their first cultures, which supply the syntax for cultural literacy in much the same way home languages do for literacy (Moll & Gonzalez, 2004).

Students consider big questions of ethics and society when studying history and other topics in social studies. Who determines how historical events are remembered? What voices in historical narratives have been silenced? How do we look at the past without clouding our view with our own modern ethical frameworks? Students are essentially training to think their way through tough questions, to understand complexities and contradictions, and to find primary sources to support their ideas. This is a kind of social science application of scientific method, in which even finding out one's assumptions were wrong yields valuable progress .

In addition to learning the mere sequence of historical events and geographical themes, through culturally relevant projects, students become active investigators into global, national, state and local matters through sources that connect to themselves and their communities. They can find their own places in the world of big ideas and conversations even if they are still developing what they have to say. By connecting to the excitement of what is going on in class, digging deeply into the content, interrogating the sources they find, and being inspired to find out more they begin to see themselves as citizens invested in how things happen in their own classroom, community, and the larger world (Gay, 2010).

Unlike rote learning, cultural literacy skills are highly transferable, leading to lasting critical thinking gains through learning to see, hear, interpret, and write about the world - both past and present (Lee, 2007). Students gain academic confidence as they

learn key skills in leading with their own questions and in analyzing what they find in order to create a more sophisticated, memorable and relevant context for what they learn. Through the funds of knowledge approach, educators show their high expectations and honor the wisdom in their students' communities, including them in the larger cultural conversations happening around them (*Howard, 2001*). Without these vital connections to student experiences, institutionalized education can be a means of further oppression (Ladson-Billings, 1994; Moll & Gonzalez, 2004).

Summary

Teaching middle school students, whether struggling, average, or accelerated learners, has shown me that they connect to social studies content in surprising ways when given an open-ended invitation to do so. The research has also shown that introducing PBL into social studies classes can improve ELL and other students' outcomes in literacy, fluency, student self-concept, 21st century learning (Larmer, Mergendoller, & Boss, 2012). When considering the evidence that PBL is so effective, the question becomes not whether we should use student-driven inquiry, but how we should use it best for our particular students, and specifically, how can Project-Based Learning be adapted to enhance middle school social studies lessons and learning outcomes for English Language Learners and other struggling readers?

When looking for best practices to implement PBL in my own classroom using language and learning supports for all my students, I confronted two significant barriers: ELL strategies did not always address the demands of hands-on learning and critical thinking because it was perceived to be outside the language (and by implication,

cognitive and expressive) capacities of my ELLs. At the same time, many PBL examples and resources seemed to be aimed at students who were very different than mine.

In short, the unstated expectation seemed to be that PBL was meant for students who were already reading and achieving at or near grade level. This research project explores how to integrate PBL and language acquisition support, highlights some effective practices that teachers can use, and invites educators to share project ideas and outcomes in their classrooms. In keeping with the final step of PBL, sharing results outside the classroom, I designed a searchable website hosted by Weebly (Weebly, 2018) to document and share this research and provide a space for my middle school social studies colleagues to share ideas with one another in the future.

Improving our current curriculum delivery methods to reach all learners requires more than just some inspiration and extra time, but teachers who lack an affinity for innovative project design should not feel discouraged from trying, anyway. PBL itself is not a binary paradigm in which the learner either succeeds or fails. Rather, there are degrees of authenticity in its design with the ultimate, Gold-standard PBL (Appendix B) framed around seven key elements, but educators may work up to this with practice and multiple iterations in class.

PBL is at its most effective when its core principles are well integrated into each part of the project, but gains can be made in even limited implementation of PBL. Ideas and templates for lessons are available from a wide variety of trusted sources like the Buck Institute for Education (Larmer, 2017; Markham, Larmer, & Ravitz, 2003), as well as arts and cultural institutions, teaching collaboratives, history organizations, and others

(Parkhouse, 2015; Russell, 2000). Teachers with a willingness to use new techniques will be rewarded by their students' increased engagement, deeper knowledge, connection to content, and transferable skills (Housen, 2001; Ryan & Patrick, 2001).

The collaborative work of Housen, a psychologist, and Yenawine, a museum curator, created the Visual Thinking Strategies (VTS) curriculum in the 1980s to enliven other subject areas through critical discussions of art. VTS is a scripted, multi-step process for drawing students into critical discussion, and it serves a key component in my project to offer more ways to introduce struggling readers in middle school social studies PBL through art and history imagery and discussion activities. These lead to writing their own questions and then developing driving research questions of their own that will shape their research (Housen;Yenawine).

Finally, the posthumously published work of educational psychologists Vygotsky (1978, 1986, 1997) and early 20th century constructivist educational philosophers Dewey (1910, 1938) and Kilpatrick (1918) provide much of the rationale for this study. Their early, and still relevant, reformist works focused on designing project learning opportunities that applied to what students wanted and needed to know. Constructivists, past and present, inspired my line of inquiry and commitment to shaking up the status quo and bringing social studies classrooms to life again.

This research is based on the assumption that students at all points on their academic journey respond to authentic learning experiences and should have them. Even though we have not yet achieved Dewey's vision of every school as a truly progressive learning laboratory (Dewey, 1938), and have started to turn back to problematic

traditional models as a whole system in some ways (Kliebard, 2004; Kohn, 2008), one way we can still work to invite the experimental mindset into of our own classrooms is by making PBL maximally accessible to all who enter.

CHAPTER TWO

Literature Review

“What avail is it to win prescribed amounts of information about geography and history, to win ability to read and write, if in the process the individual loses his own soul: loses his appreciation of things worthwhile, of the values to which these things are relative; if he loses desire to apply what he has learned and, above all, loses the ability to extract meaning from his future experiences as they occur?” (Dewey, 1938, p. 49).

Overview

The Problem With Social Studies

Social studies as a subject (inclusive of history, geography, sociology, political science, and economics) ranks nationally somewhat low for middle and high school students in terms of enjoyment and perceived relevance to students’ later lives, social studies comes in second to last (Gallup, 2017). Some recent research has connected lack of civic and historical knowledge among American citizens to increasing political disengagement and other markers of declining awareness and involvement in making positive social changes and good citizenry (NEA, 2017). Lack of civics knowledge starts with disengaged students in earlier grades, and may also be linked to lack of future college and career opportunities, and even our societal vulnerability to social media

damage to our basic democratic principles (Litinov, 2012; National Council for the Social Studies, 2012).

Social studies teachers can engage students in the exciting possibilities of this subject in order to help them develop positive, active roles as citizens, and also to open further academic doors for them in high school that will widen their horizons in future academics and in society. Social studies is a discipline that can address critical thinking, contextual analysis, ethics, politics, and maybe more importantly, that offers many opportunities for students to understand themselves in more nuanced ways in relation to society. So, why do so many students dislike social studies class?

Some answer to this question may be found in the way social studies is commonly presented. Success in this subject relies on building knowledge of historical context through reading, researching, and critical study of past events. Reading, reasoning, and writing are important, along with the ability to remember facts. Like mathematics, social studies requires complex thinking and contextual knowledge not taught to students in an intentional way that they can use (Milner, 2014). This is especially true for ELL students, whose academic language use can limit their confidence in creating essential questions to guide their research and in understanding other critical thinking routines. As in mathematics, if students miss part of the sequence in social studies, they will have greater difficulty understanding the next set of ideas that follow (WIDA, 2012).

Social studies and mathematics have traditionally both been taught with the student as the receptor of existing knowledge. Classwork typically proceeds through units along a timeline of events organized around simple principles of shared temporality: this

thing happened, and then the next thing happened, and so on. In the usual framework, history is discussed as a linear series of discrete occurrences without confronting larger historical themes, correlations, or opposing views. For example, students may successfully imbibe factual accounts of the Civil War without ever being invited into a discussion of its larger themes, like structural racism, internal colonization, or the ethics of capitalism. Middle school students are aware, either consciously or unconsciously, that there are many perspectives not considered in class, but there may be no interrogation of approved curriculum to address the bigger picture. According to constructivist teaching philosophy, any student is right to ask what the point is of knowing so much about the past if it has no relationship to their present (Dewey, 1938)

High-stakes testing, in which school funding and survival are often tied to reading, language arts, and math scores has limited some of the big ideas that social studies is able to address in class because resources of time and money are not allotted to it. Epstein (2011) points to some of the inequities of the existing funding formulas:

“...school districts in many states are not funded equitably; ...the highest-poverty districts in 26 states received less state and local per pupil funding than the lowest poverty districts... Inequity among districts means that children in lower-funded districts do not have access to the same resources...than their peers in districts with higher levels of funding....Low-income children and English language learners need extra resources to overcome disadvantages due to socioeconomic status or lack of English language proficiency..“ (p. 7).

In short, public schools that struggle the most in terms of resources are disproportionately overloaded in terms of need, and do not have equal access to local compensatory funding from property taxes that are available in wealthy neighborhoods. To get some perspective, Minnesota scored a C statewide in terms of funding equity (EPE, 2011). In many poor, low-performing districts, schools are required to allot up to five or more hours in the six-hour teaching day to subjects other than social studies, and even more during several weeks of testing in reading and math during the year. Wills has stated that professional development for social studies educators has also been given lowest priority in many schools around the country (as cited in Pace, 2007, p. 26).

Due to what Pace (2007) describes as a “social studies divide” (p. 26), social studies educators, especially those just beginning their careers, may lack the professional development that is required to develop innovative approaches, and may rely more on just addressing the content standards in less engaging ways that encourage critical discussion and hands-on learning. In essence, there is still very little support for quality teaching to underachieving students who need it the most (p. 27). While many committed educators in even the most underfunded schools do try to reach all students with engaging and culturally-relevant lessons and projects, there is just not a comparable fidelity of approach that is found in affluent districts. In schools with ample funding, teachers are more likely to be trained to teach social studies in creative and effective ways and to collaborate with other content teachers to reinforce higher level concepts across discipline areas. Not surprisingly, in such districts, students tend to place the subject much higher on their list of favorites (p. 26).

Increasing defacto segregation by economic class and race in many large urban districts has also changed the relevance of the teaching of traditional social studies content, so many students may feel disconnected from historical narratives in which there are few stories about people from their own cultural backgrounds. Research for this project suggests that students themselves can and should have a voice in selecting what they study in social studies classes in order for them to retain and enjoy what they learn (Ladson-Billings, 1994).

This research is concerned with discovering which specific teaching strategies best engage struggling, ELL and other below-grade-level readers in the social studies, and will propose practical ways that any teacher can implement these strategies in a classroom. The primary focus will be on ELLs, but all of the techniques mentioned are effective with middle school students engaged in PBL generally. Because of its promise for creating a non-coercive, engaging, culturally-relevant educational environment, PBL is one of the most effective and direct ways that teachers can design for equity (Larmer, Mergendoller, & Boss, 2015).

The Promise of Social Studies

Teachers, as well as students, may well ask why social studies really matters (Vavilis & Vavilis, 2004). This is a reasonable question to ask of any subject, and it is clear from existing resource allocations that many districts may not have the highest opinion of social studies, compared to other subjects. The value of our subject area is especially in doubt in struggling middle schools where the emphasis is often on subjects that are regularly assessed on standardized tests - English language arts, literacy and

mathematics (Milner, 2012; Pace, 2007). Clearly, all core subjects help build the minds and characters of students so that they can participate fully in whatever role they chose at some later point in life. But effective teachers know that their content must also be relevant to students right now, wherever they are in their learning progress.

Much of what social studies offers is key to building empowered citizens of the future, and to helping students develop tools for positive and active engagement with society. However, to do this, we must create opportunities for them to be lively learners in the present, whether or not their school's funding model relies on proven gains in student achievement in a narrow set of subjects (Milner, 2014, p. 9; Pace, 2007).

Increasing student engagement and sense of purpose that culturally-relevant teaching offers is vital to the individual student because it increases their fluency and understanding of content, but also may be increasingly tied to survival of their school, as well. This pertains especially to schools on the Adequate Yearly Progress (AYP) list where there is a high percentage of ELLs. Their performance as assessed on standardized tests (which are given in English) is lower than their native-English-speaking peers. In a climate where school funding is increasingly tied to school performance, struggling schools remain vulnerable.

A recent reevaluation of the 2017 Every Student Succeeds Act (ESSA), which became law in 2015 to replace the 2001 No Child Left Behind (NCLB). Both ESSA and NCLB have significant problems in serving poor, minority, ELLS, and other disadvantaged students and in encouraging the growth of charter schools that siphon public money from public schools who struggle to meet the needs of all their learners and

are inordinately punished by standardized testing that is required of 95% of their students, regardless of their abilities (Ladd, 2017). The tests, under the current administration's reversion to NCLB requirements, are used to measure public schools' performance (Ushomirsky, Smith, & Bommelje, 2017).

High-poverty schools with an inordinately large group of underperforming students of any kind will be at a disadvantage. A 2017 report describes the current funding model's problems in terms of fair funding: "Low income students, students of color, students with disabilities, and English learners often face drastic inequities in resources and support, which in turn lead to lower outcomes for these groups," (Ushomirsky, Smith, & Bommelje, 2017). Epstein (2011) describes how the funding problems in the NCLB formula affect schools in much the same way. "lower-funded districts do not have access to the same resources...not only are these children not receiving equal resources but they are also not receiving the extra supports they need in order to succeed" (p. 7). While these inequities are unfortunate all on their own, such unfair performance indicators are being increasingly put to use to remove resources from these students and defund their schools, and trapping educators in a cycle of "pressure without support" (Ladd, 2017).

Social studies offers a coherent way to further build literacy and cultural literacy for ELLs. The National Council for the Social Studies (NCSS, 2013) sums up the rationale for supporting strong social studies curricula in its 2010 publication of its *Principles for Learning*, which states that social studies is key to promoting student

growth in the following: multimodal literacy, awareness of learning as a social act, lasting skills of inquiry, multimedia skills, and knowledge of global context:

1. Being literate is at the heart of learning in every subject area.
2. Learning is a social act.
3. Learning about learning establishes a habit of inquiry important in lifelong learning.
4. Assessing progress is part of learning.
5. Learning includes turning information into knowledge using multiple media.
6. Learning occurs in a global context.

Adapted by the author (NCSS, 2010, pp. 1-2).

Social studies, perhaps more than any other subject, offers exquisite, and often missed, opportunities for all of these.

Engagement and “Unemployed” Students

Lewis makes a strong connection between our current epidemic of students without meaningful “connection, communication, and capability” creating a state of student “unemployment” - meaning: without clear, valued work tasks in families, classrooms, social groups, or society - that causes the current increase in alarming behavior issues of chief concern at home and school (Lewis, 2018, p. 5). She specifically identifies connection, communication, and capability as three areas of psychosocial need in the developing child that have gone increasingly unmet as much of the customary labor that children perform in families has decreased. In essence, their unemployment creates both a lack of preparation for them in their future life roles as adults, and also sends a

message to them that they themselves are inherently unnecessary to their communities and families (Lewis, 2018, p. 5). Lewis (2018) further connects purposeful student engagement through making mistakes to gains in self-discipline, confidence, learning, independence and critical thinking:

The goal... isn't to lecture your children so that they never make a mistake, but to kick-start their critical thinking by asking them questions, drawing out information.... to have a strong relationship and to encourage your children toward independence. That way, they'll see you as a resource rather than an obstacle. Mistakes are when learning happens.... We want to create an environment where kids are making mistakes every single day and we are there to help them process (Lewis, p. 83.)

All these gains are effectively addressed by the PBL curriculum when administered with fidelity (Boss, 2012) and used to construct a positive learning environment (Ryan & Patrick, 2001). Further gains have been documented by Savitz in her 2016 research report that found inquiry-based learning is adaptable to multiple grade levels, content standards, and learning abilities (2016) while allowing a wide variety of learners to develop skills in “metacognition and...student agency” (p. 334).

Project-Based Learning and Language Acquisition

The Buck Institute for Education, the leader in designing and training educators to implement authentic PBL, suggests a variety of scaffolding strategies to support struggling readers, including English-language learners (Boss, 2012; BIE, 2018). Contrary to many assumptions, teaching lower level readers does not mean that rigor and

creativity in the project are reduced. One strategy this project will examine is scaffolding students with language difficulties through using relevant supplements to the text and creating small groups of a variety of reading levels, along with strategies like Visual Thinking that engage other strengths besides reading grade-level texts. This research considers how these scaffolds might be used along with PBL student inquiry practices, Guided Language Acquisition Design (GLAD; BIE, 2018; Larmer, Mergendoller, & Boss, 2015).

Supporting Theory and Research

Constructivism

Dewey (1910) says, “It is [education’s] business to cultivate deep-seated and effective habits of discriminating ... to develop a lively, sincere, and open-minded preference for conclusions ...and to ingrain into the individual's working habits methods of inquiry and reasoning” (p. 8). Progressive educators propose a democratic model of learning that includes many points of view, where learning is not restricted to universally accepted narratives of the past, but rather a collective creation of contemporary meaning and intellectual freedom (Greene, 1997). A more complex and layered approach to teaching history is not brand new, but it is still innovative, relying on interdisciplinary study from a range of perspectives, an approach that has not been yet widely implemented in our country.

It is just this kind of liberation that students seek, as opposed to a final truth or system to be memorized, regurgitated, and rewarded with a grade. It is the difference between being invited into a creative process and being told to fit into a fixed framework

someone else designed. Middle schoolers in particular have strong developmental needs to connect moral and social meaning with what they are learning, and to bring their own questions to class and participate in hands-on projects according to both Piaget and Vygotsky (as cited in Woolfolk, p. 462). These are their real strengths, regardless of their academic achievements. When they are asked to check their critical thinking and social awareness at the social studies classroom door, it is no wonder they are disengaged with what happens in class.

Critical Thinking

Critical thinking can be defined as measured, independent thinking that is appropriate to whatever subject and context it is applied to, and that shows advanced understanding of the subject (Foundation for Critical Thinking, 2018). Language mastery is important to critical thinking but students can begin the process without complete language fluency. The ideas themselves can lead them to develop more advanced language as well as the other way around. Building the vocabulary of inquiry is something that PBL is well suited for. Students must first lead with their curiosity (Yang & Gamble (2013).

Making coherent observations and inferences is key to building historical thinking and also develops critical writing skills (Foundation for Critical Thinking, 2018). Students might be asked to examine two contrasting images of people who represent two sides of an issue, which might help them see multiple points of view in ways not possible through textbook learning and reading. The steps to investigating using primary source images rely on talents they may already have some confidence in, namely - close

observation of images, discussion with peers, and forming and sharing opinions. This is especially applicable to students who struggle in school, as it can lead them into reading and writing activities in a more natural way that does not emphasize their learning difficulties (Yang & Gamble, 2013). It is a way to help any student say “Yes” to entry-level historical thinking without feeling intimidated, whatever their existing academic confidence may be.

When students are invited into the project of their own education as investigators whose perspectives are valued, they begin to see the world through their own eyes (Misco & Shiveley, 2010). By implication, validating their viewpoints also validates the rights of others to have their stories woven into national and global narratives, with no one voice dominating. This kind of learning is memorable because it is the most meaningful and complex, and it is an ultimate expression democracy that should be the project of every classroom (Milner, 2014)j.

Teaching multiple points of view is also a time-honored way to teach tolerance, in learning to see controversial historical events from the perspectives of underrepresented groups by looking at primary (often in material or personal narrative, rather than written) sources. In a culture that for many centuries had low very rates of literacy for enslaved people, immigrants, women, and other marginalized groups, building visual literacy through project-based inquiry in the history classroom is necessary in order to hear the many diverse voices from our multicultural past. We must teach students how to critically view visual and other primary sources in order for them to attain more meaningful

understandings collective history, as well as their present (Gay, 2010; Hollie, 2013; Ladson-Billings, 1994).

Social Learning

Psychosocial development. Middle and high schoolers are described by psychologist Erikson as inhabiting the ‘search for identity’ developmental stage (as cited in Woolfolk, p. 105). Their essential sociability and curiosity of the age group make it an ideal time for introducing teaching that opens, rather than closes doors to new possibilities for the ways they see themselves as individuals with abilities and aspirations (p. 104). The accomplished reader can also learn to plan, collaborate, improvise, and create: the advanced visual thinker can connect to academic learning in history through drawing, collaborating, and examining historic themes critically in discussions. Interdisciplinary bridges allow students to gain mastery while working at the edges of their current understandings in the proximal zone (Vygotsky, 1978; 1986; 1997).

Student engagement in active learning also creates a cultural space in the history classroom that resists some of the most harmful educational approaches from the past, in which the classroom was a place to teach consensus history (Greene, 1986).

Contemporary multicultural educators envision school not as a mere indoctrination vehicle that insures generations behave in predictable ways because of their exposure to approved historical perspectives. Instead, school becomes the site of experimental thinking, with each student a respected individual greeting new ideas in an active, not a passive role (Cruz & Thornton, 2009; Milner, 2014). A public made of such empowered individuals free to question received knowledge is an engaged public that strengthens

core principles of democracy. Scaffolded PBL is one of the best ways to invite ELLs and struggling readers to be part of this larger project of democratic engagement by validating and welcoming their ideas and allowing them to practice skills of language alongside skills in research, critical thinking, and community engagement (Misco, 2014. Boss, 2012).

Social interactionist theory. Social interactionist theory explains language acquisition as a result of dialogue between the child and knowledgeable adults or other source. It is based on the sociocultural theories psychologist Vygotsky (1997). Feedback and reinforcement from the MKO is important, as is the conversations students have with their peers. A child's language grows because of modeling of and interaction with parents and other adults (Woolfolk, 2011, pp. 58-59). Learning that incorporates student conversation is based on this theory (Moerk, 1994).

Proximal Zone of Development. Psychologist Vygotsky theorized that student learning must happen within the zone of proximal development (ZPD), which takes place when students are challenged at just the right level for them that is not too simplistic to bore them, and not so difficult that they give up before learning something new (1997). In other words, an appropriate amount of struggle is necessary to student engagement. ZPD theory suggests that difficult content be first introduced through a modality that students have more comfort with, like group or social learning, arts, music, or some other media, while gradually adding increasingly challenging academic elements until students are more confident (1997). Vygotsky's stage theory supports introducing other vehicles for learning to aid students who struggle with academic content in ordinary lessons. He held

that social learning precedes development, as opposed to Piaget's idea that development precedes learning as a matter of course. There must be a social identity-building step in between, according to Vygotsky, linking the learner with her context (as cited in Woolfolk, 2011, p. 462).

Vygotsky's theories address why children may not develop through some of the more difficult stages during the middle school years at the same rates, since they do not all have the same level of social confidence (as cited in Woolfolk, 2011, 49-50). This age group can experience PBL in the history classroom as a kind of communal discursive project that draws out feelings and opinions and helps construct confidence in the academic setting. To many students, observing primary sources is much less intimidating than texts and they invite collaboration to foster social development that is key to their growth in other areas (Mahn & John-Steiner, 2008). Social learning initiates key self-concept shifts that enable deeper cognition. Before seeing herself as a skilled learner, the student constructs identity and relation to community, so our teaching strategies must work with, rather than against the momentum of burgeoning social intelligence (Woolfolk, 2011, . 52) . Students can be grouped by varied ability with each student in a defined role with specific duties for each role. This source of raw intellectual and creative energy in the student allows her to progress toward intellectual goals with greater speed, and perhaps more importantly with greater joy.

More Knowledge Other. Another key element of constructivist teaching that is instrumental to PBL is the More Knowledge Other (MKO). The MKO need not, and most of the time, should not, only be a teacher, but can be a text, a peer, a supportive

technology, a museum, or a visiting person from the community. Any means that scaffolds greater learning and draws the struggling learner out of the passive mode of study is an MKO. Scaffolding provides an entry point to the real work of PBL, and it helps everyone in the class be engaged collectively, de-emphasizing hierarchies of expertise, and highlighting inclusion in social learning. This is in keeping with the sociocultural theories of cognition, namely the ecological systems theory of learning Put forth by Bronfenbrenner (1993), in which both the microsystem of the child (home, family, immediate classroom) and the mesosystem of the child (larger school environment, peers, and community) construct some relationship through learning that includes both systems (See Appendix H).

With supports, the struggling reader of English becomes aware that she is among allies at varying levels of expertise that extend beyond her home microsystem. Rather than drawing attention to her deficits in understanding, she creates links between her multiple systems to help her access the new content. As a consequence, she can develop a notion of herself as belonging to secure structures of microsystems and mesosystems while accessing new ideas from the macrosystem, or larger societal context (Bronfenbrenner, 1993, p. 39-41) in social studies content. Students practice cooperating with each other and the MKO functions as a guide (Pope, 2014) who introduces and structures the environment, and who is, in turn, influenced by quality student questions and discussion to determine which next steps are most appropriate and challenging (Boss, 2012).

Because social learning is not merely a beneficial side effect, but rather, the foundation of how knowledge is built, focusing on giving struggling learners a way to know their roles in the social learning context becomes most important. This enables them to develop active skills of inquiry together much more quickly than they might do on their own, along with confidence in discovering new ideas within any new framework. Along with greater fluency and literacy, successful group collaboration skills perhaps one of the most transferable and lasting outcomes PBL offers (Larmer, Mergendoller, & Boss, 2015; Boss, 2012)

Language Acquisition

Language acquisition depends upon students having “comprehensible input” and opportunities to create comprehensible outputs of their own in conversation (Krashen, 1982, 2003). Krashen and other linguistic theories serve as the basis for GLAD, which will be discussed more extensively in the Teaching Methods section below. PBL offers opportunities for students to acquire and produce language at the limits of their current comprehension, which is a significant driver to further language development according to Vygotsky (as cited in Woolfolk, 2011, p. 462).

Teaching Methods

Project-Based Learning (PBL)

Project-based learning and problem-based learning are two related approaches that are often conflated with one another, but they are not the same thing. So it is useful to establish a definition of both and to emphasize the differences between the two. Both have a role to play in the social studies classroom, although it is project-based learning

that is the focus of this research. While both project-based learning and problem-based learning use the acronym “PBL” and share similarities, there are key differences between the two. Both are popular constructivist teaching approaches within the larger category of inquiry-based learning (Barrows & Tamblyn, 1980; Markham, Larmer, & Ravitz, 2003).

Shared aspects of both Project- and Problem-based PBL approaches feature:

- Student-centered learning
- Small groups of six to ten students work collaboratively
- Facilitator/teacher guides rather than leads inquiry (Pope, 2014)
- A problem or question is the focus of the group, and catalyzes learning
- Development of problem-solving skills to ignite the cognitive process
- New knowledge gained through Self-Directed Learning by conducting intensive looking and developing critical thinking skills (Barrows & Tamblyn, p. 186; Markham, Larmer, & Ravitz, 2003).

Project-based learning dates from trade schools of the late 19th and early 20th centuries, and was promoted in the earliest writings of constructivist education visionaries like Dewey and Kilpatrick (Kilpatrick, 1918). Their ideas centered around school reform to include learning that had greater relevance to students’ actual lives and needs. Dewey (1910, 1938) and Kilpatrick (1918) proposed lessons that invited students to create products, performances or events to solve real-world problems in genuine or imagined scenarios (Dewey 1938; Kilpatrick, 1918). To do this, students would research a topic and develop an answer to open-ended, rhetorical or even abstract philosophical questions (Larmer, 2014).

In the true PBL process, students confront significant ethical, scientific, or design problems by interrogating the existing knowledge, redrafting inquiries and assumptions, arguing to defend and refine ideas, predicting outcomes, researching, experimenting, designing plans, considering the data, making conclusions, sharing their ideas with peers, and often using their knowledge to draft new questions. They then document their process in evidence that can be shared with peers, usually in the form of some art or media, to increase the understanding of the wider community of learning outside the classroom (Blumenfeld, et al., 1991).

Problem-based learning, which is really a subset of project-based learning, differs in that it came about through teaching designed for medical school students in the 1960s (Barrows, 1967). University students were engaged in solving specific, real-world medical problems as small teams in order to learn how to think through unexpected situations, focusing on multiple possible outcomes. Since then, it has been applied to an ever widening range of ages and school environments, and sometimes goes by the name Design Thinking (Archer, 1965), among others. Science Technology Engineering and Math (STEM) education and service learning projects frequently adhere to a more problem-based learning framework, rather than project-based. One key difference is that problem-based learning may or may not result in a concrete final product, and can be more theoretical in its focus (Barrows, 1967).

Problem-based learning is also especially useful in looking at ethical issues in more sophisticated frameworks within history classrooms, and looking at art as evidence is often used to initiate these kinds of seminar-style discussions around a particular

historical theme or event and its possible implications. Problem-based learning does not, however, lend itself to the same scope, scale, or shareable outcomes that project-based learning does, as it does not always invite as much student-driven inquiry, or the creation of a final product (Larmer, 2014).

Lastly, project-based learning is more prevalent in K-12 classrooms, and problem-based learning is more common in post-secondary coursework (Larmer, 2014). Nevertheless, the term “PBL” is used almost interchangeably when talking about both forms. In the case of looking at extended, long-term and widely shareable products, project-based learning is more appropriate to this research into middle school social studies teaching and learning, so it is this framework that will be evaluated and adapted in this study, and whenever the term PBL appears in the rest of this research, it refers to project-based learning, not problem-based learning.

Visual Thinking Strategies (VTS)

“We have come to believe that discussions of art may be one of the most fertile grounds for teaching critical thinking skills precisely because there is no one right answer.” (Housen, 1999, p. 20)

Psychologist Housen’s (2002) research questions about how students build meaning and what a thought map of the aesthetic experience looks like are at the center of designing inquiry around visual and other sources. Housen’s Visual Thinking Strategies (VTS) give educators concrete steps to guide students into developing and supporting their own conclusions, whatever they may be (Housen, 1999, p. 20). She outlines five main stages of inquiry in VTS: accountive, constructive, classifying,

interpretive, and re-creative, each more involved and complex than the one before it. These steps of VTS address standards for literacy, cultural awareness, critical discussion, observing evidence, and critical writing, and are reliable tools for measuring how well an interdisciplinary arts inquiry is achieving its academic goals (See Appendix E). Over forty years after their initial studies, VTS is still a challenging approach, and is now being taken up for wider use in many kinds of classrooms. See Chapter 3 to understand more of the exact steps and scaffolds for using VTS for all learners (Housen, 2002).

When VTS becomes a regular part of routines to introduce new topics, students gain confidence in themselves as observers and critical thinkers (Housen, 2001). In this way, talking about a historical subject becomes less abstract and more memorable than simply reading about it. VTS in the social studies classroom can show students directly and engagingly into the real heart of a historical moment, get them to start using the vocabulary, and help them get comfortable with making more sophisticated observations that put things into a context. They learn to work together in Socratic dialogue to create authentic understandings of their own before the book is even opened. These introductory successes lay the groundwork to help them feel more confident once the text is introduced (Housen, 2002).

VTS Routines. Yenawine (2013) and Housen (2001, 2002, 2013) collaborated to introduce Visual Thinking Strategies (VTS) and show the value of introducing VTS routines into the general classroom, especially in building confidence in the visual learner. Because ELLs depend more on their visual thinking abilities when learning a new language, VTS is a strong strategy to use in introductory launch activities that lead to

deeper levels of critical thinking right away and keep students actively engaged. The use of images as text circumvents barriers to low readers and asks them to think critically in a modality (visual) they are already familiar with.

There is a rigorous sequence to VTS (See Appendix E). First, the teacher selects images relating to the history lesson at hand from relevant, primary sources (made at the time of the events being taught). The images should also represent more than one perspective. The teacher asks students to observe and record anything about the images without trying to determine what is going on, simply writing what is visible in the image without inferring any meaning (Yenawine, 2003). The same is true for audio sources or material evidence - students must rely on their five senses only, without speculation about meanings. Students write their observations in their own words.

Secondly, using open questions, the teacher then prompts a discussion among students, comparing and contrasting student observations, and then coaxing deeper responses by neutral furthering questions like “Why do you say that?” and “Where do you see/hear that?” Teachers avoid inserting information of their own at this stage, so restraint and deep listening and looking are required on the part of both teacher and students in order to make room for students to observe, record, and reason out their responses on their own. Any factually incorrect conclusion drawn by students should be gently corrected later during the lesson, not during the VTS conversation. Emphasis at this step is on building student confidence in their own viewpoints, so all perspectives are valid (Housen & Yenawine, 2013; Yenawine, 2013; Horowitz, 2004).

The third step is to allow the student conversation to go wherever it goes, following its own structure and logic, even if it seems off topic. The goal is not to share existing information with students yet about the topic, but to encourage their own critical thinking, and to work conversation toward deeper levels of inquiry. Teachers may take detailed notes or make an idea map on a whiteboard to link student ideas, but all the content should come from students. Mapping is key to sustaining this inquiry and applying it later, and it is a function students can take over later in their familiarity with VTS. Many teachers take a digital photograph of the resulting idea map to post on the classroom web site as a reference. At the end of the conversation, the teacher continues the lesson, linking the historical content and perhaps textual sources with comments students made. All the VTS steps are outlined in Appendix (Housen, 2002; Russell, 2013).

In their decades of research into how visual thinking strategies function in classrooms, Housen (2001), Desantis (Housen & Desantis, 2000), and Yenawine (2003) showed that following VTS methods led to increased student abilities in critical and creative thinking, writing and aesthetic thought (Housen, 2001). Students also developed skills not always directly associated with art, such as presentation, tolerance, comfort with opposing views, collaboration, and historical research. Impressively, the same improvements in student learning were consistent across cultural and socioeconomic backgrounds, as well, which is more than can be said for standard delivery model (Housen, 1999, 2001; Housen & Desantis, 2000).

VTS methods can be supported by further scaffolds, like sentence stems to guide their inquiry and record observations in writing for each step:

Step one supports for observing:

- “I see a _____.”
- “I notice _____ in the background of the painting.”
- “The people in this image are (verb).”
- “This object smells (adjective).”
- “This radio recording sounds (adjective).”

Step two supports for concluding:

- Prompt: “What’s going on here?” Stem: “In this painting, the people are ____.”
- Prompt: “What do you see/hear that makes you say that?” Stem: “I say that because I see ____.”
- Prompt: “What more can we find?” Stem: “I also notice there are (details) that relate to (whatever action written in the first prompt).”
- Prompt: “What is not represented here?” Stem: “I don’t see any ____.”
- Prompt: “What would the opposite of this representation be?” Stem: “The opposite of this representation would be ____.”

Balancing the Curriculum

One of the earliest rubrics for examining relevancy of curriculum is the “Tyler Rationale,” which offers questions to help focus teaching approaches so that they address specific purposes (Kliebard, 1995; 2004). Tyler’s aim was to balance student experiences,

assessment, and long-term organization of lesson sequences to provide iterative meanings for students over time (Tyler, 1948, p.1; Misco, 2009). Misco points out how imbalanced our current curriculum models often are in favor of the two areas of lesson design and assessment, without allowing for equal consideration of the quality and sequence of lessons. Both Tyler and Misco propose that this imbalance is part of the cause of student disaffection with the subject. Such a piecemeal approach causes social studies and other content areas being isolated or “atomized” from one another (Misco, 2009, p. 242) in the intense cycle of pressure to teach/test/teach (Misco & Shiveley, 2010). A shift must happen to move our teaching toward the consideration of bigger ideas that mean something to students (Capaldi, 2009), and it is in the larger framings of social studies themes that “challenging, active, values-based,... integrative” content achieves some staying power in young minds (Misco, 2014, p. 242).

Language Acquisition Design

Designing powerful lessons that promote language acquisition in the content areas should integrate ELL supports with PBL to promote the best outcomes for struggling learners encompassing all the gains mentioned in this chapter (Ferlazzo & Sypnieski, 1974; Yang & Gamble, 2013). The main strategy examined in this research is Guided Language Acquisition Design (GLAD), which has its basis in the language acquisition work of Krashen (1981, 1982; GLAD, 2018).

There are five customary stages of second language acquisition, where the learner moves from no understanding at all of the new language to fluency. The accepted progressive five stages are:

- Stage 1- Silent/Receptive
- Stage 2- Early Production
- Stage 3- Speech Emergence
- Stage 4- Intermediate Fluency
- Stage 5- Continued Language Development (Krashen, 1981)

As a teacher of ELLs, it is vital to know how students are progressing through language acquisition stages design instruction to guide them to the next stage (Krashen, 103). Another significant part of ELL instruction is knowing which kind of language students are using and producing, according Cummins's theory that distinguishes between two types of language, basic interpersonal communications skills (BICS) and cognitive academic language proficiency (CALP) (Cummins, 1984). Both BICS and CALP are necessary, so both must be engaged in the classroom for even beginning language learners to latch on and progress toward fluency (p.) In an approach related to Vygotsky's Zone of Proximal Development theory, language acquisition theorists propose a "comprehensible input" hypothesis, wherein ELLs acquire new language by taking it in at a level that is a slightly ahead their current understanding (Krashen, 1981, p. 103).

Both BICS and CALP are engaged at the same time in the cooperative learning that small group and partner work involve in PBL because students have their own conversations to negotiate project tasks and use content language in those conversations. Pairings, team structures, group roles and work routines are critical to make sure that conversations are balanced and challenging..

Guided Language Acquisition Design (GLAD). GLAD Strategies promote language acquisition in ways that are both integrative of language practice routines for both BICS and CALP, interactive for students, and adaptive to meet and challenge students at all stages of language acquisition. Routines include introducing content via multimodal text, image, and audio sources as well as performative methods that incorporate use of chants, rhymes, poems, and songs to create mnemonics. Students participate in expert groups to find and report information they learn and participate in various critical reading, thinking, and writing activities, including creating informational paragraphs about new knowledge and developing “big books” (GLAD, 2018) to showcase their knowledge in summative activities. GLAD is complex and most effective when educators are formally trained in its use, but educators can incorporate routines and strategies of GLAD into their regular lessons. GLAD strategies are especially applicable in PBL with its emphasis on students working collaboratively to construct their own understandings. GLAD strategies can be integrated into designing PBL (Appendix D).

Culturally-Relevant Pedagogy

Multicultural Histories. While multicultural historical perspectives have become somewhat more common in standard textbooks, they have also come under fire from far-right conservative legislators and state board of education members who cast them as too negative a story. A few claim that the more complex, multicultural approach to social studies undermines the strength of our national identity and casts shadows on the reputations of the great figures of our country’s past. Enlightenment, and even triumphalist ideas of history are still deeply embedded in our school structures and

curricula today, and have resurfaced in recent years in this kind of call for a more positive, and some would say, reductive, rendering of American history, that only represents a Protestant, middle class mythology (Greene, 1997). This approach has been widely criticized from both right and left, but the movement continues and social studies content draws fire from it on a regular basis (Krieger, 2013).

Contrary to what multiculturalism's critics say, the study of history is only made stronger and more balanced by diverse understandings of the past (Milner, 2014; Boss, 2015, p. 211). Students should be presented a more complete and realistic picture of our founding fathers, with principles that can still stand without the hero-worship of their original proponents. For example, the main author of the Constitution that represents one of our core values of personal liberty, Thomas Jefferson, was also someone who enslaved his own biracial children. In knowing this, along with his important work in authoring much of the language establishing principles of fairness in our Constitution, students can see in him the contradictions of the country as a whole as it fought for liberty for only some of its citizens, while denying the very humanity of others (Brick, 2005; Smithsonian, 2014; Wiencek, 2012).

For students of color, newcomers to the country, and ELLs, designing for equity of representation in the kinds of voices heard in the history classroom is particularly powerful. Students who are not from the dominant culture benefit when they see themselves and their cultural stories in the curricula, and shows that they are part of a society that values having a rich variety of voices represented (Milner, 2014; Howard, 2011). Even teachers from the majority cultural perspective can and should introduce

material that speaks to the students they serve and other communities not typically represented. Not only does this help us to balance our curriculum, more importantly, it invites our students to see they have a stake in, and can benefit from studying the living discipline of social studies as it relates to them. (Ladson-Billings, 1994; Governale, 1997).

Inviting Student Questions

Ladson-Billings's idea of "sociopolitical consciousness" is a main aim of culturally-relevant pedagogy in that the ethical teacher can elicit from students a consideration of their own sense of purpose and cultural identity while living with questions that arise when they consider larger themes in social studies content (as cited in Milner, 2014, p. 9). Student-driven inquiry is the core of the authentic PBL model (Larmer, 2014), and is a point of invitation through which students can enter into social studies.

One foundational writing practice asks students to keep track of their own questions that arise in class by regularly writing them down in their interactive notebooks on a designated page, and later use the one of these to develop an authentic essential question to guide their inquiry on research days. Each day, at the end of class, the teacher reminds students to take a moment to write what they are still wondering about that did not get answered in that day's lesson. While such a practice may seem simple, it fosters habits of metacognition that build literacy and skills in reflection, as well as being an essential to design thinking. Students learn to work with their own spontaneous inquiries to develop high-quality, researchable, essential questions to guide projects from such

early drafts (Larmer, 2014). The sky is the limit here, meaning no genuine question is too far fetched to be recorded and later considered and developed by students as a guiding question. The more students have written on their weekly question page in their notebooks, the more choices they will have to work with when it comes time for project research. This cultivates writing practice as a positive habit of mind and makes space for curiosity in the classroom that leads to deeper inquiry (Rupley, Blair, and Nichols, 2009).

With constructivist approaches and ELL students in mind, this project points out ways of using high-quality PBL in the middle-school classroom as a bridge to student engagement, with special focus on struggling readers. It will highlight PBL rubrics (Larmer, Mergendoller, & Boss, 2015) that uphold high expectations and evaluate lesson outcomes based on the steps of Visual Thinking Strategies (Housen, 2007; Yenawine,) and gold-standard PBL (Larmer, Mergendoller, & Boss, 2015), The National Council on Social Studies' Powerful Social Studies Teaching and Learning (NCSS, 2013), and other inquiry methods (Evans, Newmann, & Saxe, 1996; Evans, 2004; Misco & Patterson, 2009; Oliver, Newmann, & Singleton, 1992; Rugg, 1931) in inclusive and diverse middle school classrooms that have many students who could benefit from language scaffolding designed for ELLs (Mastropieri & Scruggs, 2004).

This research project also documents project-centered, interdisciplinary teaching methods that enhance traditional academic learning and show how it can be rigorous and engaging when well designed and thoughtfully delivered. PBL should be a challenging intellectual activity that opens important doors for young scholars, and is a matter of equity. Visual Thinking Strategies and other methods of inquiry around art help students

to gain skills in critical thinking and writing, enhance social-emotional learning, develop a more pluralistic worldview, and deepen understanding of historical consequences and contexts. With the aim of supporting teachers to begin to design customized PBL experiences for their classrooms, the website will be a resource of lesson planning templates for integrating PBL and ELL supports and connecting project work to Minnesota standards for middle school social studies.

In this research project, classroom activities are built around the role of students as investigators and teacher as a guide, rather than a lecturer. Weekly writing workshops, visual research and discussion activities predominate, in which teachers can introduce historical concepts in the form of material objects, art, or music to invite students to find their own way into the lessons, and then move on to further steps of authentic PBL inquiry. There is a natural link between hands-on and visual content introduction and successful engagement of the struggling reader since the methods rely less on text . To that end, I have adapted PBL steps to include VTS and GLAD strategies for each step that will help ELLs. Each PBL lesson should also be situated appropriately within an existing unit and address appropriate social studies standards and benchmarks (MDE, 2018; NCSS), while remaining culturally relevant and inviting student inquiry as part of its further development.

This project's purpose is to share ideas for how teachers can effectively integrate PBL and research workshop roles into regular classroom routines, so students will grow increasingly confident in working this way and gain literacy, fluency, enhanced self-concept as academic learners, critical thinking, and cultural literacy, and to provide

an answer to the question: How can Project-Based Learning be adapted to enhance middle school social studies lessons and learning outcomes for English Language Learners and other struggling students?

Outcomes

Literacy and Fluency

Research by the NAEP, Newkirk, Hall, Burns, and Edwards indicates most American 8th-grade students were not proficient in reading (as cited in Savitz, 2016, pp. 333-334), which contributed to their own negative self-concept. Nevertheless these students do want to make progress by becoming better readers and are not content to be described as having a “deficit” (p. 334). Social studies content is well suited to sociocultural language instruction because of its potential to make real-world connections and engage multicultural knowledge bases while teaching the language of inquiry. In designing lessons for ELLS, WIDA (2012) recommends that instructors ask these key questions:

- What background knowledge do students have and need?
- How can I increase their motivation and interest?
- What are their reading abilities, what are the most difficult passages of the text, and how do I support them through those?
- What vocabulary do they need to really get the content in the activities?
- How does the activity address oral fluency?
- How can I support ELLs in writing activities while they are learning English? (p. 6)

The main measure of ELLs language progress in use in Minnesota and other states is a set of WIDA narratives (WIDA, 2012) which include can-do descriptors that correlate well to PBL activities and outcomes (See Appendix F).

Student Self-Concept

Collaborative project learning creates opportunities for more purpose-driven and multicultural education, especially for students who do not yet confidently engage with text-intensive content. Students' existing experience with art and music functions as the gateway to developing visual literacy and critical thinking/writing that leads to greater literacy and understanding of social studies content (Gay, 2010; Misco, 2014).

By designing their own inquiries around visual and musical projects, students honor and advance their current understanding of historical concepts. This is important in engaging students who lack confidence as text learners, especially ELL learners or those with IEPs (Yang & Gamble 2013). Constructivist researchers Yang and Gamble conducted their study in two research groups: a control group that engaged in standard language acquisition strategies which put reading before writing, and an experimental group that used the same strategies plus additional collaborative learning, debate, critical thinking, writing and discussion activities that are similar to PBL. The results were that the experimental group had greater gains in language acquisition and critical thinking and writing. Yang and Gamble have summarized Ennis's conclusions about most effective activities:

- metacognition or 'knowing about knowing'
- logically evaluating information sources

- problem solving
- selecting appropriate strategies or solutions

(as cited in Yang & Gamble, 2013, pp. 398-399)

Aesthetic Awareness

Baldacchino's "exit pedagogy," (2012, pp.175, 192), is similar to Greene's value placed on the aesthetics as a means to critical thinking (Greene, 1985), in their shared notion that authentic and lasting learning cannot take place until the student is placed in the uncomfortable but necessary viewpoint of the outsider in some meaningful way (Baldacchino, 2012). The artist knows that people benefit from viewing things without interpretation first, and other content areas should be examined closely without needing to understand their meaning right away in order to construct more nuanced understandings. When art is restricted to some subordinate use in merely illustrating other concepts, it becomes the tool of a "fascistic" (Greene p. 88; Baldaccino, p. 186) system of learning that imprisons the learner to achieve its own systemic objectives. When art is integral to our teaching of cultural landscapes, students are more engaged because they sense this lack of authoritarian control of what they should observe, it has powerful impact on student connections to the content.

Baldacchino makes the case that aesthetic awareness must exist for its own sake, as well as for the important purpose of "othering" students as viewers (Baldacchino, 2012). When aesthetics are part of our teaching, students can see that our own ordinary point of view is not by default the dominant or correct one and they experience an intuitive understanding that there are many views. Students benefit in other ways from

learning how to look at primary sources with fresh eyes, but learning to free themselves from ideological stances and fixed meanings (Irwin, 2009, p. 68) is of primary importance in social studies.

Other Significant Skills

Costa's Levels of Inquiry (See Appendix I) and Bloom's Taxonomy (See Appendix J), in particular, how both Costa and Bloom interrelate (See Appendix K), figure prominently in my development of rubrics to measure student learning outcomes for PBL.

Costa's Remembering, Showing, Using, Examining, Creating, Deciding, and Supporting with Evidence activities correspond to Bloom's categories of Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation, and roughly to aspects of the seven steps of gold-standard PBL design (See Appendix B) of Challenging Question, Sustained Inquiry, Authenticity, Student Voice & Choice, Reflection, Critique & Revision, and Sharing the Public Product which could be described as putting into context or relating as an additional step to Costa's and Bloom's taxonomies. However, PBL, as a design approach that can be seen as more of a cyclical process, and less unidirectional than Costa or Bloom, addresses realities of how students actually think in practice at multiple levels. As a means of showing how these cognitive measures intersect, PBL is more suited than either Costa's or Bloom's alone, as it does not yield to the hierarchies of academic language in the same way. In other words, higher order tasks and knowledge can be addressed and assessed while still developing the academic language.

Current pedagogy for teaching ELLs struggles to address all higher levels according to Costa and Bloom in favor of building the first two - knowledge and comprehension. PBL offers ways for students to address higher levels while building the lower as well. Subsequent research can address whether students can develop an awareness of more sophisticated inquiry while still working on skills in knowledge and comprehension. Nevertheless, PBL as a means for ELLs to show deeper understandings has the potential to be a major improvement in how language acquisition is taught while maintaining high expectations for student critical thinking (Bloom, et al. 1956; Boss, 2015; Larmer, Mergendoller, & Boss, 2015).

Project-based learning strengthens the relationship between visual literacy and other academic skills like research skills, critical thinking and agency (Mahn & John-Steiner, 2008). Students learn in collaboration and apply themselves to creating publicly relevant and visible outcomes. In the process, they learn to master new techniques in the visual arts, research, writing, and technology (Shermann, Sanders, & Kwon, 2010). Students can then share their projects to contribute to their school and community, and in the process take ownership of new knowledge and show evidence of its value to peers and community. Acts of looking and describing are empowering and even political acts to the larger context of the class and school community (Miron & Lauria, 2005; Ladson-Billings, 1994).

Conclusion

Although ELLs face pressure to progress in language acquisition and improve scores on standardized tests, educators can create and protect a space in class that

engages them as the curious, developing human beings that they are, welcoming ELLs assets and strengths and expertise that come from living in two or more language and culture communities. To accomplish this, creating scaffolds, roles, routines, and culturally-relevant learning to help them access integrated learning in a mainstream classroom is critical. When supported in ways that allow them to access PBL and other inquiry-based practices, ELLs and other struggling readers are able to make significant gains in literacy, fluency, critical thinking, cultural literacy and self-concept and positive relationship to school, as are their peers. They become citizens in the mini-society of the collaborative social studies classroom. The theories discussed in this chapter relate to practical implementations of them in the next in the form of a shared project development website focused on ELLs.

CHAPTER THREE

Website Project

Methods and Research

I shared my research about ELL adaptations for teaching project-based social studies online via a website I designed, with lesson templates, rubrics, and other tools to help teachers use PBL in their classrooms with diverse learners. I used a constructivist theoretical framework to guide my research into effective support strategies and design of project templates that may be adapted to provide students maximum “voice and choice” and guide relevant learning framed by their own inquiry questions (Boss, 2012).

The platform I chose to host my website was Weebly (Weebly, 2018), known for its affordability, usability and high-quality design, and I chose a design template that conforms to the U.S. Department of Health and Human Services Research-Based guidelines for accessibility (USHHS, 2006). Usability elements of main importance are the site’s restrained use of color, consistent fonts, searchable subject tags to enable image descriptors and ease of navigation, logical menus, and embedded code that functions with standard screen reading software for visually-impaired users. I also set up an embedded code from Google Analytics set up around tags that will bring up the site in web searches for PBL, ELL strategies, middle school social studies, teaching and scaffolding strategies, and Minnesota social studies standards.

Constructivist educational philosophy has been the primary framework for the design of this project, in its emphasis on validating a variety of individual participant meanings, social learning contexts, and the teacher's role in guiding students to generate their own theories and deepen their knowledge through advanced critical thinking (Cresswell, 2013, p. 84). Project learning principles of educators Dewey and Kilpatrick have figured in justifying the value of bringing PBL to more students. Throughout the research, the Buck Institute for Education has also been a main source for much of the theory and practice of teaching PBL (Boss, 2012; Larmer, et al., 2002), and was the source of my first formal training in authentic learning design. I have also relied on the developmental narratives of Piaget and Housen, and the cultural studies work of Ladson-Billings, Greene, and Misco. I emphasized the importance of social learning through engaging multiple intelligences in young learners and showed how teachers use student inquiry as a tool to help students construct learning in class.

In its design, this study will also be a pragmatist effort, as it aims to discover the most effective methods for using PBL in the history classroom and to solve a problem faced by my community of social studies educators. I am inspired to do the research by a problem I have observed in many contemporary social studies classrooms: lower level readers and ELLs are often not as invited into more hands-on learning in the social studies classroom.

Rationale and Relevance

Misco refers to the condition of social studies teaching as “moribund” and explains that it has failed in its basic purpose to give students tools to be fully

participating citizens of a democracy (Misco, 2014, p. 241). Many others in the field share his view, including teachers who are required to teach using methods of rote learning that reformers like Dewey opposed over 80 years ago (1933). Misco writes that contemporary teaching of social studies seems to suffer from an outdated, irrelevant, fill-in-the-blanks format that just does not appeal to the vibrant minds of most middle schoolers, and describes current content delivery models as disappointingly “declarative ... disconnected, and irrelevant” in ways that actually impair student abilities to form their own judgements about issues relating to basic citizenship (Litinov, 2012; Misco, 2014, p. 241).

Developing a conceptual framework for the relevance of new knowledge is essential to learning because secondary students are just beginning to develop an understanding of their place in the world. According to Erikson, the young adolescent’s questions, “Who am I?” and “What can I achieve?” are fundamental to their learning motivation (as cited in Woolfolk, pp. 104-105). We need to find ways of teaching that say “yes” to students’ existing skills and questions, while inviting them into building greater skills and questions (Ames, 1992). Project-based instruction offers multiple ways to say yes, and all students deserve to have access to its benefits.

Design and Procedures

This study of how PBL and ELL supports can be integrated into middle school social studies lessons combined a constructivist/interpretivist approach with a pragmatist element (Cresswell, 2012. 28). I designed a website to share the findings of my studies of best practices in both PBL and language acquisition strategies, and then create a rubric

and methodology for evaluating successful lessons that make PBL maximally accessible for all learners. Interpretivist studies “assume that access to reality is only through social constructions such as language, consciousness, shared meanings, and instruments” (Myers, 2008, p. 38).

An interpretivist approach is integral to the design of this study, as its aim is to bring a more student-centered balance to the overly positivist, or objectivist structure of the customary history classroom. Objectivism takes for granted that knowledge exists independent of the learner’s consciousness and cultural context, and so students succeed in learning when they learn without questioning the knowledge (Badhwar & Long, 2016). This is in contrast to the constructivist belief that authentic knowledge comes from students creating their own relationships to it. In many history classrooms, student knowledge of history is often received from text and from an objective source, rather than constructed (Collins, 2010, p. 38). This study presumes that the passivity and lack of authorship in the overly objectivist classroom disengages students from more meaningful and lasting learning in social studies (Blumenfeld, 1991).

According to Elrich, students from high-poverty backgrounds, in particular, may instinctively mistrust the objectivist teaching of history because it represents the mainstream culture that rejects them, and shows how it devalues in having low academic expectations of them (as cited in Woolfolk, 2011, p. 201). These low expectations are clearly conveyed in accepted histories that exclude stories from their own communities’ perspectives. These and other factors contribute to developing resistance culture that can manifest in their negative behaviors at school according to Bennett and Ogbu (as cited in

Woolfolk, 2011, p. 201). Because PBL introduces multicultural, content-driven points of connection and high expectations through research projects, it counters some of the low expectations that lead to poor academic progress as observed in a study by Okagaki (as cited in Woolfolk, 2011, p. 202). Support of a more active learning approach also accommodates multiple perspectives in looking at history, and creates a classroom culture that honors diversity. Both outcomes, high expectations and cultural diversity in the learning environment, are positive ones for all students and lead to higher achievement by multiple measures (Misco, 2014).

Documentation

Practicing the process of historical inquiry is a norm in all of the classrooms in this study. Students must think their way through the concepts by looking at evidence and discussing in groups, at first guided by very general questions (Housen, 2001), with a guiding principle that they should, at first, restrict themselves to thoroughly describing just what is seen/heard, and avoid interpreting the evidence and then guide students toward deeper inquiry, discussion, and writing activities. To support ELLs and other struggling readers, sentence stems and GLAD strategies will be used throughout to ease students new to PBL into the routines of generating their own essential questions and researching on their own.

Products of PBL will include projects, essays, imitative art studies, digital images of their mapped discussions, research notes, social studies journal entries, and sketchbook work. Inviting teachers and students into a “complexity of meanings” (Greene, 1997. 387) is the goal of my project, but assessing this relies on teachers having a clear

understanding of their role in guiding, not driving, students through all the stages of their projects. It is necessary that educators sustain their own comfort with ambiguity in learning how to deliver PBL to all learners in treating the classroom as a laboratory to develop more legitimate approaches. Questions must remain at first general and open ended and then guide students toward more specific conclusions about the meanings (Cresswell, 2013).

Summary

As a resource for educators seeking to adapt PBL for their students, I have created new PBL project ideas and rubrics integrating ELL strategies that support literacy and higher-level critical discussion and writing, a reference page with scholarly resources, searchable lessons and project ideas for social studies, links to local, state, and national standards, planning tools and frequently asked questions page for educators new to implementing PBL. Lastly, I designed a survey to assess teacher needs (See Appendix L) and a searchable index within the website where middle school social studies teachers can share their own PBL ideas.

The website is where the theory and strategies that I have researched in this project can be put to use to share the rationale for using PBL with struggling readers and also the practical scaffolds that can be used in the design and implementation. The most frequent misunderstanding in my conversations with fellow educators about PBL has been that it is not seen as an assessable or rigorous way of teaching. By connecting colleagues with persuasive research, connections to social studies standards and customizable supports that allow them to try PBL for themselves, I aim to fill a gap in my

professional community so that we can reach more students with the advantageous learning experiences they need.

CHAPTER FOUR

Reflection

Introduction

My work as a public school teacher in a variety of inclusive middle-school classrooms has led me to ask: How can Project-Based Learning be adapted to enhance middle school social studies lessons and learning outcomes for English Language Learners and other struggling students? This chapter is a consideration of how the research and website project answers my essential question in terms of implementing techniques that the research suggests would be most effective, how my community of teachers could use the website resource, what ethical issues arose, and findings that inspire further research.

Implementation

One question that has lingered in the background haunting this research has been “How will this project make a difference?” or at its lowest points, “Will this make any difference?” As a partial, but important, answer to these, my research has made a difference to me, in terms of further developing my own context and priorities as an educator. I have a much better understanding of what sorts of research and practice are developing in terms of innovative PBL than I did at the outset of my research.

My classroom has served as a laboratory for testing several units using PBL, and my context has narrowed my focus to be primarily on the needs of urban ELLs. We need

much more in terms of resources and innovation to provide the education that all students deserve. I believe even more strongly that this really needs to begin with school and district leadership in coordination with teachers, not as a piecemeal effort in certain progressive rooms. Those innovative PBL teachers are always going to be great favorites of their students, but they may challenge existing teacher assessment rubrics that, many argue, fail to assess more complex activities like research, writing, and critical thinking around specific disciplines. Criticism from advocates of constructivist teaching is that standardized assessments of teachers are too non-specific, and at the same time lengthy, in their need to be uniformly applied (Thomas, 2016, para. 2). Thomas describes the current climate of teacher evaluation as a “statistical enterprise - not an adventure in teaching and learning” (para. 12) and indicts this trend as a betrayal of the basic tenets of progressive education reform undertaken by Dewey and others over a hundred years ago. Namely, in our efforts to achieve uniformity and data-driven solutions, we have lost the “soul,” and the “meaning,” of educational experiences, according to Dewey, and thereby delegitimizing the whole point of progressive reform, which was meant to revive learning with an infusion of authenticity to free students’ minds (para. 12).

In full transparency, all of my work to develop a responsive and culturally relevant curriculum of my own of ELLs and others took place in a school environment that was not supportive of PBL design in general. Consequently, much of my research was unconsciously shaped by making a basic argument for PBL to unconverted educators and administrators who were either frightened, skeptical, or in some cases even openly scornful of this unfamiliar approach. However, the more I have learned about

implementing PBL, the more committed I have become to it because of what it offers in terms of student outcomes. My focus on making an argument to defend PBL from critics has perhaps prevented me from following every fascinating research tangent that presented itself. As a result of determining that PBL for all students was a core value of my own teaching and learning, I did choose to leave my position for one in a more innovative school where I can further develop as an interdisciplinary PBL educator. This was a courageous step that I was only able to take after the kind of deep reflection that my research led me to. Another lesson for me in doing this work is realizing how much it matters how we spend our time, to us and to our students.

Trauma-informed teaching is another area of research that has affected my teaching during this research, as I have become aware of the increasing number of students experiencing trauma in classrooms like mine. While trauma-informed teaching intersects with making safe spaces for students to experience authentic project work and inquiry, there is so much more that is needed in terms of support, understanding, and responsive curriculum and school environment. Through no fault of their own, many teachers simply are not prepared to teach such high needs students, and teaching programs may not address the training training teachers need to be an advocate for all our students. This topic may not seem to be related to student outcomes in PBL, but it is: designing for equity and innovation means being informed about where our students are coming from and to honor their experiences, whatever they may be. I have further questions after reading so much about and teaching students with significant trauma: why are there so many, and how do we prepare as educators to create responsive classrooms to

meet their needs? These questions will guide my further research to improve my teaching practice.

The societal backdrop to my last two years of teaching ELLs has been one of sweeping changes to U.S. immigration laws and procedures, increased deportations of undocumented immigrants, and an overwhelming amount of negative press about the very families I serve. Many adults - whether in the targeted groups or not - have struggled to remain optimistic and resilient and resist internalizing the xenophobia and negative stereotypes promoted as policy by the current administration, so I know that my students are struggling. Several students have confided in me that they fear their parents or other family members may be deported at any time. How could they possibly focus on the content when this is happening? When I suggested that we start our first PBL unit on immigration with an engaging launch activity and discussion, not all of them are thrilled at the mention of this topic, and they cannot, or will not connect to the content by sharing. This is now part of what ethical teachers must address in creating a positive context for learning, in addition to their academic and other developmental needs. That is just one example of how addressing social studies content in my class is not separate from addressing the needs of the whole child.

Student “voice and choice” as described in the PBL project design essentials, is the most intriguing to me in terms of further research questions. Non-coercive, multicultural, purpose-driven teaching sounds great, but some of our students may not yet be ready (either developmentally or because of academic and literacy needs) to make good choices that are needed in project work. In sixth and seventh grade, children are

undergoing radical growth in every way, which creates a state of vast potential in them. This is what makes them so rewarding, and sometimes perplexing, to teach.

Similarly to what my research showed, the most effective practice to encourage better choices around project work in my classroom has been leveraging social learning motivators like roles and peer feedback, rather than intervening and limiting their options for the sake of time or productivity. However, in a few cases, students needed me to choose topics for them. They were practicing important academic skills of self-advocacy in class by reaching out to me as the MKO, but I would like to examine other ways to help students gain confidence besides limiting their choices. At times, my work to find ways to encourage students to help themselves (and not affirm their own low expectations and Seligman's notion of "learned helplessness," (as cited in Woolfolk, 2011, p. 478) has seemed like an unsolvable riddle in my teaching practice. This research has improved my set of tools, and also my connection to the big questions that my teaching peers are considering, also. As a community, we have some thematic commonalities and shared wisdom that are among my most valuable resources in becoming a better teacher of PBL.

Community of practice needs. I am still uncertain how my teaching colleagues may want to use the web resources that I created, how exactly I will reach out to them other than through informal networks of colleagues within my building and peer networks, or if many of them will choose to share their own resources and outcomes. Nevertheless, I have created the space for them to do so and a framework to develop as my understanding grows about what we need as a community. If there is a need for them

to have a secured space to share student work, the site is also security enabled with the simple addition of a password and is designed to be searchable and can accommodate a blog section with registered users.

There are natural limits to my scope: teachers do not always feel confident sharing, or have time to share and document their work, not to mention the size of my network, and restrictions on data privacy that may apply in sharing student projects. However, opening our teaching practice to the wider community to share what we have learned is one of the essential steps of PBL that packs the most power. We all learn more when we share what we know. But even if only the 10 social studies teachers with whom I am already acquainted who are using (or attempting) PBL in their classrooms share a few projects each, we will all benefit significantly. In this sense, I am creating a space for progressive gains in my community of practice, which I would say makes the project successful. It is the kind of resource I was looking for as a beginning teacher that I did not find, so it may be useful.

Of course, it is possible that many of my fellow teachers in this area are not interested in developing PBL adaptations for ELLs and other struggling readers, so they may not participate for that reason. In addition, the web resource page could become too much for me to manage in terms of design and indexing everything to be accessible, in which case it would need to be reevaluated. Either or these outcomes would make me feel less positive about the project. Nevertheless, failing and mistakes provide real information, so I could incorporate these outcomes into my next areas of inquiry.

Ethical issues. Many questions arose during and after this research that I was unable to address, such as the duty of public education to lead in addressing progressive reforms, amount of resources needed for teachers to implement inquiry-based teaching like PBL, the effects of unsupportive leadership on implementation, privacy and safety issues for ELLs, and funding and enrollment constraints on inquiry-based learning.

When teachers take it upon themselves to train themselves in effective teaching approaches, are we letting our public institutions off the hook for the work they have a societal obligation (and funding from the public) to do? For example, at the national level, leaders are pushing toward a less progressive structure of public education across the board. How does the PBL teacher fit into this model? How do teachers striving to meet their own needs enable institutions to continue to ignore students? In being skilled in this, are we making the lack of good curriculum and other resources less visible to the public that needs to support our schools?

Faithful implementation of approaches like GLAD, VTS and PBL may require an unrealistic amount of additional study and training. After researching, immersing in, and trying to implement them for several years, both on my own and with some limited training, I am only just scratching the surface. How could a full-time working teacher find time to really understand and use them with fidelity?

There may be little or no support for PBL from leadership in the school or district. How does one educator, or a group of educators make change in that situation? Institutions are famously slow to change and love to use jargon that makes it seem like they are innovating, but in my experience, they too often resist innovation at the top.

Teachers can construct little islands of new approaches in their classrooms, but PBL relies on being really connected to the real world through bringing the community into the classroom as well as letting the classroom out into the community. How can authentic PBL really happen when there is not wider adoption of it in a particular school?

What are privacy issues for middle school families and students, especially around the immigration project, citizenry issues, ethnic identity studies? How do we make truly safe spaces to come to PBL with authentic questions that do not endanger students (or make them feel endangered) in the current climate?

What if PBL really does not work for some students? I feel confident that I can adapt this approach to suit any student, but how true is that? What are the limits of the approach? A number of my own ELLs may struggle with unidentified special education needs, as well, for example. So in addition to language supports, they may also need others that have not been evaluated. Perhaps their families do not want them to be tested for a variety of reasons, they have not yet been identified as having a problem, or customary evaluations are not accurate enough for ELLs.

How do underfunded schools with packed classrooms of 35 or more students with many special needs and not enough support staff make innovative learning a top priority? Small groups, customized learning, and strong teacher relationships are critical to implementing PBL for all learners, but the basic math of how resources are distributed may make it impossible to implement. In spite of these doubts and possible limitations, I would argue that any amount of PBL is beneficial if you stay true to the core principles sequence and reflect on the outcomes to make improvements

Further study. Several areas of further research occurred to me over the course of this initial research; how PBL affects standardized test results, what the relationship is between language ability and higher-order critical thinking, how PBL is implemented in other school environments, and what the state of current scholarship regarding progressive reforms more generally. My future interests may be guided by the following questions that resulted from developing this research paper and project:

- How does PBL implementation affect growth on standardized assessments (MCA, WIDA, and FAST tests)? A positive correlation from PBL and growth indicators could make a connection that would inspire administrators to adopt PBL more widely and establish concrete links between PBL design and promoting educational equity. This makes it a viable area for future study..
- How possible is it for students with reading difficulties to progress through more sophisticated learning tasks at higher levels in Bloom's taxonomy, even before they have the language capacities? Despite connecting language supports to complex PBL tasks in multiple ways, and despite having a solid sense that students can participate in higher-level critical thinking without progressing through each phase of language fluency development in order beforehand, I still cannot answer this question definitively with the research I found. This question is the territory of cognitive psycholinguistic research outside the scope of this project, such as implications of research by Pienaar that suggests language

development is essential to higher-order thinking activities of: elaboration of arguments, examining implications, analyzing opinions, and supporting arguments with evidence (as cited in Grosser & Nel, 2013). These capacities are by definition still developing in ELLs, and perhaps middle school students in general according to Piaget (as cited in Woolfolk, 2011. 49).

- How are PBL techniques being used in other schools, with and without high ELL populations, what are the comparisons in outcomes, and what are the larger trends in PBL curriculum?
- Where did all the scholarly interest in holistic child development go? Has our recent focus on student data and measurable outcomes affected progressive educational reforms aimed at developing the whole child? In my examination of research for this project, it seemed that some of the most innovative voices were from 20 or more years ago.
- Finally, what are the policy needs that will arise as our student populations become more and more diverse, particularly in the area of providing equity for ELLs and other struggling readers? What are the potential outcomes that may result from having many students unable to achieve their full potential because they miss being engaged in developmentally-appropriate and challenging learning during the critical developmental phase of middle school? What is the social cost of this lost opportunity?

Conclusion

Inviting middle-school students into the process of authentic inquiry is a complex task, in truth, an ever-changing list of many tasks, as our students are increasingly diverse groups of learners with many needs. As educators guiding ELLs and other struggling readers to construct meaningful knowledge in middle-school social studies, we must each design learning opportunities best suited to our particular classrooms. Training in special instruction techniques and having extra resources and learning materials will help, if they are available. However, responding with effective changes we can each make right now, individually, and with existing resources will help more immediately and perhaps, more with more relevance to or particular students.

Any professional development opportunity or resource that promises a complete solution for all students is either misguided or dishonest. Many of these training modules are developed for profit by selling themselves to school districts. But for each of us, designing to reach students in our classroom is a decent beginning point that can be addressed independent of whatever district mandate comes along. It is possible that as colleagues see the outcomes in terms of literacy, 21st century learning skills, increased engagement, critical thinking, self-esteem, and cultural literacy, PBL may be implemented on a wider scale.

This research to answer the question, “How can Project-Based Learning be adapted to enhance middle school social studies lessons and learning outcomes for English Language Learners and other struggling students?” yielded ideas for making changes to classroom roles and routines in supporting group investigation and promoting

social learning around PBL. I also found ample research to build a case for why PBL is advantageous and why it should be adapted and offered to all learners.

Additionally, introducing more culturally-relevant content, alternatives to text-centered lessons by using VTS, language acquisition strategies like GLAD, critical thinking, structured group discussions, arts and cultural connections, and opportunities for students to bring authentic questions can all support more meaningful learning for ELLs and other students. Because of PBL's potential to integrate all of these and other practices, and because of the significant increase in critical thinking skills that PBL outcomes offer, teachers should introduce it to their middle school social studies classrooms, along with customized supports for their students. Doing so is a matter of professional ethics in providing quality education with equity, and it shows high expectations that students can achieve their potential academically, and more importantly, in finding joy and meaning in the process of learning together.

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Appendix A

Essential Elements of PBL

1) Student Learning Goals

- Student learning of academic content and skill development
- Personal learning goals

2) Key Knowledge and Understanding

- content standards, concepts, and in-depth understandings
- Application of knowledge to the real world to solve problems, answer complex questions, and create high-quality products

3) Key Success Skills

- 21st Century Skills/College and Career Readiness Skills:
 - Critical thinking and problem solving
 - Collaborative work with others
 - Self-management
- Other habits of mind and work
 - Perseverance
 - Creativity

(BIE, 2018; Larmer, Mergendoller, & Boss, 2015)

Appendix B

Seven Elements of Gold-Standard PBL Design

- 1) Challenging Problem or Question**
- 2) Sustained Inquiry**
- 3) Authenticity**
- 4) Student Voice & Choice**
- 5) Reflection**
- 6) Critique & Revision**
- 7) Public Product**

(Larmer, Mergendoller, & Boss, 2015)

Appendix C

Using PBL With Struggling Students

1. Make the activity challenging and the align to standards, but provide enough scaffolding to meet the students where they are. PBL allows for the accommodation of different learning styles through various teaching styles.

Instructional strategies: workshops (centers/stations), solo and team assignments, and small group and whole group learning, aligned with state standards. Incorporating these strategies consistently in my teaching yielded 98.5% mastery in achievement on state test scores and 90-95% passage scores in classroom assessments—which included 504 students, many in Special Education.

2. Include collaboration with peers and experts. PBL encourages expert collaboration to give students a deeper understanding of the learning. Students interview community partners and invite experts into the classroom.

3. Use protocols. Protocols ensure students focus and are guided in their project work. Protocols include structured conversations learning activities like research, critiques, and assessments. Students also use the protocol when planning their final presentations (Terrance, 2017).

Appendix D

GLAD Strategies Paired with PBL Steps

Strategy	Actions	Purposes	PBL step(s)
Pictorial input chart (Foundational)	Teacher charts chunks of information to introduce the topic, each chunk a different color, 10/2 lecture	Make connections to the topic, build interest, elicit questions, start conversation, begin mind mapping	Challenging problem or question, reflection
Expert groups (Foundational)	One student from each small group joins expert group with teacher, experts read content together, highlight main ideas in mind map, illustrate main ideas, gradual release to let students research	Develop content knowledge, social learning, peer academic conversations	Sustained Inquiry, authenticity
Process grid (Foundational)	Process grid with space for each vocabulary word and main concept in the above mind map, teacher asks class to help fill in main ideas on the grid by conferring with their group members, models first row, and student experts present the rest.	Build peer connections, research skills, iterative learning, ZPD, inviting students to see themselves as experts,	Authenticity, sustained inquiry
Cooperative strip paragraph (Foundational)	Teacher models how to create good sentences about main ideas in the lesson using vocabulary and sentence parts on large paper strips, student groups collaborate to create their own sentences and highlight main ideas, whole class puts sentences together to create a paragraph	Model sentence-making grammar and academic vocabulary, model paragraph and relationship to main idea, students practice reading aloud, writing	Sustained Inquiry, reflection, student voice and choice, public product
Cognitive content grid (Foundational)	Day 1 - Teacher writes content words on grid, says the word aloud, students repeat in chorus, group volunteers definitions and works in small groups to develop definitions they lack. Teacher introduces a gesture or synonym (buzzword) for each vocabulary word Day 2 - Student teams share their final meanings for each word, teacher writes final meanings on grid, adds sketch and may offer the word in native language, leads word study, models sentence with each word aloud, teams create own sentence aloud to whole class	Develop research abilities and finding meaning from context clues, collaboration, writing	Authenticity, sustained inquiry, student voice and choice, critique and revision

Adapted by the author from GLAD and PBL (as cited in Alamo Heights School District, 2018; Larmer, Mergendoller, & Boss, 2015)

Appendix E

Visual Thinking Strategies (VTS)

Step	Notes	Product
Project or show prints of artwork, play film, show material objects, or play audio.	Works of art can be single or multiple of related topics or time period. Non-abstract works and primary sources are best for most social studies topics.	Notes on student's own observations
Ask students to look closely and silently at artwork for a few minutes. Instruct them to record just their observations available from using their five senses. No conclusions yet, just evidence gathering.	Let the looking fully occupy the students. Silent thinking is important here and will take some practice. Show them what good note-taking looks like.	Written notes in social studies notebook or graphic organizer on all details of image, artist, year, observations, quick sketch, audio descriptions. The heading can be "observations of (work of art name here)."
Three questions guide discussion: "What's going on here?" "What do you see/hear that makes you say that?" "What more can we find?" "What is not represented here?" "What would the opposite of this representation be?"	Give ample time for discussion and then summarize after each question. Do not correct responses unless it's necessary to continue. Address corrections later during the lesson as needed. Make idea map of the conversation on the board. Take a picture of it and post to classroom site.	Discussion and further written/drawn notes under heading of "conclusions." Idea map on the board. Picture of idea map on classroom website.
Writing prompt: Prompts: "How would you explain what we just discussed? Pick one aspect." "Relate these observations to our study of (historical concept or event)."	Writing workshop time. notebook. 5-30 minutes.	Teacher reviews essays and comments to student in notebook. Points for participation and execution. Rubric is shared with students.
Exit activity: "What further questions about this topic do you have?"	Write questions in notebook. 5 minutes	Written questions under heading of "further questions." Teacher reads from notebooks and addresses questions during the next day's lesson.

(Housen, 2002; Yenawine, 2003)

Appendix F

WIDA Can-Do Descriptors

ELP Level	Level 2	ELP Level 3	ELP Level 4	ELP Level 5	ELP Level 6
1: Entering	Emerging	Developing	Expanding	Bridging	Reaching

WIDA Can-Do Descriptors address abilities of English-language learners to address the key uses of accounting, explaining, arguing, and discussion expressed in the actions of listening, speaking, reading and writing at all six levels, with Level 6 denoting full fluency.

Adapted by the author (WIDA, 2012)

Appendix G

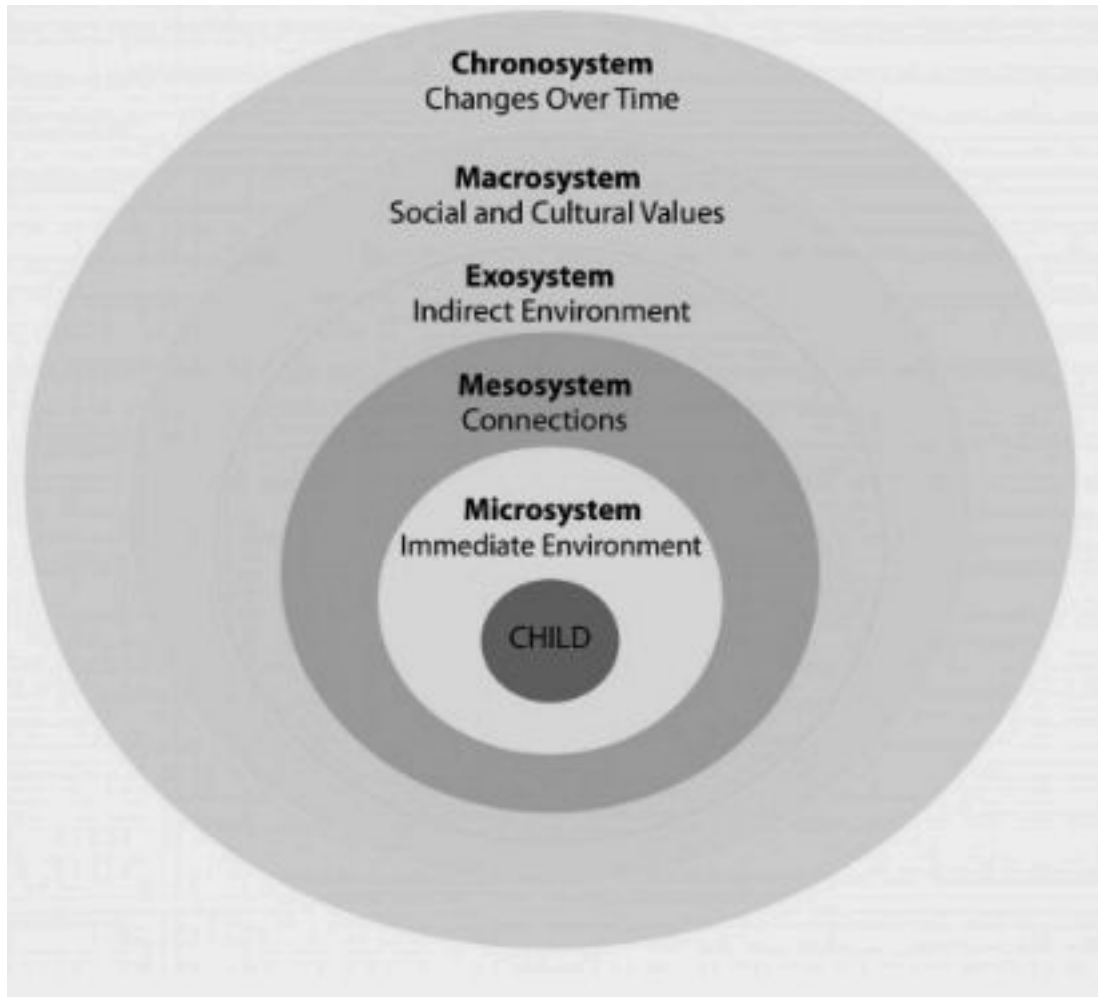
Sheltered Instruction Routines

Step	Action
Target Vocabulary.	Choose a few words vital to the lesson. Define at the beginning of the lesson, and post them prominently for students to see throughout. Add them to the word wall as they are introduced.
Select a Main Concept.	Summarize chapter or section of content in one or two key concepts. Highlight the main concept, and focus on that for the lesson. Interpret chapter readings in outlines or at Lexile levels as appropriate.
Create a Context.	Be creative to establish context for the new information: visuals, sketches on an overhead, gestures, real objects, facial expressions, props, manipulatives, bulletin boards, and the like. Show what the text is referring to. Create key student experiences to make meaning.
Make Connections.	Make time and space to invite students to share their own experiences related to the topic. Facilitate this process by asking deeper questions and connecting the students' comments to the topic in discussion and mind mapping.
Check for Understanding.	Repeat, clarify, and elaborate. Check often for understanding by going over target vocabulary and main ideas. Use variety in assessments. Create a safe space for student questions and authentic participation.
Encourage Student-to-Student Interaction.	Include cooperative activities and projects that pair and group native speakers of English with ELLs in various ways.

Adapted by the author (Echevarria, 1995)

Appendix H

Bronfenbrenner's Ecological Systems Theory



Adapted by the author from Bronfenbrenner (as cited in Psychology Notes HG, 2013)

Appendix I

Costa's Levels of Inquiry

LEVEL 1				
Remember	Define	List	Recall	Match
	Repeat	State	Memorize	Identify
	Name	Describe	Label	Record
Show Understanding	Give examples	Rewrite	Review	Tell
	Restate	Recognize	Locate	Extend
	Discuss	Explain	Find	Summarize
	Express	Report	Paraphrase	Generalize
LEVEL 2				
Use Understanding	Dramatize	Use	Translate	Interpret
	Practice	Compute	Change	Prepare
	Operate	Schedule	Pretend	Demonstrate
	Imply	Relate	Discover	Infer
	Apply	Illustrate	Solve	
Examine	Diagram	Question	Analyze	Criticize
	Distinguish	Inventory	Differentiate	Experiment
	Compare	Categorize	Select	Break down
	Contrast	Outline	Separate	Discriminate
	Divide	Debate	Point out	
Create	Compose	Draw	Plan	Modify
	Design	Arrange	Compile	Assemble
	Propose	Suppose	Revise	Prepare
	Combine	Formulate	Write	Generate
	Construct	Organize	Devise	
LEVEL 3				
Decide	Judge	Justify	Assess	Summarize
	Value	Decide	Select	
	Predict	Measure	Estimate	
	Rate	Choose	Conclude	
Supportive Evidence	Prove your answer.	Give reasons for your answer.	Explain your answer.	Why do you feel that way?
	Support your answer.		Why or why not?	

(Donohue & Gill, 2009)

Appendix J

Bloom's Taxonomy

The following six levels of Bloom's Taxonomy describe levels of complexity in student understanding in increasing order, with level one being the most basic and level six, the most complex. Bloom's premise is that the higher levels promote increasingly lasting learning because deeper cognitive processes are engaged.

LEVEL ONE: Knowledge

define, duplicate, label, list, memorize, name, order, recognize, relate, recall, repeat, reproduce, state.

LEVEL TWO: Comprehension

classify, describe, discuss, explain, express, identify, indicate, locate, recognize, report, restate, review, select, translate.

LEVEL THREE: Application

apply, choose, demonstrate, dramatize, employ, illustrate, interpret, operate, practice, schedule, sketch, solve, use, write.

LEVEL FOUR: Analysis

analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.

LEVEL FIVE: Synthesis

arrange, assemble, collect, compose, construct, create, design, develop, formulate, manage, organize, plan, prepare, propose, set up, write.

LEVEL SIX: Evaluation

appraise, argue, assess, attach, choose, compare, defend, estimate, judge, predict.

(Bloom, Engelhart, Frost, Hill, & Krathwohl, 1956).

Appendix K

Costa and Bloom Comparison

LEVEL	COSTA'S	BLOOM'S	VOCABULARY WORDS LEVELS OF THINKING		
Higher Order Thinking Skills HOTS	(OUTPUT) Applying Information: Applying and evaluating actions, solutions and connections made in order to predict.	Creating: Can the students: <ul style="list-style-type: none"> • Create/generate new ideas, products or points of view • Combine ideas/thoughts to develop an innovative idea, solution or way of thinking 	Assemble Build Construct Create Design	Develop Devise Formulate Imagine Invent	Make Plan Produce Write
		Evaluating: Can the students: <ul style="list-style-type: none"> • Justify a stand or decision • Judge the value of an idea, item or technique by creating and applying standards/criteria 	Appraise Argue Check Critique Defend Detect	Forecast Generalize Hypothesize If/Then Judge/Predict	Select Speculate Support Test Value Value
	(PROCESSING) Processing Information: Making sense out of information; processing the information gathered by making connections and creating relationships	Analyzing: Can the students: <ul style="list-style-type: none"> • Distinguish between the different parts • Explore and understand relationships between the components/parts 	Attribute Classify Compare Contrast Critique Deconstruct	Differentiate Discriminate Distinguish Examine Experiment Infer	Integrate Organize Outline Question Sort Structure
Lower Order Thinking Skills LOTS	(INPUT) Gathering Information: Identifying and recalling information	Understanding: Can the students: <ul style="list-style-type: none"> • Explain ideas or concepts • Understand information provided 	Classify Complete Describe Discuss	Explain Identify Locate Paraphrase	Recognize Report Select Translate
		Remembering: Can the students: <ul style="list-style-type: none"> • Recall or remember the information • Recognize specific information 	Define Duplicate List	Memorize Recall Repeat	Reproduce State

Adapted by the author (Daws & Schiro, 2012)

Appendix L

Teacher Survey

1. How do you use participatory/hands-on activities as part of your history lessons?
 - a. Field trips
 - b. Guest speakers
 - c. Art/music
 - d. Sharing projects outside the classroom
 - e. Independent research
 - f. Debates
 - g. Other _____
2. How culturally-relevant is your school's approved social studies curriculum to the students in your classes?
3. Are you familiar with Project-Based Learning (PBL)?
 - a. If so, please briefly describe how and if you use it in class.
 - b. not, please rate your interest level in learning more about PBL.
4. Are you familiar with Visual Thinking Strategies?
 - a. If so, please briefly describe how you use them in class.
 - b. If not, please rate your interest level in introducing content with VTS.
5. Do you observe a difference in student engagement between PBL and text-based lessons?
6. In general, what role does independent research play in your daily lessons?
7. What routines do your students practice that develop cultural literacy?
8. How do you connect independent project work to content objectives and standards?
9. What are the most challenging aspects of using PBL curriculum?
10. What sorts of learners struggle the most with inquiry-based lesson activities?
11. What adaptations have you used to help all students access PBL?
12. What kinds of support do you wish you had to help engage ELLs and struggling readers in PBL?