ONE HEN: TEACHING ELEMENTARY-LEVEL ECONOMICS FOR CIVIC ENGAGEMENT

By

Annie McMahon Whitlock

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Curriculum, Instruction, and Teacher Education-- Doctor of Philosophy

2013

ABSTRACT

ONE HEN: TEACHING ELEMENTARY-LEVEL ECONOMICS FOR CIVIC ENGAGEMENT

By

Annie McMahon Whitlock

This dissertation is a qualitative case study focused on describing and analyzing the student and teacher experience with One Hen, a project-based learning unit specifically designed to teach civic engagement. In this study I address three questions: 1) Do fifth-grade students' knowledge and skills in economics change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how? 2) Do fifth-grade students' knowledge of and beliefs about civic engagement change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how? and 3) What are the affordances and constraints of teaching economics and civic engagement using a project-based approach? In order to answer these questions, I drew on many data sources: pre- and post-assessments, student and teacher interviews, field notes and reflective memos, and student work samples.

I designed the One Hen unit, a project-based unit for elementary economics that integrates English-Language Arts (ELA) and math. In the unit, fifth-grade students learn about and have the experience running a social business, where they have to design, advertise, and sell a product that addresses a community need. I co-taught the unit in a fifth-grade classroom in a school enrolling a high population of low socio-economic status (SES) and minority students and worked closely with the regular classroom teacher, Lynn.

The students demonstrated a more developed understanding of the economics concepts of revenue, profits, loans, and microfinance after the authentic experiences in the One Hen unit. The

project also gave students the opportunity to be civically engaged, as the students chose to focus their social businesses on addressing the problem of child abuse and teenage homelessness in the community. The experience may have contributed to the students' broader view of community problems and increased civic efficacy. The students had a tangible positive impact on their community by donating their social business profits to a local organization constructing a teenage homeless shelter.

Also, I examine the affordances and constraints of the project-based approach in the One Hen unit. As co-teachers of the unit, Lynn and I both reported that the lengthy amount of time it took to complete the project and the tendency of the project to overwhelm the curriculum were constraints to project-based learning. However, the benefits of students' meaningful learning, behavioral and civic engagement, and benefits to the community with the project far outweighed the constraints, according to the teachers.

The study contributes to our understanding of how students can learn economics for civic engagement, as well as teachers' beliefs about the affordances and constraints of project-based learning. Since No Child Left Behind, social studies instructional time is decreasing, and students from low-SES backgrounds are becoming less civically engaged and efficacious. It is important to examine approaches that can give students meaningful learning opportunities and allow them to engage in their communities that are also feasible for teachers to implement.

DEDICATION

To the Mega Minds.

ACKNOWLEDGEMENTS

I would like to thank all of the big and little things that helped me throughout this experience. The biggest thanks go to the Mega Minds of Lanley Elementary, and Lynn, who opened their classroom and their lives to me. I am so proud of the work they did and the care, compassion, and passion they showed while working hard to make our community safer for homeless youth. Another big thank-you goes to the wonderful people at One Hen, Inc., especially Karen Schultz and Amma Sefa-Dedeh Lartey, for introducing me to their amazing work and giving me their support of my dissertation project.

I am appreciative of the big influences in my life and career, first and foremost my advisor Dr. Anne-Lise Halvorsen. I am so thankful for her guidance, support, and encouragement from my first doctoral class to the completion of this project. I would also like to thank my committee members, Dr. Kyle Greenwalt, Dr. Cheryl Rosaen, and Dr. Peter Youngs, for their help and feedback on this project and for being great mentors to learn from.

I am also grateful for those who took up a big place in my heart and my mind throughout this experience. My family, especially my Dad—my first teaching and writing mentor; my friends, especially Sally, Erica, and Elizabeth—who provided me with great intellectual conversations; all my Section 6 students; and most of all, my husband Mike. Without my partner-in-crime to make me laugh, encourage me to keep to going, and push me to be great, none of this would be possible.

I would like to mention the little things that have helped me along the way—my dependable car, numerous cups of coffee, MSU football games, my running shoes, and a great alternative music radio station in Lansing during those long commutes. As a wise man once said, "You can't ignore the little things. It's the little things that make up life."

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

Introduction

"People don't believe something until they know it or see it… I learned in the One Hen project that you should always believe before you don't."

On a Friday morning, fifth-grade students at Lanley Elementary are in the computer lab exploring websites of various organizations that help solve global problems such as poverty, homelessness, and hunger. As the time in the lab comes to a close, the students are instructed to share their research with their families and friends over the weekend to discuss which of the global problems they researched are also a problem in their local community. Monday morning, the students are ready to talk about which problems they are most passionate about addressing. The students generate a long list of problems (see Table 1), giving reasons why they believe these problems are the most relevant to their city. The students know that they will soon be starting their own social businesses, and they will create a product or service that addresses a community problem, so the teacher guides them toward narrowing the list down to one problem that the entire class feels drawn to.

Many students argue that "abuse" is the most dire and prevalent problem on their list. Some students even share personal stories of their own abuse or those of their family members. Nearly all students vote to donate the profits of their social businesses toward helping address the problem of child abuse and child welfare. The teacher, Mrs. Lynn Rey, reminds the students of their previous economics lesson about cost and profit and that tomorrow's discussion will be about discussing possible low-cost products they could make that would help address child welfare problems in the community. The discussion wraps up before lunch, and two students ask to stay in for recess to research an idea they already have for a business product.

Table 1.

Student-generated list of community problems.

Problem	
• Cancer • Pollution • Endangered species • Unemployment • Hunger • Homelessness • Illness (diabetes) • Starving children • Poverty • Malaria/West Nile • Gas prices-transportation • Graffiti • Books • Abuse • Drugs • Computers/Internet access • School • Electricity • Water • Sanitation • Taxes	• Drunk driving • Smoking • Texting and driving • Overpopulation • Wildfires • Orphans • Violence • Habitat destruction • Bullying • Global warming • Illiteracy • Affordable housing • Inability to get loans • Medical care

Since its founding in 1921, the National Council for Social Studies (NCSS), has made its mission to promote citizenship. Its national curriculum standards, published in 1994, described the organization's mission: to promote "civic competence—the knowledge, intellectual processes, and democratic dispositions required of students to be active and engaged participants in public life" (2010, p. 9). NCSS leaders argue that social studies is important because of its role in showing students how to improve society: "Young people who are knowledgeable, skillful, and committed to democracy are necessary to sustaining and improving our democratic way of life, and participating as members of a global community" (NCSS, 2010, p. 9). The story at the start of this chapter describes a social studies lesson from the project-based unit in this study,

One Hen. However, the story describes a scene that rarely occurs as part of "social studies" in elementary classrooms. Although social studies has been given less instructional time than literacy and math over the last three decades, scholars agree that teaching social studies has been marginalized even more in the school day since No Child Left Behind (Checkley, 2008; Fitchett & Heafner, 2010; Halvorsen, 2013; Houser, 1995). The decrease has been accelerated due to the high-stakes testing demands of No Child Left Behind (NCLB, 2001), in which the subject of social studies is not mentioned (Checkley, 2008; Halvorsen, 2013). This current state of elementary social studies has certainly inspired advocates for social studies to defend the importance of keeping the subject in elementary school. Former NCSS president Steven A. Goldberg wrote that in the current climate of social studies marginalization:

> We must preserve the hallmarks of social studies instruction so that students will gain the requisite knowledge, skills, and habits of mind to "do social studies every day" as we prepare them for college, careers, and citizenship in our ever-changing independent global society (NCSS, 2010, p. 7).

Social studies is an important field of study for developing civic competence, and its marginalization in the school day is an increasing problem.

The commitment of NCSS to an overarching mission to develop civic competence is important, since students are increasingly exposed to global issues and problems through the wealth of information and accessibility offered to students through the Internet. Being civically engaged in one's world no longer only means understanding the functions of government and issues in one's own country, but also in the larger global community. A civically engaged student is an active, intelligent, and informed citizen of the world. NCSS lists six descriptions of civic engagement, three of which guide this study: 1) participating in communities through

organizations working to address an array of cultural, social, political, and religious interest and beliefs, 2) acting to accomplish purposes through group problem solving, public speaking, petitioning and protesting, and voting, and 3) exhibiting moral and civic virtues such as concern for the rights and welfare of others, social responsibility, tolerance and respect, and belief in the capacity to make a difference (NCSS, 2010, p. 166).

NCSS also outlines the five qualities of social studies education that will help produce citizens who are well-informed, civic-minded, and civically efficacious. NCSS calls this social studies "powerful and authentic social studies" and define it in the following ways: active, challenging, meaningful, integrative, and value-based. Social studies instruction is powerful and authentic when it involves collaboration, rigorous academic work, purpose, and integrates other disciplines and content areas (Brophy, Alleman, & Halvorsen, 2012; NCSS, 2008; NCSS, 2010).

Utilizing collaboration and real-life application of content, as well as challenging academic work and creativity, are also characteristics of an instructional approach called project-based learning. Project-based learning is an approach whereby students work with others to synthesize information they have learned in a content area to create a project or solve a problem that has a real-life application, and is often shared with an authentic audience, such as the larger community or school (Katz & Chard, 2000; Thomas, 2000). Project-based learning is an instructional approach that can be enacted effectively in any content area, and it usually allows for opportunities for students to work across content areas as well, such as the integration of social studies and literacy (Halvorsen et al., 2012) or science and literacy (Purcell-Gates, Duke, & Martineau, 2007). The subjects of social studies and science are often considered the "project subjects" because of how these subjects can incorporate ELA and math (Hertzog, 2007). Project-based learning has been a successful instructional strategy in both social studies and science—

students learn more about the content in these subjects using this approach (e.g., Halvorsen, et al., 2012; Hernandez-Ramos & DeLaPaz, 2009; Hertzog, 2007).

In the elementary grades, social studies tends to consists of the disciplines of history, geography, political science (called civics/government), and economics. Usually, these disciplines are taught separately, and often with an "expanding communities" approach (Brophy et al., 2012; Halvorsen, 2013; Parker, 2011). The expanding communities approach describes social studies instruction as starting in Kindergarten with studying small communities like the self and the family, moving to studying the larger communities of the school, city, state, and country as students progress through fifth grade. One example of how state standards are organized around the expanding communities approach is the Michigan Grade Level Content Expectations (GLCEs) for social studies. In Michigan, second-grade students study the history of their local town or city, locate it on a map, and learn about local government (mayor, city council). By third and fourth grade, students study the history, geography, and government of their state, and by fifth grade, students begin to study American history, the locations of the 50 states, and the branches of the federal government (Michigan Department of Education, 2007). The expanding communities approach has been criticized for not being content-driven or engaging to students, and for underestimating younger elementary students' abilities to understand the world beyond their family or school (Brophy et al., 2012; Halvorsen, 2013).

Economics is the discipline of social studies that is often neglected in elementary classrooms. Some economics is taught as part of the expanding communities framework in the lower elementary grades with a focus on personal economics and basic concepts, but is not often emphasized in the upper elementary grades even as economic themes appear in history and geography (Brophy et al., 2012). Ensuring that younger students (even toddler-aged) have

instruction in economics in particular has increased in the last four years (Finkel, 2010). Today's economic climate and financial uncertainty has many people calling for students to become more informed about money, economic choices, and how the government and economy work together in a society (Finkel, 2010). Knowledge of macro-economics (e.g., national budgets, international trade) is of critical importance in a world that is becoming increasingly global and interconnected. However, students' knowledge of microeconomics (e.g., needs and wants, scarcity, opportunity cost) is also vital to the economic and civic health of the country (and world). With excessive credit card and mortgage debt causing problems in today's economy; a call for students to become more "financially literate" about their personal wealth has become crucial (Brophy et al., 2012; Finkel, 2010; Schug & Lopus, 2008).

Learning to manage one's resources to make informed and prudent economic decisions is a critical and lifelong skill. In the discipline of economics, students can have many opportunities to make real-life applications of this content, whether these applications are to their own personal finances, their local community, or the global community. It is important that more research is done to examine how elementary-age children can make connections to economic content. This study describes what happens when teachers use a project-based approach to provide students an authentic experience in being civically engaged while also teaching them economics content in a fifth-grade classroom. This intersection of project-based learning, civic engagement, and learning economics has potential to add another perspective to teaching elementary social studies to engage students as citizens.

Statement of the Problem

Many elementary and secondary level economics programs exist that feature authentic experiences, simulations, and project-based learning such as creating products to sell, running a

store, or participating in a classroom economy where students are rewarded for behavior and academics while learning economics (e.g., Broome & Preston-Grimes, 2011; Kourilsky & Ballard-Campbell, 1984; Kourilsky, 1977). These economics programs have mostly focused on teaching students about how they participate in the economy for their own personal gain (i.e., maximizing income, rewards, or profits). Few economics programs introduce students to the idea of participating in the economy to work toward the common good and to help society.

"Social business" is a concept created by Mohammed Yunus (2010), an economics professor in Bangladesh. He describes a social business as one that creates a product or service that addresses a need in a specific community to make a profit. However, a social business doesn't keep the profits and instead turns the profits back into building the business. He gives an example of Grameen Danone, a division of Dannon yogurt in Europe, that sells yogurt fortified with nutrients at a low price so that parents in extreme poverty can afford to feed it to their children to combat malnutrition in areas where this is a severe problem. Grameen Danone's profits go into distributing more yogurt, not into increasing the salaries and benefits of the entrepreneurs and board of directions that started Grameen Danone, as is the case for for-profit corporations. Nor do social businesses rely on donations to keep afloat, like a non-profit corporation. Social businesses are neither for-profit nor non-profit. Instead, they represent a "new kind of capitalism" that Yunus (2010) believes can be taught to students, possibly even in order to encourage these students to become social business entrepreneurs themselves.

Teaching students the concept of social business is at the intersection of learning economics and experiencing civic engagement. Civic engagement is often taught through community service or service learning (Billig, 2010), and economics is generally taught from the perspective of scarcity and maximizing profits. There is a gap in elementary social studies

programs (and therefore in the literature) that focus on social business, and about what happens when economics is taught for civic engagement.

Economics and civic engagement, taught together or separately, are domains of social studies education. Unfortunately, as mentioned previously, lessons in social studies have been disappearing for elementary students. This is especially prevalent in schools that enroll students of low-SES backgrounds (Camburn & Han, 2011). These schools often have larger class sizes, inexperienced teachers, and fewer resources. These less favorable conditions only exacerbate inequalities in the school experiences for poor and minority children, who are also more likely to enter school behind their peers in terms of achievement (Lee & Burkam, 2002; Snow, Burns, & Griffin, 1998).

The disparity in performance on standardized tests between students of different SES and racial groups is called the achievement gap, and much research has been done about the experiences that low-SES students receive in school (Boykin & Noguera, 2011; Buffam, Mattos, & Weber, 2009). In order to close the achievement gap, students considered "at-risk" (who are often low-SES and minority) are likely to be immersed in tested subjects such as reading and math, and more likely to never receive any kind of social studies instruction, as instructional time for tested subject takes precedence to catch them up (Buffam et al., 2009). This means that students of low-SES and minority backgrounds are less likely to learn (at least through school) social understandings (i.e., knowledge and skills in history, economics, geography, and civics/government) as well as civic efficacy.

Levinson (2012) describes a concept related to the achievement gap--the "civic empowerment gap" (p. 31). The civic empowerment gap affects students from low-SES and mostly minority backgrounds. These students are less likely to be knowledgeable about how the

government works and less likely to participate in political structures (which include anything from voting to volunteering, to working toward addressing a community problem) than their wealthier, non-minority peers.

It is problematic that economically disadvantaged students in our country are not learning economics to the degree their more advantaged peers are, nor are they as well-equipped with the knowledge and capacity to make change in their community through civic channels. The purpose of this study is to learn what happens when low-SES and minority students are provided the opportunity to learn economics and civic engagement directly by starting their own social businesses—a large-scale, authentic project, taught as a project-based learning unit. What do they learn? What do they experience? Another purpose of the study is to learn, first-hand, the benefits and challenges of teaching social studies with a project-based approach. Project-based learning has some drawbacks (e.g., time and planning intensive) and as such, it is important to determine whether its strengths outweigh its drawbacks, even if it is shown to improve students' learning and engagement (Thomas, 2000). If teachers are unable or unwilling to invest the time, materials, and resources into designing and teaching project-based learning, then it will not be sustainable.

The One Hen Project

This study describes a particular case of fifth-grade students in an elementary school who experienced a unit called One Hen. I designed the One Hen unit in a partnership with One Hen, Inc., a non-profit educational group whose mission is to develop educational materials that help instill students with a sense of social responsibility and social entrepreneurship, as well as develop students' awareness of their roles in the local and global community. I helped the founders of One Hen, Inc. revise the unit from a somewhat scripted after-school program

curriculum to a classroom social studies unit. Over the course of two years, I piloted iterations of the One Hen unit in several classrooms of upper elementary and middle school students and worked in collaboration with these classroom teachers to make adjustments to the unit.

The unit employs a project-based approach that integrates the subjects of ELA and math within social studies. The unit begins with reading the students *One Hen* (Smith-Millway, 2008), a book about a boy named Kojo who builds a large chicken farm starting with a small loan of a hen. He eventually transforms the economy of his village in the country of Ghana through his practice of giving small loans to other entrepreneurs. The story is an entry event to the project, where students work in small groups of five or six who receive a small loan (usually $10) to start a business. Through the process of running a business for profit, the students learn economic concepts such as revenue, cost, profits, and loans, as well as practice math skills of counting money and adding, subtracting, and multiplying decimals. The students also make connections between their experience and Kojo's story. Similar to how Kojo's business in Ghana helped improve his entire community, the students research a community need and decide as a class how to build their social business and design products to address this need. Throughout the project, the students practice literacy skills such as participating in discussions, public speaking, and writing. The unit ends with students publicly sharing their work selling products to the community, presenting their work to others, donating profits to a local charity, or often all three.

In this project, students from Lanley Elementary started social businesses to address the community problem of child abuse. Students decided to raise awareness of this problem through selling their products such as calendars, key chains, pins, and friendship bracelets that were royal blue, representing the awareness color of child abuse victims. Other businesses produced children's toys like slime and "stress balls" (balloons filled with cotton) that were also royal

blue. The students' research on child welfare and abuse in their city led them to discover a related problem of teenage homelessness. The students in this study worked with an organization called the Teen House (a pseudonym) that was raising money to build a homeless shelter specifically for teenagers, donating their profits to aid in the construction of the shelter. The One Hen unit had a positive impact on the Lanley students' economics learning and beliefs about their civic engagement.

Summary

This study examines the experience of the fifth-grade students at Lanley Elementary as they participated in the One Hen Project, an integrated, project-based learning unit with a strong civic engagement component. I specifically answer these two questions related to the students' experiences: 1) *Do fifth-grade students' knowledge and skills in economics change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how?* and 2) *Do fifth-grade students' knowledge of and beliefs about civic engagement change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how?*

In addition to the experience of the students at Lanley, this study also examines the experience of the classroom teacher, Lynn, and her perspective on teaching with a project-based approach. Specifically, this study uses Lynn's and my experiences as co-teachers to answer the question: *What are the affordances and constraints of teaching economics and civic engagement using a project-based approach?*

In this dissertation, I provide answers to these research questions through a qualitative case study of Lynn's fifth-grade classroom at Lanley Elementary, a school in a suburb in West Michigan where a large majority of its students are Latino and from low-SES backgrounds. In

Chapter 2, I review the literature on the major foci of the One Hen unit—civic engagement, elementary economics instruction, and project-based learning to describe how the One Hen project fits into the research in elementary social studies. In Chapter 3, I describe the One Hen unit and its implementation at Lanley Elementary as well as describe the qualitative case study methodology I used in this study, including data sources and my approach to analysis.

In Chapter 4, I describe and analyze the findings in my research related to the first two research questions about the student experience in the One Hen unit. I describe the economics knowledge and skills the students learned (and didn't learn) as a result of their experience and how their beliefs about their own civic engagement changed over the course of their social business experience. I tell the stories of five focal students (Summer, CeCe, Lucia, Gaby, and Derek) to exemplify these findings.

In Chapter 5, I discuss the findings of my research and my analysis of the findings related to my third research question regarding the teachers' experiences with project-based learning. I use interviews with Lynn to describe her perspective as well as use my reflective memos to add my experience of co-teaching a project-based learning unit with her.

In Chapter 6, I evaluate the importance of the One Hen unit as a curricular tool for teaching civic engagement and elementary economics. I argue that One Hen and its project-based approach had many benefits for students in regards to developing understanding of economics knowledge and skills as well as their civic engagement, as well as benefits for the community where Lanley Elementary resides. I also describe the caution in implementing One Hen by outlining some of the constraints to project-based learning. This study has the potential to contribute to our understanding of how economics can be taught for civic engagement and how teaching this way can impact students, teachers, and communities.

CHAPTER TWO

Civic Engagement, Economics Education, and Project-Based Learning: A Review of the Literature

This study seeks to describe and analyze students' experiences with a project-based economics/civic engagement instructional unit involving starting a social business, and teachers' experiences teaching the unit. This chapter reviews the literature on three streams of research that inform the study: civic engagement, economics education, and project-based learning in the elementary grades. In particular, it reviews the literature about how civic engagement, economics, and project-based learning are taught in the classroom, and the relationship between teaching and student learning in these areas. This literature review also examines the intersection among all three areas and makes a case that my study of the One Hen unit fills a gap in the literature with its unique focus on all three.

Civic Engagement

The mission of the National Council for Social Studies (NCSS) is to develop students' civic competence and civic engagement for a specific purpose—to be "members of a global community," or in other words, to be an "effective citizen" (NCSS, 2010, p. 166). Citizenship education has long been considered the job of the subject of social studies in schools, but many educators disagree on what citizenship education should entail (Kerr, 2002; Ross, 2004; Westheimer & Kahne, 2004). A central tension arises from the differing values educators have about what it means to be an American. For example, Schlesinger (1998) and others believe that the aim of citizenship education should be to unite the country in what makes Americans common—understanding of our democracy, Core Democratic Values, and facts about our nation's history and government. Americans value our commonalities (e.g., "E pluribus unum").

Ross (2004) describes this model as "citizenship transmission," where students learn that there are certain agreed-upon facts about how to be a good citizen that are determined by those in authority and passed on to them in school.

However, most Americans also value freedom and free thinking (Foner, 1998). Many educators believe that educating students for citizenship means showing them how to develop the skills necessary to examine American values and institutions, which means critiquing and challenging them (Ross, 2004). In this model, which Ross (2004) calls the "citizenship transformation model," students are taught how to have agency as citizens to act for social change. Educators in favor of citizenship transmission education of our American traditions may be in conflict with those who believe in citizenship transformation education to promote changing and challenging some of these very traditions (Schlesinger, 1998). The following sections describe the ways other scholars have defined education for citizenship, including how social justice pedagogy fits into this literature, and how civic engagement is taught in the subject of social studies.

Types of citizenship education and citizens. Some researchers make more refined distinctions between types of citizenship than Ross (2004). In his examination of how other countries (as well as the United States) teach citizenship, Kerr (2002) describes three aims of citizenship education: education *about* citizenship, education *through* citizenship, and education *for* citizenship (p. 5). Education *about* citizenship may include students learning factual information such as their nation's history or government, similar to Ross's (2004) citizenship transmission model. Education *through* citizenship goes beyond factual information to include active participation in one's community, similar to the citizenship transformation model. However, Kerr (2002) describes a third distinction, education *for* citizenship where students are

equipped with both the knowledge and skills necessary for decision-making they will need as citizens.

Kerr (2002) emphasizes that education *for* citizenship encompasses both education *about* and *through* citizenship to combine for a "whole education experience" for a student (p. 5). Kerr (2002) does not position citizenship knowledge and skills as opposing forces, but instead complimentary ones that make up a rich citizenship curriculum. Levinson (2012) also argues that education for citizenship needs to be offered to all students regardless of race or socio-economics status (SES), in order to combat the "civic empowerment gap." She found that minority students are less likely to participate in political decision-making as adults due to years of negative interaction with government systems, such as the police and schools. Levinson (2012) found that measures of civic participation like civic knowledge, voting, volunteering in the community, campaigning for a candidate or issue are unequally distributed between White and Black students, creating a gap where minorities are falling further behind in civic empowerment from their non-minority peers.

Westheimer and Kahne (2004) argue that even if there could be consensus on what kind of citizenship education to offer in schools, educators need to decide what kind of citizen they would like students to become. They describe three types of citizens: the *personally responsible citizen*, the *participatory citizen*, and the *justice-oriented citizen*. According to Westheimer and Kahne, the personally responsible citizen works more as an individual to be a "good" citizen—paying taxes, obeying laws, and giving his or her time and money to help others in need through volunteering or donating money to charity. The participatory citizen views citizenship as broader than the individual, who sees the importance of working with systems, institutions, and other citizens to participate in civic life. Participatory citizens organize community events like food

drives or charitable events, or serve on boards and committees within their communities. Seeing themselves as part of a bigger picture, justice-oriented citizens call attention to social injustices and issues and use collective action to take on these deeper issues. In other words, "whereas a personally responsible citizen may donate food to a food drive, and a participatory citizen may organize the food drive, a justice-oriented citizen asks 'Why are people hungry?'" (Westheimer & Kahne, 2004, p. 243).

Social justice pedagogy. Citizenship education to prepare justice-oriented citizens also shares goals with social justice pedagogy. Social justice teaching can be enacted with an individual perspective—teaching students how to treat each other fairly and interact respectfully--as well as with a global perspective, where students are taught about how to act as agents of change in their community. Students can "move from a position of powerlessness to one of possibility" (Wade, 2007, p. 14). According to Bickmore (2008), social justice "describes a behavior, not merely ideals or beliefs…knowing how to achieve equity, freedom, or transparent decision-making is not sufficient enough to make them happen" (p. 155). In other words, teaching for social justice requires equipping students with civic efficacy—the knowledge, skills, and confidence needed to enact social change within their communities. Students need regular experience in working for social change and being civically engaged, and many educators use service learning as a way to give their students this connection to community activism (Wade, 2007).

Service learning is not just volunteering for a one-time event, but instead involves educating students on important issues, giving opportunities for students to assist others in local settings, and most importantly, is closely tied to classroom instructional aims (Billig, 2010; Wade, 2008). One way to foster civic engagement is to have students regularly participate in

service leaning opportunities that help the students understand the needs of their community and how to help. In 2004, 4.7 million K-12 students in 23,000 public schools were involved in some form of service learning, and 24% of public high schools in the United States require service learning as a requirement for graduation (Wade, 2008). Service learning is more than just community service—it is most effective when the service is connected with academic content, and when the teacher helps the students make explicit connections between their service and the greater social issues in their community (Wade, 2008).

Youniss and Yates (1997) use the term "civic identity" to describe the inclusion of civic engagement and service learning in schooling. They describe civic engagement/identity as gaining an orientation toward civic participation by developing a student's sense of agency and responsibility for addressing problems in society and his or her community (Youniss & Yates, 1997, p. 36). Kahne and Middaugh (2010) make a similar argument. They state the following about high school students:

> Students' broad commitment to civic participation will be enhanced when they develop a sense that they have the capacity to be effective as civic actors, when they feel connected to groups and other individuals who share their commitments and/or can facilitate their involvement and effectiveness as civic actors, and when they have formed particular and strong commitments with respect to specific social issues (p. 144).

Participating in service learning doesn't necessarily mean that students will examine the larger social issues and injustices that might be the reasons for the need for their service (Levinson, 2012), however, service learning can build civic efficacy, especially if students can experience some sort of success as positive change agents through their service (Kahne & Middaugh, 2010; Wade, 2008). If a teacher who is committed to social justice pedagogy helps students become

aware of larger social injustices, taking part in service learning can be justice-oriented as well as participatory. Connecting to others who "share their commitments" can show students that they are part of collective action, no matter how small that action may be.

Like Levinson (2012), Kahne and Middaugh (2010) have found that students from different social contexts are civically engaged in different ways. In their study, they found that White high school students were more likely to report that they feel comfortable speaking their opinion in government and civics classes, whereas Latino or African American students reported very few school experiences that fostered their civic engagement. Kahne and Middaugh (2010) stress the importance of fostering civic engagement in high school social studies classes, as civics classes are often the last stop before students enter the job market or higher education. Service learning can be an example of social justice teaching, and with its increasing popularity in public schools, can be the best way to create civically engaged students and adults.

Teaching civic engagement in social studies. As explained in Chapter 1, NCSS describes teaching civic engagement as more than teaching *about* citizenship, and as more than developing personally responsible citizens. The NCSS definition includes active participation in the community to solve problems and exhibit social responsibility (NCSS, 2010, p. 166). The NCSS describes the role of social studies as preparing something closer to Westheimer and Kahne's (2004) justice-oriented citizen, or participatory citizen, and closer to social justice pedagogy rather than a transmission model of citizenship. The NCSS's commitment to civic engagement also means that NCSS leaders believe social studies can be a great subject in which to teach civic engagement because civic engagement can be woven into the many disciplines of social studies. Wade (2007) has stated that many social studies disciplines have the potential to raise issues of inequality in the world and social issues through regular study in elementary

classrooms. She gives an economics example, where a teacher taught her students how child labor is sometimes used to meet supply and demand of goods—a lesson in both social justice and economics.

Ross (2004) doesn't view subject matter as necessarily important to teaching civic engagement in a citizenship transformation model. He writes instead that the "pedagogical goal is to support students as they come to understand their world and have agency as citizens" (p. 250). Although this kind of agency is NCSS's goal as well, civic engagement does not need to come at the expense of subject matter. Instead, subject matter can be the vehicle through which to introduce civic engagement, such as Wade's (2007) child labor example, or service learning projects advocated by Billig (2010). In his study of how other countries educate for citizenship, Kerr (2002) found that in the elementary grades around the world, civics is often taught infused into other subjects, and as part of broader thematic units such as a "Discovering the World" unit in France and a "People and Society" unit in Hungary.

However, Ehman and Gillespie's (1974) study of the effects of classroom climate suggest that teaching students to be civically engaged involves not so much *what* one teaches, but *how* (Ehman, 1980). In their study of political attitudes, confidence, and interests among secondary students, they found that teachers and schools allowing for more student voice and participation in the curriculum, (particularly when discussing issues like in social studies class) is correlated to positive political attitudes of trust, interest, and efficacy. Serriere, Mitra, and Cody (2010) wrote about the experience of three elementary-aged girls who were dissatisfied with school lunch salad options and wanted to petition their school district to offer a salad bar. Cody, the third author of the study and teacher of the unit, turned the "Salad Girls'" interests into a social studies unit modeled after the steps of the Project Citizen protocol from the Center for Civic Education.

The girls identified and researched the problem by interviewing students, their principal, and the school lunch coordinator of their district and they proposed solutions and an action plan presentation which they gave to their school. The Salad Girls were able to successfully change the salad options in their school lunch program. Serriere, Mitra, and Cody (2010) wrote that it was important for these students, who would normally not have a voice in their school lunch options, to experience success with the project. "These opportunities have the potential to increase young people's efficacy and empowerment, the belief that they can make a difference in their lives and the lives of others" (p. 7).

The One Hen unit in this dissertation study encourages the development of civic engagement though learning subject matter, specifically economics. The unit aims to do this by introducing the concept of a social business to fifth-grade students (Yunus, 2010). Yunus (2010) suggests that students learn about the market economy through the lens of addressing a social need as another form of capitalism with the idea that perhaps some students will go into business as a social entrepreneur in the future and continue their work acting as change agents in their community. This approach of connecting economics with civic engagement is unique.

Economics in the Elementary Grades

Studying economics in school can have far-reaching impacts on a student's life as a future adult citizen. Understanding how concepts like needs, wants, goods, services, choice, and money interact in a market system prepares students to interact with their own finances and their own community, and perhaps even for a future career in business. At the elementary level, economics is taught as a discipline of social studies; many connections can be made between economics and other social studies disciplines such as geography and history. The following sections describe what content state and national standards emphasize in economics, what

challenges students face when learning those standards, and examples of elementary economics instructional methods.

In the NCSS publication, *National Curriculum Standards for Social Studies: A Framework for Teaching, Learning, and Assessment* (2010), as well as its 1994 predecessor (NCSS, 1994), the organization outlines 10 themes for social studies knowledge from grades Kindergarten through 12th grade. Each theme reflects content in one or more disciplines of social studies; the theme "Production, Distribution, and Consumption" relating more clearly to economics.

In the elementary grades (K-5), the standards in this theme involve basic economic terms and concepts (e.g., scarcity, needs and wants, goods and services), the role of decision-making (e.g., trade-offs and opportunity cost), and the functions and uses of money. The Michigan Grade Level Content Expectations (GLCEs) for economics overlaps with the Production, Distribution, and Consumption theme, including basic terms and concepts, decision making and function of money in early elementary economics. By fourth grade, students are expected to understand the basic form and functions of a market economy and answer the following questions about the United States and international economies:

1) What is produced?
2) How is it produced?
3) How much is produced?
4) Who gets what is produced?
5) What role does the government play in the economy?

The National Council on Economics Education (NCEE) has also published its own set of standards, the *Voluntary National Content Standards for Economics* (2010), as well as its 2000 predecessor (NCEE, 2000) that describe what is expected for students to learn in the discipline of economics in 20 content standards. These standards include many concepts covered in the NCSS economics theme and the Michigan GLCEs such as goods and services, decision-making, money, and the market economy; but they also include additional concepts like competition, inflation, economic institution, and entrepreneurship. Each content standard specifies the knowledge and skills students should know by the completion of fourth grade, eighth grade, and 12th grade as well as ideas for instructional practices teachers can use to help students meet these standards. These NCEE standards are different from the NCSS standards in that they feature more complicated economic concepts such as *entrepreneurship* in early elementary grades, and they outline how a teacher could scaffold this concept in fourth grade for a deeper understanding by 12th grade.

Students' challenges with economics concepts. The abstractness of economics concepts poses challenges for young students. One example is the concept of opportunity cost, which is a required concept for students to learn as part of economic decision-making in grades as low as second grade in the Michigan GLCEs. Brophy, Alleman, and Halvorsen (2012) suggest that concepts such as opportunity cost are better taught through experiential learning for practical application rather than taught as an "abstract concept in isolation from other, related content" (p. 159).

Brophy and Alleman (2006) identify the economic concept of money as another difficult concept for students to grasp in economics. However, they also argue that money is an important concept to teach and they include it among the cultural universals (defined as a "basic human

need and social experience found in all societies, past and present" (Brophy et al., 2012, p. 10) they believe all students should learn. Cultural universals are important because they are big, powerful ideas as opposed to small, inconsequential details. A social studies curriculum based on cultural universals can be very effective because

> …students will develop a basic set of connected understandings about how the social system works; how and why it got that way over time; how and why it varies across location and cultures and what it all might mean for personal, social, and civic decision making (Brophy et al., 2012, p. 10).

The real-life connections that learning cultural universals can provide for elementary students can make economics more meaningful and relevant to students' lives (NCSS, 2010).

Brophy and Alleman (2006) found that many young children have a limited understanding about money, price, or income. Brophy and Alleman (2006) interviewed 12 first- and second-grade students about their understanding of money and personal experience with economics from a list of big ideas from a unit on the cultural universal of "money." When asked about what resources are needed to start a business, only two of the 12 first- and second-grade students in Brophy and Alleman's study mentioned that money is needed to start a business. When asked further, seven students said that one could get money from the bank, and none of them mentioned a loan as an option. They found that older elementary students are more knowledgeable about how money works, and this knowledge emerges sooner in elementary students who have had real economic experiences themselves, such as receiving an allowance or saving money in a bank account (Brophy & Alleman, 2006, p. 373). Although perhaps developmentally appropriate, if these misconceptions are not corrected at an early age, they are

likely to continue into adulthood, where the consequences of being economically illiterate are serious (Meszaros & Evans, 2010).

Other studies have found that young students' knowledge of economics moves through stages of development similar to Piaget's stages of child development (Brophy & Alleman, 2002; Miller & VanFossen, 2008; Schug & Walstad, 1991). Young children often have misconceptions about basic economic concepts (such as money), but as their economic understanding develops, students are able to reason through more complex concepts, such as international trade. Miller and VanFossen (2008) found that teachers can correct these misconceptions with purposeful instruction, such as economic simulations. Economic simulations allow teachers to introduce difficult economic concepts in an authentic situation. In simulations, students are able to see the relevance of abstract concepts by actually experiencing the economic decision-making involved. Often, more complex economic concepts arise from the experiences than were originally intended. Then, during a debriefing discussion, teachers can expand on these opportunities to extend the economics learning further, and students are more ready to understand because they have experienced the concepts (Brophy et al., 2012). The following section describes experiential learning in economics in more detail.

Instruction in elementary economics. Despite holding some misconceptions about economics content in the early grades, younger students are capable of engaging in the real-life applications of economics and their connections to social studies. Many educators use a project- or problem-based learning approach with economics in elementary grades. Although described in detail in the section below, project-based learning is a type of student-centered, experiential learning where students collaborate to investigate a central question and create a real-world project for a public audience (Thomas, 2000). Problem-based learning is similar to project-based

learning in its experiential, authentic approach, but in problem-based learning, the students focus on searching for a solution to an ill-structured problem rather than creating a project. Although the One Hen unit does feature students working on a community problem, the focus of the unit is on solving this problem through the creation of a large project—a social business. In this study, I will refer to the One Hen unit as an example of project-based learning.

Brophy, Alleman, and Halvorsen (2012) advocate for experiential instructional approaches like project-based learning as an effective way for elementary students to make abstract economic concepts more concrete. Economic simulations have been proven to be particularly effective in increasing students' learning of economic concepts, as measured by pre- and post-tests designed to measure student knowledge of concepts such as producers and consumers, scarcity, opportunity cost, goods and services, and resources (Miller & VanFossen, 2008). Programs for students in upper elementary grades such as Mini-Society, Children in the Marketplace, Small-Size Economics, and Kinder-Economy for early elementary students are all experienced-based curricula to help teach students real-world economic decision-making (Brophy et al., 2012).

Mini-Society (Kourilsky & Ballard-Campbell, 1984) shares similarities with the One Hen unit. In the Mini-Society program, students create their own classroom society and experience the issues and problems that arise from being members of this society, while the teacher leads the class through debriefing the experience and a discussion of the problems and possible solutions. These problems are predictably economics-related, as students deal with issues of scarce resources, supply and demand, and starting a business (Kourilsky & Ballard-Campbell, 1984). Similar to the One Hen unit, students spend most of their time in the unit working independently through the experience of being members of society, and the opportunity for learning in different

content areas can arise from the experience. Even though the Mini-Society program does not have a focus on addressing a community problem like One Hen does, topics such as poverty, unemployment, and inflation can come up during the experiential part of Mini-Society for teachers to discuss with students. Kourilsky and Ballard-Campbell (1984) found that participating in Mini-Society increased students' economic decision-making and positive attitudes towards school, regardless of the academic ability of the students. They argued that Mini-Society was successful because it was relevant to students' lives, and that even students with low verbal skills could be successful with the unit because the experiential nature of Mini-Society allowed these students to display other types of skills (such as reasoning and decision-making). One Hen has similar potential to be relevant to students with its focus on a community problem chosen by the students, and it features a heavy experiential component similar to Mini-Society.

Kinder-Economy (Kourilsky, 1977) is another experienced-based unit meant for Kindergarten students. Similar to Mini-Society, in this program, Kindergartners are introduced to economic concepts such as scarcity, opportunity cost, production, consumption, and specialization through a role-play or simulation, followed by a debriefing discussion led by the teacher. Unlike Mini-Society and One Hen, the simulations and role-playing opportunities in Kinder-Economy are not part of a larger "project" like running a society or starting a social business, due to the developmental level of such young students (Kourilsky, 1977). However, despite the young age of the students, Kourilsky (1977) found that participating in Kinder-Economy led to mastery of the economic concepts of scarcity, decision-making, cost-benefit analysis, production, and business organization, as measured by a pre-and post-test of economic concepts and compared to a control group of Kindergartners. Kourilsky (1977) wrote that these

results suggest that students as young as five and six years old are capable of understanding complex economic problems, but that this understanding does not move naturally through stages of development without some sort of instructional intervention in economics like Kinder-Economy or Mini-Society.

Another effective strategy for teaching elementary economics is through interdisciplinary instructional activities. Economics is easily integrated into the subject of math, as students can count money while discussing price or savings, or calculate interest in the upper elementary grades when discussing loans and banking systems. There are also many children's books that can be used to introduce and reinforce economic concepts and also make connections to mathematics (Altoff & Golston, 2012; Mezsaros & Evans, 2010), including *A Dollar For Penny* by Julie Glass (2000), *Supermarket* by Kathleen Krull (2001), and *Lawn Boy* by Gary Paulsen (2007). One example is the book *One Hen* (Smith-Millway, 2008), which is used to introduce the economic concept of microfinance, entrepreneurship, and loans to young students. Brophy, Alleman, and Halvorsen (2012) write that elementary students are not ready to learn about macroeconomics such as banking systems like microfinance agencies. The *One Hen* story (and the corresponding unit in this study) offers an engaging way to access these difficult concepts.

Other researchers have studied student learning in economics, as taught experientially or integrated with other social studies disciplines. Wittingham (2008) analyzed his approach to teaching economics with his own students and found that looking at historical events through an economic lens helped improve his students' content knowledge in both history and economics. Wittingham (2008) defined economics for his students in the following way: "Economics is the study of how people use their limited resources to satisfy wants and needs" (p. 1). His students used a graphic organizer technique where they examined historical events through these

questions 1) Who was involved? 2) What did they need and why? 3) What might they want, and why? 4) What resources are available? and 5) How were these resources used?

Wittingham used a graphic organizer with these economics questions for students to answer as they learned about historical events in class. His success with his students does show the ease in integrating economics into other subject areas outside of social studies. Helping students make connections across disciplines (between social studies and math, for example), is also a characteristic of project-based learning, as that type of instruction often requires students to synthesize what they have learned in many subjects to create a product.

Many teachers have found success in teaching economics through a real-life experience. For example, a semi-authentic experience is when teachers use a form of economy in their classrooms to distribute rewards for behavior or academics while teaching their students about economic concepts. An even more authentic activity is to give students the experience of running their own business. One study of middle school economics instruction in a Montessori setting examined students' experiences running their own store. Students created products to sell in the store and used their knowledge of the market system to become successful entrepreneurs (Broome & Preston-Grimes, 2011). The researchers found that participating in this kind of application as real-life entrepreneurs led to increased content knowledge in economics, as well as problem-solving and decision-making skills. The authors used Lave and Wenger's (1991) theory of communities of practice to attribute the social interaction among all of the students in running the store in a real-world scenario as a contributor of the students' increased economic knowledge. Working as store owners and workers helped the students see economic concepts in a real-life setting.

Although economics is often taught through a real-life experience or simulation, there is little research on economics instruction that teaches or models civic engagement. However, there are exceptions. For example, in Sylvester's (1994) study, his students experienced economics through both the public and private sector. Students in Sylvester's classroom worked as producers and consumers within an entire simulated neighborhood called "Sweet Cakes Town." These students participated in an economy by working jobs, starting businesses, paying taxes, and dealing with real-life economic consequences and issues such as outsourcing, immigration, homelessness, and unions. Not only did Sylvester believe that this type of economics instruction was an effective way for students to experience economic issues similar to how they would experience economic issues as an adult, Sylvester also saw this project as a great opportunity to teach critical pedagogy. Through economics, students understood how inequalities affected their community and the people in it. This awareness of inequalities in society is part of students learning how to be civically engaged. As mentioned above, civic education and civic engagement is often taught in the elementary grades with an integrated approach in various countries around the world. However, economics is often only integrated into civic education in the later secondary grades, perhaps due to the difficulties students have grasping abstract concepts (Brophy et al., 2012; Kerr, 2002).

Miller and VanFossen (1994) noted that expert economists use their knowledge of concepts to solve complex problems. Economics instruction in K-12 education is very heavily focused on students' understanding of concepts, but not on this problem solving which they call "economic reasoning." Economic reasoning is used in the One Hen unit as students work through the complex problems of starting a social business. The students in Sylvester's (1994) study used economic reasoning to uncover how inequities affected their classroom community.

Miller and VanFossen (2008) write that very few studies or economics curricula focus on how to develop economic reasoning as well as concept knowledge.

None of the studies mentioned above explicitly feature economics instruction designed to promote the common good (Broome & Preston-Grimes, 2011; Wittingham, 2008). Even Sylvester's (1994) "Sweet Cakes Town" was not explicitly designed for students to take collective action to promote the common good. What these studies have in common is their commitment to giving students an authentic experience with economics. Project-based learning is an approach designed to do just that, and the One Hen unit uses this approach to give students an authentic experience with economics and civic engagement. The project-based approach is described in more detail in the following section.

Project-Based Learning

There is no agreed-upon definition of project-based learning or exact model of how it looks in the classroom. "This diversity of defining features coupled with the lack of universally accepted mode or theory of Project-Based Learning has resulted in a great variety of PBL research and development activities" (Thomas, 2000, p. 2). For example, project-based learning is characterized by a student-centered instructional approach where the students experience all parts of designing a project that incorporates complex learning. Often, these projects also incorporate multiple objectives across disciplines (Larmer & Mergendoller, 2010; Thomas, 2000). A related approach to project-based learning is problem-based learning (Savery, 2006). In this approach, instead of creating a project, students seek a solution to a relevant problem. Both approaches involve students presenting a project or solving a problem for a larger audience beyond the teacher (Thomas, 2000). Both project-based and problem-based learning encourage active participation among all students. Active participation can be attributed to the strategy's

connections to constructivist theory; the very nature of project-based learning involves students collaborating with their peers, using one another to construct their own learning by articulating and analyzing problems and solutions, or creating a project.

Historical traditions of project-based learning. The authenticity and relevance associated with project-based learning stems from the early 18th century, when engineering and architecture students in Europe began to work in special schools, as opposed to on the job as apprentices. In these special schools, students were given tasks to complete that were practical and relevant to their future work, such as designing the plans for a new church or palace. These tasks were called "projects" and were known for their connection to real work of an occupation as opposed to abstract and theoretical problems (Knoll, 2010). Connecting school tasks to relevant work within an occupation was also one of the characteristics of the student-centered progressive movement of the early 20th century. In his University of Chicago Laboratory School, Progressive educator John Dewey had students work in cooperative groups to actively engage in hands-on activities and tasks that connected to occupations, home experiences, or students' interests (Dewey, 1902). His colleague, William Heard Kilpatrick, developed from these ideals his "project method" (Kilpatrick, 1918). Kilpatrick advocated for students learning by solving "practical problems" that were discovered by individual students' interests. Seeing no place for a planned curriculum, Kilpatrick believed that the project method intrinsically motivated students because solving relevant problems were "wholehearted, purposeful activit[ies]" (Kilpatrick, 1918). Kilpatrick (1918) recognized that teaching the project method required a shift in the role of the teacher—someone who was comfortable not being the sole dispenser of knowledge in the classroom and who allowed projects to take shape according to students' discoveries and interests, which may mean they are not completely in control of what or how their students learn.

Contemporary models of project-based learning share many similarities to Kilpatrick's project method, and especially shares similarities to the goals of progressive educators. The project-based approach is student-centered and often features students working collaboratively to solve problems and create projects that are relevant to the students' lives and sometimes the communities in which they live. The fact that students sometimes work across disciplines when creating projects can add purpose to students' learning and allow the students to work with their interests and strengths. The teacher is to be a facilitator, setting up projects and learning experiences for his or her students and guiding the students through the process of project creation and problem solving by responding to what students need and allowing the project to unfold naturally.

The role of the teacher is where the project-based approach and Kilpatrick's project method differ. Kilpatrick advocated for a hands-off role for the teacher, and that students achieve true freedom and enlightenment when free to pursue their own interests and solve problems they would like to solve (Kilpatrick, 1918). John Dewey disagreed with Kilpatrick on this point, arguing that leaving children alone and in full control of their learning process was "impossible" and represented a "relapse into barbarism" (Dewey, 1926; Knoll, 2010). Dewey advocated for the teacher to have a larger role in helping students think through their work, in introducing problems and projects that students may not have been aware of, and in guiding the students to developing their own strengths and interests. Dewey criticized Kilpatrick's method for not giving students enough guidance (Dewey, 1926). In his book *The Child and the Curriculum*, Dewey wrote that in order to connect education to real-life experience and the child's world, teachers need to expose students to a logically organized curriculum so the students have a chance to discover their strengths and interests, and determine the real-life tasks they would like to work on

(Dewey, 1902). Dewey used an analogy comparing subject-matter curriculum to a "map" (created by people working within disciplines "blazing a trail and finding his way"). Using this map, students:

> …know what to look for and where to look. It is the difference between looking for a needle in a haystack and searching for a given paper in a well-arranged cabinet…It gives past experience in that net form which renders it most available and most significant, most fecund for future experiences (Dewey, 1902, p. 199).

Nonetheless, as Dewey wrote:

> The map is not a substitute for personal experience. The map does not take the place of an actual journey. The logically formulated material of a science or branch of learning, of a study, is no substitute for the having of individual experiences (Dewey, 1902, p. 198).

Dewey's map analogy explains how students still need the guidance of a curriculum and from teachers to introduce them to subject-matter content, but that this guidance does not have to replace the experience of letting students explore their interests and work on relevant projects within subject-matter disciplines. An effective experience should be a "continuous spiral," where in addressing one problem; the students find new problems to solve and new questions to answer to continue their inquiry (Dewey, 1938, p. 79). Teachers have an important role in designing curriculum that encourages a continuous spiral of learning.

Project-based learning tends to draw upon the ideas of Dewey more than it does those of Kilpatrick. In project-based learning, teachers do not take a back seat—instead they tie projects and problems to curricular standards, provide students with purposeful feedback on their learning, and model critical thinking and problem solving for their students (Larmer & Mergendoller, 2010). Dewey and Kilpatrick both may have agreed that teachers don't need to

work within strict, "fixed" subject areas with project-based learning, but Dewey believed that subject matter was still important in student-centered education.

During the Progressive Era, Harold Rugg's project-centered textbooks for high school social studies became very popular. Seeking to make social studies content relevant for students, Rugg's curriculum emphasized the importance of students learning the knowledge, skills, and key concepts of social studies disciplines that were framed around a current, modern, and relevant problem or issue. His curriculum was engaging and experiential, so students could better connect to the social studies material. His curriculum could be seen as the beginning of problem-based learning, an instructional strategy that shares many of the same characteristics of project-based learning (Rugg, 1931). By the late 1930s, Rugg's problem-centered approach to teaching secondary social studies had become very popular among social studies educators.

Even as critics of Rugg's curriculum accused his problem-centered approach as un-American in the 1940s and 1950s, others did not abandon the desire to make social studies more relevant to students. In the 1960s, Harvard researchers Donald W. Oliver, James P. Shaver, and Fred M. Newmann developed a curriculum where high school students research a contemporary issue to determine where they stand on the issue. The students then defend their stance, often in whole-class, critical discussions of controversial issues such as school integration (Oliver & Shaver, 1966).

Other researchers advocated for an issues-centered approach to teaching civics, investigating primary sources and examining historical perspectives when teaching history, and for teaching elementary economics through experiential, real-world tasks (Evans, 2004). These traditions of seeking ways to make social studies more authentic and relevant for students shaped how project-based learning looks today in the subject.

Contemporary models of project-based learning Larmer and Mergendoller (2010) outline the seven components of project-based learning. According to them, a good project unit begins with an entry event and a driving question. The driving question relates to the learning goals of the project and sets a purpose for the creation of a product. This purpose and focus make the work meaningful to students. The driving question relates to a real-world problem (Krajcik et al., 1998) or can even be derived from the students (Hertzog, 2007). Incorporating student choice can increase student engagement with school in general, and even specifically civic engagement. In their studies of using project-based learning in social studies and science, Krajcik et al. (1998) and Hernandez-Ramos and DeLaPaz (2009) found that students had improved attitudes and felt more engaged in learning the subject matter through investigations in history and inquiry in science. Hertzog (2007) found that classrooms that used a project-based approach had fewer behavior problems when students were allowed to work with each other to choose how to solve a problem, or how to create a project.

Student choice is an essential component of project-based learning, and so is collaboration. Collaboration, along with the cross-disciplinary work and technology use associated with this strategy are often considered "21st century skills," which are the skills many believe are necessary for students to succeed in a future job market where the jobs involve right-brained critical thinking and creativity (Larmer & Mergendoller, 2010; Pink, 2006).

Project-based learning can feature projects that mirror authentic situations for students, such as working as entrepreneurs to start a social business in the One Hen unit. In these authentic situations (and in their future careers) students need to work across disciplines in order to create the project. The One Hen unit is an integrated unit, as it teaches knowledge and skills from three different subject areas while the students use their understanding from these subject areas to

focus on addressing a problem. In this case, students use reading, writing, listening and speaking skills often taught in ELA, economics knowledge and skills often taught in social studies, and adding and subtracting decimals taught in math to run their social business.

Although project-based learning is student centered, students are not completely left alone to make these connections across disciplines and they are not on their own to create a project. The teacher is a facilitator of students working toward the learning goals of their project, ensuring that students have the proper scaffolding to meet the goals. Teachers design real-world problems to solve that involve higher-order thinking and give regular feedback toward their students' progress (Larmer & Mergendoller, 2010). In their study of project-based learning in geometry, Barron et al. (1998) found that when compared to a control group classroom, students that worked on a project involving real-world geometry tasks showed growth in their knowledge of geometry concepts and were more willing to revise their work when knowing their solutions and products would be shared with their classmates and an outside audience.

Another key component of project-based learning is the publicly presented project or solution, which allows students to share their work with others, adding to the authenticity of the task. They are no longer creating something solely for their teacher, but for a wider audience such as the school or local community. In the case of problem-based learning, students' work can have an impact for change in the community, if the students have studied a solution to a real problem. This kind of instruction can keep students civically engaged and promote a sense of agency within a student. Billig (2010) describes the connections between problem-based learning, civic engagement, and service leaning. Often problem-based units are designed to be service projects, which can increase students' self-efficacy toward their community, and lead

students to be more involved community members and volunteers in the future (Billig, Jesse, & Grimley, 2008).

Connections to curriculum integration. Project-based learning also has connections to another instructional approach—curriculum integration. Many kinds of instruction can be labeled as curriculum integration (or even interdisciplinary instruction). Vars (1991) writes that curriculum integration can be as simple as teaching subject areas together that have similar topics, or as unstructured as students and teachers planning instruction together to incorporate student interest. A common way to integrate subject areas is through a theme, which is sometimes referred to as thematic instruction (Kerekes, 1987). Barab and Landa (1997) describe the driving question or theme of an interdisciplinary curriculum as the "anchor" and the learning activities (regardless of subject area) as the "hub." In order for an integrated curriculum to have relevance and meaning to students, subjects should be integrated under themes or big ideas, not trivial topics. Themes allow students to engage deeper into content and allow them to more easily attach meaning to what they are learning (Barton & Smith, 2000; Hargreaves & Moore, 2000). Shanahan, Robinson, and Schneider (1995) give a clear example of the difference between topics and themes. An integrated curriculum centered on the topic of "penguins" can be difficult for students to engage in, especially if students aren't interested in penguins. Also, that topic can result in students working with subjects in isolated, trivial ways with forced connections to fit the topic. Whereas a theme such as "it's important to be different" is broad and meaningful enough for students to make connections to their lives and across subject areas, as well as allow teachers to introduce social issues and problems (Shanahan, Robinson, and Schneider, 1995, p. 719). Integration of subject areas under a specific theme, as opposed to topic, is compatible with problem- and project-based learning.

There are some scholars (e.g., Beane, 1997; Bergstrom, 1998) who believe that personal and social development should be the main goal of curriculum integration. Strubbe (1990) asked middle school students to evaluate integrated curriculum units that focused on relevant social issues and found that the students preferred and were more engaged with these types of units. This engagement shows that students are willing and perhaps excited to dig into social issues and the content that comes with organizing instruction around these themes.

Beane (1997) argues for the importance of integrating curriculum around social issues, even if it means ignoring traditional subject area labels. Beane (1997) defines curriculum integration as "a curriculum design that is concerned with enhancing the possibilities for personal and social integration through the organization of curriculum around significant problems and issues, collaboratively identified by educators and young people, without regard for subject area boundaries" (p. x). Beane (1997) describes the four dimensions of curriculum integration theory as an integration of experiences, knowledge, curriculum design, and social aspects. He believes an integrated curriculum gives students an unforgettable experience, where they can use their prior knowledge in new situations and gain new knowledge as part of a "big picture" as opposed to segregated by subject area. Students are working on a problem that promotes the common good, that is important to them to address, and where the teacher organizes the entire curriculum around projects or activities that will help them address this problem.

Curriculum must be integrated meaningfully, doing justice to all the subject areas involved (Alleman & Brophy, 2010). If curricular goals are aligned among subject areas and integrated together, students are more likely to meet curricular goals and are more likely to retain content, especially if the content is taught with an authentic application (Brophy, 1999), such as

when centered around a problem or project. Social studies and literacy are two subjects that are often integrated together. This is due to the common skills that subjects share, such as persuasive writing, identifying perspective and bias, and distinguishing fact and opinion (Alleman & Brophy, 2010). With limited time to teach social studies in elementary schools, integrating social studies and literacy (which is a subject often given much more instructional time in a school day) can be seen as desirable by elementary teachers, and a good way to improve elementary social studies instruction. For example, Halvorsen et al. (2012) found that students from low-SES schools showed gains in content knowledge of economics, civics and government, and public discourse, decision making, and citizen involvement from pre- and post-tests assessing Michigan Grade Level Content Expectations (GLCE) in those social studies areas. After they had participated in two project-based learning units that integrated content area literacy and economics and civics and government, students performed just as well on assessments as students from high-SES schools who did not participate in the projects or in integrated instruction.

However, Alleman and Brophy (2010) caution teachers against integrating social studies within other subjects if the instructional activity doesn't offer any significant content learning toward social studies goals. Instead, they recommend tasks that draw on literature and literacy skills that match social studies goals, such as reading biographies or writing a letter to a public official, or introducing a new literacy skill using social studies content, such as outlining a passage in a social studies textbook. Activities that integrate subject areas must be significant and worthwhile on their own, even if they weren't integrated. Brophy and Alleman (1991) also caution against such trivial, but integrated instructional activities as alphabetizing state capitals, which is not a worthwhile activity in either social studies or language arts alone.

Some educators worry that the important content knowledge within disciplines can get lost when content is integrated around social themes or issues, or when the focus is mostly on student interest as opposed to what is essential learning in the disciplines. Gatewood (1998) criticized Beane's view on curriculum integration, writing that integrating subject areas around a problem does a disservice to students understanding the essential knowledge and instructional practices within specific disciplines. Beane (1995) had responded to critics even before Gatewood's piece, writing that "what possible integrity could there be for any kind of knowledge apart from how it connects with other forms to help you investigate and understand the problems, concerns, and issues that confronts us in the real world?" (p. 620). Beane (1995) writes that an integrated curriculum doesn't ignore or abandon subject-area knowledge, but instead focuses on the interaction of that knowledge with the world as opposed to trivial knowledge: "curriculum integration centers the curriculum on life itself…" (Beane, 1995, p. 622).

There are possibilities for synergy between project-based learning and the kind of curriculum integration that Beane describes. Beane (1997) addresses project-based approaches in his work, including them as part of the large umbrella of curriculum integration. Successful curriculum integration also allows students to use the skills they learn from one subject area and apply it to make sense of knowledge in another subject area (Alleman & Brophy, 2010). The breakdown of subject areas can make new content seem more authentic to students and offer them more opportunities to extend their learning, much like a good project does within the project-based approach. However, curriculum integration can be done without a focus on "projects," and project-based learning can be done where the students are still working within subject-area distinctions. An "integrated curriculum" does not impose specific school subjects on to students to solve the problem, which could set it apart from project-based learning.

In this study, the One Hen unit introduces students to the concept of social business and how social entrepreneurs help address societal needs. The students primarily learn economics in the unit, but there are other disciplines of social studies that can arise based on student interest and need for the lesson, including geography, culture, and of course, civics. Students will also be reading literature, writing, speaking, listening (all strands of ELA), and even working on basic operations in math as these needs arise when working on their business. Many disciplines are represented in this unit to serve the problem at the center; One Hen can be considered an integrated curriculum as well as a problem-based and project-based approach.

Challenges to using a project-based approach. The connections between project-based learning and civic engagement (with the connections to addressing social needs for the common good) are evident, but facilitating project-based learning or an integrated curriculum is not a simple task. It can involve a major shift in one's approach to teaching, requiring teachers to attend to the "big picture" of a unit—learning progressions, focused goals and targets, and larger guiding questions (Barron et al., 1998). Teaching using a project-based approach involves professional development, and with today's curricular demands to cover content, the amount of time necessary to engage students in this kind of in-depth learning may not be possible, or perceived as possible. Also, many students need to have established some common background knowledge about a topic before they can engage in the application of that topic that is a characteristic of project-based learning (Brophy & Alleman, 2008). Teachers may find that the time it takes to teach this way is also increased when they need to spend time presenting information to build students' prior knowledge before digging into a "problem" or "project."

Hertzog (2007) observed two veteran teachers' attempts to implement project-based learning in their classrooms and the challenges they found to the approach. These teachers were

excited about the hands-on work the students were engaging in, but felt pressure to keep control over the classroom, both academically and behaviorally. The challenge to teaching this way was even mentioned by critics of Rugg's problem-centered approach in the 1950s, as many researchers at that time remarked that only teachers that had full control of their classrooms should attempt student-centered instruction (Evans, 2004). The teachers in Hertzog's (2007) study struggled with meeting state curricular demands and keeping track of their students' progress toward these goals when the learning was mostly the responsibility of the students and not the teacher. If teachers haven't been prepared to teach this way, project-based learning can be challenging. Even the individual component of project-based learning can be challenging for teachers to implement in an educational climate full of initiative demands. Instructional choices such as incorporating student choice, providing frequent feedback and assessment, curriculum integration, and technology, can all be overwhelming for teachers to implement separately, let alone together.

Teaching with a project-based approach can be especially challenging in schools where students are below grade level or living in poverty. These students are more likely to receive what Buffam et al. (2009) call "triage" instruction to bring them up to grade level—mostly direct instruction of tested skills. Teachers in the Hertzog (2007) study taught in a high-poverty school, and referred to the struggle toward managing a classroom of below-grade-level learners in the project-based approach. This struggle can result in the triage-type instruction, (such as Response to Intervention programs (Buffam et al., 2009) for students performing below grade level) overpowering the kind of engaging, authentic instruction posed by project-based approaches. Also, social studies and science appear to be the subjects that lend themselves well to project-based learning (Hernandez-Ramos & DeLaPaz, 2009; Hertzog, 2007; Krajcik et al., 1998) and

these subjects (especially social studies) are disappearing from elementary schools due to state-mandated curricular demands for increased time in tested subjects, especially for struggling students.

Project-based learning has many benefits for student learning, especially the fact that it is a student-centered instructional approach. Students are able to see relevance in their learning when they create something for an authentic audience or to solve a real problem, which can lead to higher engagement. The integrative nature of project-based learning may also allow for a richer understanding of subject matter, as students may be able to better see connections across disciplines (Beane, 1997). Barron et al. (1998) found that students' performance on content-area tasks increased when they were introduced to a relevant problem and then engaged in a meaningful project. The authors first introduced a contrived but authentic problem where two students needed to design a playground for students so they didn't have to play in the street. After solving this problem, the students were asked to design their own playhouse that could be used in a park in their own community. In this combination of problem-based and project-based learning (in which the problem is introduced before the project), Barron et al. (1998) found that students' designs of the playhouse showed gains in their knowledge of geometric concepts (including scale and measurement). Not to mention the students successfully worked in groups and created creative playhouse designs. It appears that when teachers can combine a relevant problem with an authentic project that they may be able to see gains in student learning.

However, project-based learning can be time-consuming for teachers to implement and may even require additional training for teachers so they can successful integrate subject areas with real-life tasks and manage group work. The amount of time involved in teaching with a project-based approach might mean that teachers do not "cover" every curriculum standard

required of them, which could discourage teachers from implementing this type of instruction. Teachers may also be discouraged to use project-based learning if they fear a certain loss of control of the classroom with a student-centered approach (Hertzog, 2007). Krajcik et al. (1998) found that despite the benefits of teaching inquiry science with a project-based approach (including relevance, successful group work, and increased engagement), that time can be a constraint. Krajcik et al. (1998) noted that even if teachers had a significant amount of instructional time to spend on a project-based unit, that the students may not be able to hold their initial motivation for a project throughout its duration. Some of the middle school students in their study even forgot the initial question they were investigating as the project continued.

Behavioral engagement. Student engagement in school is a complex concept. Factors within a school, classroom, or peer group can have an impact on students' willingness to participate in school, their feelings, and their self-confidence toward being able to tackle challenging academic work. These characteristics are important to foster in students because the result of disengagement can lead to boredom, poor attendance in school, or worse—students dropping out completely. These results are especially prevalent in high-poverty schools and among students already struggling academically (Boykin & Noguera, 2011).

Struggling students in disadvantaged environments are more likely to be disengaged with school (Boykin & Noguera, 2011). This could be from the struggles they experience, or perhaps from other demands from home and financial insecurity. Sadly, teachers who perceive students to be disengaged spend less time trying to engage them, which causes them to be more disengaged, and so the cycle continues (Boykin & Noguera, 2011). These students would benefit the most from instructional approaches such as project-based learning to keep them engaged. There are different dimensions to student engagement, all of which play a role in the students'

overall interest in school—affective engagement, cognitive engagement, and behavioral engagement. Approaches like project-based learning can have a positive impact on all types (Billig, 2010; Frederick, Blumenfeld, & Paris, 2004; Jimerson, Campos, & Grief, 2003; Ladd & Dinella, 2009). This section describes behavioral engagement and how students demonstrate this dimension of engagement in a classroom setting.

The term "behavioral" might lead one to believe that engagement is present when a student exhibits "good" behavior, or behavior that is rewarded in a typical school setting--being quiet, paying attention, or making eye contact with the teacher. However, the presence of these behaviors does not necessarily indicate that a student is engaged (Himmele & Himmele, 2011). Instead, behavioral engagement refers to students who actively participate in their learning. A behaviorally engaged student might participate in discussions, complete homework on time, and participate in extra-curricular activities. These students have the persistence, concentration, and motivation to complete this kind of work, which often leads to increased student achievement (Billig, 2010; Jimerson et al., 2003; Ladd & Dinella, 2009).

In the classroom, teachers can use project-based learning to increase behavioral engagement because project-based learning allows students opportunities to actively participate. In project-based learning units, students are expected to be involved in whole group lessons and discussions, but shared decision-making through small-group collaboration can also keep students actively participating. Project-based learning units also incorporate student choice and clear goals, which can also keep students engaged with the content of a lesson as well (Frederick et al., 2004). The authenticity and relevance of the work in project-based learning units can also contribute to students' confidence in completing the higher-order tasks involved in the projects and problems. The more students can perceive their own competence with difficult tasks, the

more engaged they can be with the content as well (Billig, 2010; Frederick et al., 2004; Jimerson et al., 2003).

Engagement can be measured by a variety of factors, including school attendance records, student attitude surveys, or even grades and extra-curricular participation (Nystrand & Gamoran, 1991). Examining different dimensions to engagement has made it clear that both the content teachers present to the students as well as *how* they present the content (possibly using project-based learning approaches) can work together to increase behavioral engagement.

This Study's Contribution to the Literature

There are various examples of economics instruction in the elementary grades that utilize a project-based approach. These studies have shown that combining a content area that has meaningful application in the world beyond school (economics) with authentic instructional approaches can increase students' content knowledge in economics (Broome & Preston-Grimes, 2011; Wittingham, 2008). Sylvester's (1994) case study also shows the potential of using this combination of content and instructional strategy as a form of critical pedagogy to make students more aware of societal inequalities.

This study will add to the literature of using project-based learning in economics and also seeks to add a new component: teaching for civic engagement. Unlike other economic simulations students experience in school, this study aims to discover what happens when students learn about *social business* (Yunus, 2010) and become active participants in the economy to address a societal need.

The review of the literature indicates the importance of teaching citizenship in the elementary grades and to educate students to be more justice-oriented (Kerr, 2002; Westheimer & Kahne, 2004). The One Hen unit aims to develop justice-oriented citizens through the teaching

of economics. Kerr's (2002) study suggested that more curricular resources are needed for teachers to see how to integrate citizenship into their teaching. Although the goal of this study is to examine one classroom's experience of studying the One Hen unit, future research could stem from this study to test the One Hen unit for effectiveness in teaching economics and civic engagement. Research on the effectiveness of curricula that teaches civic efficacy is rare (Brophy & Alleman, 2008); it is possible that if I find the One Hen unit to be an overall positive experience for the students and teacher, the unit may have promise as an exemplary curricular tool (whose effects could be researched in future experimental studies) that can promote the kind of civic efficacy and citizenship that lies at the heart of the goal for social studies.

The research described above outlines elementary economics instruction as being traditionally experiential, with several examples of simulations where students act as producers, consumers, and even entrepreneurs in an artificial (but somewhat authentic) environments (Broome & Preston-Grimes, 2011; Sylvester, 1994). The One Hen unit encourages teaching of civic engagement, something that is not often connected to economics teaching in the literature (Sylvester's 1994 simulation being the closest thing to exposing students to justice-oriented citizenship). There are many examples of project-based economics, but none that encourages students to start a social business. One Hen is more than just a traditional economic experience for students, and it is unique in this regard. Despite the research on teaching strategies in elementary economics, there is little research on teaching and learning in elementary economics. One Hen is one of the few economics curricula that targets developing students' economic reasoning skills as well as their understanding of economic concepts. Research on how students are developing these problem-solving and reasoning skills is very thin (Miller & VanFossen,

1994; Miller & VanFossen, 2008), but has the possibility to increase students' civic engagement as well, as the students are also attempting to solve community problems using economics.

Economists, policymakers, and interest groups are stressing the importance of further research in economic literacy in K-12 students. However, social studies educators are not taking up the responsibility with similar urgency (Levstik & Tyson, 2008). This study does examine teaching strategies in economics, but it goes beyond strategies to add to the scant research on how students learn economics and how teachers approach integrating this subject with other disciplines. As studying economic literacy becomes even more high-profile during this time of a nation-wide economic recession, it is important that the voice of the social studies educators is represented in the field of economics education so that those who work the closest with students as well as content can have an input in the direction of economics education.

However, even if the One Hen unit holds promise as a beneficial experience for students, implementing it will not be worthwhile if the unit is not perceived as such by teachers. Thus, in this study, I explore the teachers' experiences with the unit as well, to gain insight on whether the project-based approach to teaching economics and civic engagement together is feasible, manageable, and worth the time and effort. The One Hen unit is similar to the math projects in the Barron et al. (1998) study in that the unit begins with introducing the students to a relevant problem in their community, then having them engage in a project related to the solution of that problem. As mentioned previously, high-stakes testing has placed increased demands on classroom instructional time. Any instructional approach that is potentially time-consuming should be examined closely. This study will contribute to the literature on project-based learning by examining the benefits and challenges of teaching social studies with this approach using the teacher's perspective and insights.

Research Questions

The study seeks to describe the student and teacher experience with One Hen, a project-based learning unit specifically designed to teach civic engagement. This study will examine how and what students learned about economics from One Hen, the students' beliefs about their civic engagement, and the teachers' perspectives on the affordances and constraints of the project-based approach. Specifically, the study addresses these questions:

1. Do fifth-grade students' knowledge and skills in economics change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how?
2. Do fifth-grade students' knowledge of and beliefs about civic engagement change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how?
3. What are the affordances and constraints of teaching economics and civic engagement using a project-based approach?

CHAPTER THREE

Method

This study examines the students' responses, both cognitive and civic, to learning about social business (Yunus, 2010) and whether and how they become active participants in their community in order to address a societal need. It answers the following research questions: 1) Do fifth-grade students' knowledge and skills in economics change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how? 2) Do fifth-grade students' knowledge of and beliefs about civic engagement change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how? and 3) What are the affordances and constraints of teaching economics and civic engagement using a project-based approach?

Curriculum Intervention: The One Hen Unit

To answer these research questions, I co-taught a social studies unit that could be considered both project-based and integrated, incorporating the subjects of social studies and ELA, as well as math. In 2011, I developed the unit, titled One Hen, in partnership with a non-profit educational group called One Hen, Inc. The mission of One Hen, Inc. is to develop educational materials that will help instill students with a sense of social responsibility and social entrepreneurship, as well as increase students' awareness of their roles in the local and global community. These materials include children's literature about global topics and experiential curricula that use these children's literature titles designed for after-school programs. I worked with the group to adapt One Hen from its original format of an after-school program into a classroom unit by aligning the unit with standards and adding assessments of these standards. I

also revised the unit to incorporate the explicit teaching of social business, including small-group collaborative activities and whole-class discussion questions.

The One Hen unit begins with reading a book about Kojo, also called *One Hen*; the book narrates the true story of a boy who successfully obtained a microfinance loan of one hen in his small village in Ghana to eventually build a large farm (Smith-Millway, 2008). The story serves as an "entry event" into the project the students create, which is to obtain a small microfinance loan from their teacher to start a small business. Each student works in collaborative teams to create and sell a product, as teachers guide them toward understanding of the relationship between economic concepts of revenue, cost, and profit. The students make a profit of real money and participate in exchanges with real money when purchasing supplies from the teacher for their small businesses. During the unit the students learn that Kojo's business in Ghana helped improve his entire community, as he loaned his profits to others to help build their businesses. In this unit, the students research a community need to which to donate their profits, and decide as a class how to build their social businesses. The students choose a product that will help specifically address the community need they choose, as opposed to developing a product *only* for the purpose of making profit.

The unit is designed to be a project-based learning unit. Kojo's story hooks the students into the project, they work in collaborative teams to design a product (and address a community problem or need), and they can publicly present their work to their school, their parents, and especially the larger community. Most of the 16 lessons are student-directed and independent, where, working in business teams, students produce, sell, and manage the inventory of their business on their own.

One Hen unit content standards. The unit integrates multiple subject areas and addresses economics and civics objectives in social studies, as well as reading, speaking, and listening Common Core State Standards (CCSS) in ELA. The students also practice operations skills such as adding, subtracting, and multiplying decimals and percentages when bookkeeping and calculating interest in their small businesses. Since One Hen, Inc. had developed many of the economic concepts lessons and student learning activities in the subject areas of social studies, ELA, and math, I was able to choose standards that were closely aligned to these lessons, and then rework the unit to ensure the closest alignment possible to standards.

The unit includes opportunities for teacher scaffolding and feedback toward Michigan Grade Level Content Expectations (GLCEs) for economics and public discourse and decision-making (MDE, 2007). The unit also targets CCSS in ELA and math (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010). In the National Content Standards for Economics developed by the National Council for Economics Education (NCEE, 2010), One Hen meets three standards relating to a market economy, price, and entrepreneurship. They are:

- Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services (NCEE Content Standard 7).
- Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives (NCEE Content Standard 8).
- Students will understand that entrepreneurs are people who take the risks of organizing productive resources to make goods and services. Profit is an

important incentive that leads entrepreneurs to accept the risks of business failure (NCEE Content Standard 14).

One Hen also targets goals for civics and civic engagement outlined by the National Council for Social Studies (NCSS, 2010, p. 90). They are:

- Understand that key practices in a democratic society include civic participation based on studying community issues, planning, decision-making, voting, and cooperating to promote civic ideals (Standard 10- Civic Ideals and Practices).
- Ask and find answers to questions about how to plan for action with others to improve life in the school, community, and beyond (Standard 10- Civic Ideals and Practices).
- Participation in a civic discussion and action about a school or community issue (Standard 10-Civic Ideals and Practices).

Since the study, and therefore the One Hen unit, took place in Michigan, I selected Michigan standards: the Michigan GLCEs for Economics and Public Discourse and Decision Making. The GLCEs add specificity to the broader national standards. In addition to GLCEs for social studies, the unit also targets the CCSS in ELA and math, as students are reading, writing, listening, speaking, and performing operations with decimals and percentages within the context of the unit (Appendix A). This study is focused specifically on students' learning in economics and their beliefs about civic engagement, so the pre-and post-assessments used in this project only assess the Michigan economics standards and public discourse and decision-making standards. Throughout the unit as part of their classroom instruction, the students were assessed to measure their learning on the CCSS in ELA and math.

Adapting the One Hen unit during instruction. The One Hen unit was also modified, by both me and the regular classroom teacher, as instruction occurred, as student need indicated that certain planned lessons needed to be expanded, or that other lessons in the unit needed to be added to meet the needs of the particular students in this study, and based on innovations the classroom teacher wanted to add to the unit.

Before beginning the study, the One Hen unit was 16 lessons, some of which consisted of introduction of new concepts, facilitation of whole-group discussions, mini-lessons leading into student independent work, and re-teaching or reviewing of key concepts. Due to timing and scheduling constraints, the classroom teacher, Lynn, and I taught several of these 16 lessons over the course of multiple days. For example, we facilitated a whole-group discussion on choosing a community need over three days due to the short amount of time we had to engage in a lengthy discussion all on one day. Sometimes, we split lessons into smaller mini-lessons because the students needed more time to work on key concepts. For example, a lesson on cause and effect with the One Hen story was taught over four days when it became clear that the students needed more re-teaching and review of cause and effect.

Lessons were also added to the unit to meet the needs of all students. Lynn felt that the students needed more lessons on problem-solving and global awareness before beginning the unit, so we added three lessons to address these needs. Lynn also chose to add several more days in which students created and sold their products. On many of these days, we added mini-lessons to review important concepts, which resulted in seven more lessons being added to the unit. In sum, we added 10 lessons to the original 16-lesson unit.

My collaboration with Lynn also resulted in us adding lessons to the One Hen unit that resulted in a much stronger curricular tool. We added a field trip to visit a social business, as well

as several guest speakers from community organizations. These authentic experiences allowed students to practice their speaking, listening, and questioning skills in ELA. The original form of the unit did not include CCSS standards in math at all; Lynn saw an opportunity to add four lessons where she introduced adding, subtracting, and multiplying decimals to the students in the context of them calculating profits. Two of those four added math lessons were mini lessons on reviewing place value and counting money. Adding these lessons increased the opportunities for students to work across content areas and made the integrative elements stronger. Although the length of 26 lessons could be problematic for teachers whose time in social studies is scarce, it is important to note that not all of the lessons were social studies and could be taught during the designated subject-area time for ELA or math.

Teaching the Unit and the Role of the Researcher

For this project, I acted not only as a researcher but also as a co-teacher/facilitator in collaboration with the regular classroom teacher in the participating school. I modeled my role after VanSledright's (2002) study of historical thinking with fifth-grade students. VanSledright (2002) studied fifth-grade students' historical thinking skills after they had participated in two history units where the students conducted investigations into historical questions using primary sources. VanSledright (2002) chose to teach the history units to his fifth-grade participants himself in order to get a richer understanding of students' learning, and to understand first-hand the challenges with teaching history using an inquiry approach.

I took on the role of co-teacher for the same reasons as VanSledright chose to teach his units. I wanted to get a closer look at what the students learned in economics and their beliefs about civic engagement beyond just observing their classroom activities, and experiencing teaching One Hen also gave me insight into the benefits and constraints of a project-based

approach. Experiencing project-based instruction first-hand and reflecting on my experiences gave me a unique view of this kind of teaching from an "insider" perspective. It was important to me to examine the students' experiences as a member of the classroom community rather than as an outsider. Co-teaching and co-planning the unit with the classroom teacher provided me an insider perspective, where I got to know the students and more closely study what they learned in the classroom, similar to how VanSledright (2002) conducted his study.

Cochran-Smith and Lytle (2009) (as cited in Cochran-Smith, 2012) describe this approach as "working the dialectic" (p. 93). They describe the "dialectic" as the typical perspectives and boundaries between the work of a university researcher and the teacher practitioner and how they can become blurred when university researchers take on the role of practitioner or vice versa. Cochran-Smith and Lytle (2009) write that blurring these lines (or "working the dialectic") purposefully can be very beneficial for both parties. They wrote, "Contradictions in our own practice have oriented our research just as much as our reading of the wider literature has" (p. 96). Taking what Cochran-Smith et al. (2009) call an inquiry stance to research can be an important source of new knowledge and raise new questions to study.

I took on the dual role as researcher and co-teacher in this study to open up lines of inquiry that perhaps I would not have seen just being an observer of the One Hen curriculum, especially when it came to studying the project-based approach. I was able to experience first-hand some of the findings from previous studies on the benefits and challenges of project-based learning. My first-hand experience gave me a unique perspective from which to examine my study in light of the previous literature.

My role as a co-teacher made me a participant in the classroom community I studied. Although I have never taught fifth grade, I do hold a current teaching certificate for grades

Kindergarten through eighth grade and have had experience teaching social studies (and economics) to sixth, seventh, and eighth grade students. I have also taught social studies and literacy methods courses to elementary teacher candidates, which has aided in my understanding of curriculum, instruction, and assessment at the upper elementary level.

Lynn and I began our work on the unit prior to the beginning of the school year. We met in August to discuss the unit and to brainstorm possible implementation strategies. Once the school year started, we began to focus our planning on specific lessons. Lynn had planning time first thing each morning, so we used that time to discuss the direction of that day's lesson and upcoming lessons and whether and how we wanted to make changes to the lesson as it was written in the unit. On some days, we continued this conversation after school as well, especially before big "events" in the unit that required more logistics planning, such as organizing how the students could sell products and planning the final presentation. Lynn and I were in frequent communication over e-mail throughout the unit when we weren't at school together.

Setting and Participants

This project is a qualitative case study of one classroom of 29 fifth-grade students at Lanley Elementary and their experiences with the One Hen unit over the course of 16 weeks in the fall of 2012. The following sections describe the school, the participating teacher (Mrs. Lynn Rey) and the environment she creates for her students in her classroom, and the participating students in this project. The names of all participants and the school in this study are pseudonyms.

Lanley Elementary. Lanley Elementary is located in a suburban area in West Michigan and enrolls 425 students from Pre-Kindergarten to fifth grade. The percentage of minority and low-SES students is well above the state average (Table 2).

Table 2.

Demographics of Lanley Elementary.

Ethnicity	*Lanley Elementary*	*State Average*
Hispanic	58%	5%
White, not Hispanic	20%	71%
Asian/Pacific Islander	13%	3%
Black, not Hispanic	6%	20%
Free or Reduced Lunch %	84%	42%

National Center for Educational Statistics (2011)

There are two classrooms at every grade level at Lanley Elementary. The district's early childhood center is also housed at Lanley, and one principal oversees both the early childhood center and the elementary school, which are referred to by the Lanley staff as separate buildings. Although the school is located in an area of the city near a divided highway, heavily-trafficked cross streets, and a commercial center full of chain restaurants and large stores (including a shopping mall), Lanley is located slightly off of a major street, in a heavily wooded area surrounded by paths for the many students who walk to school with their parents.

Perhaps because they are surrounded by nature and green space, Lanley Elementary takes great pride in being considered a "green" school. Certificates from the governor and superintendent of the district are displayed in the office. They certify the school as an "Official Michigan Green School for outstanding performance and lasting contribution to conservation and preservation of the environment." Also, the school has adopted a bald eagle, and a certificate celebrating their support for the National Wildlife Foundation is also displayed in the office, demonstrating a commitment to global awareness of environmental issues. This commitment is modeled by the staff at Lanley for the students in the following ways: signs saying "Reduce, Reuse, Recycle", and "Go Green" are displayed in the hallways and teachers regularly use recycled paper to make copies (and recycling bins are in every classroom and teacher workroom). Several students in the participating classroom could easily explain to me what

"going green" meant to the school—that members of the school community have a commitment to using recycled materials and minimizing waste and energy use.

Lanley Elementary also displays its commitments to students and families in the area around the school in the form of laminated posters indicating the school's Mission Statement, Vision Statement, and Belief Statements. These posters are displayed in the hallways and also in teacher work areas such as the copy room, teachers' lounge, and staff bathrooms. These statements describe Lanley's commitment to educating students in a partnership with "shared responsibility" with parents and students. The statements not only describe students having "the potential to develop academically…through a well-developed and implemented curriculum by following state guidelines," but also that the school will "foster inquisitive minds, healthy bodies, and citizens who are respectful, responsible, and engaged in learning." Notable in these statements is the use of the word "citizens" and "engaged", which suggests that Lanley espouses a culture of civic engagement. The Beliefs Statement, in particular, describes the staff's desire to develop students "socially" (as well as "academically," "physically," and "emotionally"). These statements, coupled with the school's focus on being environmentally conscious, reflects the school's desire to instill in students social responsibility.

Mrs. Rey's Mega Minds. I consulted the principal of Lanley Elementary for recommendations of upper elementary teachers who might be interested in being a part of this study. Co-teaching a 16-lesson project-based learning unit required a time commitment and a willingness examine both curriculum and instructional methods with me. Lynn Rey was recommended by her principal as an ideal participant for this study due to her previous experience with project-based learning, integrated curriculum, and participating in research studies. Lynn is part of the National Writing Project and was in the process of conceptualizing

her own action research study on writing instruction with her students. Lynn's previous experience with the type of instruction featured in the One Hen unit will be discussed further in Chapter 5, but it is important to note that Lynn is a veteran teacher with 17 years teaching experience, who had experience with project-based learning and curriculum integration.

Lynn has been at Lanley Elementary for five years. At the beginning of her time at Lanley, Lynn taught second grade and then "looped" with her students for their entire elementary career after that point, teaching second, third, fourth, and fifth grade in consecutive years. Lynn described looping as a positive experience in which she developed a familial relationship with students. When this study began, Lynn was beginning her second year teaching fifth grade, facing her first year with a "new" group of students, something she had not experienced in the previous four years. Her "new" students, however, were not new to each other, as most of them had been in the same fourth grade class.

The physical space of Lynn's classroom has a "homey" feel—natural light or lamp lighting is used instead of the overhead florescent lights, calming music such as classical music or standards by Frank Sinatra, Michael Buble, or Harry Connick, Jr. plays as students enter the room (and even during independent work time), and Lynn's personal effects surround the room—her collection of dirt from around the world, pillows and beanbag chairs, and many, many books. Lynn is thoughtful about designing the physical space. In early conversations about her classroom space, she stated that both personal experience and research led her to play music while students work and to use natural light. She also said that research she read about brain-based learning led her to incorporate activities like "the hook up," where students take a break from work to cross their arms and feet to stimulate brain activity. She also does five to ten minutes of physical activity with the students after lunch, where she often plays videos from

YouTube and requires students to dance, do yoga, or some other cardio-vascular workout along with the video.

The desks in Lynn's room are arranged in groups of five or six, which she and her students call "learning clubs." Lynn chose this arrangement to foster easier access for group work in her instruction, as well as to build a sense of community. Lynn said that she rarely (if ever) changes the seating arrangement the entire school year (even when students aren't getting along) so they can learn to work together. Lynn devoted a significant amount of instructional time early on in the year for the students to name and make signs for their learning club which are hung in the classroom and also placed on their tables. She required the students to name their club using words from a list of "lifelong guidelines and life skills" that she provided for the groups. Some names include the "Flexibility Bunch," the "Problem Solving All-Stars," and the "Caring Karate Cooperators." As a whole group, the class also chose a name for themselves—they chose to be referred to as the "Mega Minds." The name comes from a Pixar animated film called *Megamind*, where a super villain turns into a superhero; however the students chose the name because it celebrated their collective intelligence.

Lynn places a heavy focus on what she calls lifelong guidelines and life skills in her classroom. Each day, the students copy a "quote of the day" that describes a certain life skill, such as "responsibility," "personal best," or "caring." An example of a quote is "Saying 'I must do something' is better than 'something must be done'" and "Relationships of trust depend on our willingness to look not only to our own interests, but also the interests of others." The students are also required to write a short response to the quote that usually involves them making a personal connection to how they will exhibit this particular skill or characteristic that

day. Many times Lynn has the students share their responses and they discuss the quote during a common time in the morning called "Morning Meeting."

After morning writing and Morning Meeting, the students often have their social studies lessons. At the beginning of the year in social studies, the students had to draw on a poster "what makes a good student," using lifelong guidelines and life skills to describe the ideal student. In a follow up to that lesson, students commented on the good qualities of each other's posters, describing what other lifelong guidelines and life skills could be added to their drawings. In another social studies lesson early on in the year, the class developed a "Class Constitution," where they described how they want to be treated and how they learn best. Lynn guided the students to use the lifelong guidelines and life skills when developing the language for this document, and after completion, all the students in the class signed it. It is important to note how much value Lynn places on developing these skills for her students and these examples show that her beliefs about social studies instruction are heavily influenced by her beliefs about citizenship education. Lynn described her goal for social studies instruction as developing "responsible citizens," and her focus on life skills as part of social studies aligns with this goal. Lynn also believed that another goal for social studies in her classroom is to encourage students' "activism within their community, big or small." Lynn's prior beliefs about the role of social studies and community action are similar to the goals of the One Hen unit. Her beliefs had an influence on how the One Hen unit was implemented within the context of her classroom environment.

Student participants. I asked all parents/guardians of the students in the classroom for consent for their child to complete the pre-and post-assessments, to be interviewed, and to have their child's work from the unit used as data sources. All students whose parents/guardians had provided consent were also asked for their assent to participate in any of the activities that would

be used as data sources. Twenty-one (out of 29) students participated in the study. All students in the classroom participated in the instruction in the One Hen unit.

I randomly chose 10 students as "focal students" for the study. These focal students participated in interviews conducted at the beginning and at the end of the One Hen unit. This approach is similar to VanSledright's (2002) researcher-practitioner designed study in social studies. In his study, he selected students for interviews to represent the wide range of abilities in the participating classroom. In this study, which took place at the beginning of the school year, there were no indicators of the academic ability of Lynn's students. She had not yet given her planned pre-assessments in reading and math before the study began. As such, I selected seven girls and three boys for interviews randomly.

As in VanSledright's (2002) study, classroom interactions such as whole-class discussions, small group conversations, and instruction in general were video recorded for analysis as secondary data sources. The following sections describe each of these data sources in greater detail.

Data Sources

This study drew upon three primary data sources: 1) a pre- and post-assessment that assessed students' economics knowledge and skills, 2) interviews with a focus group of 10 students at the beginning and the end of the One Hen unit, and 3) interviews with the classroom teacher at the beginning and the end of the One Hen unit. Student work, my reflective memos and field notes, and my informal conversations with Lynn during the One Hen unit were used as secondary sources to further explain and support findings from the three data sources.

Pre- and post-assessment of economics knowledge and skills. This data source is used to help answer Research Question 1: *Do fifth-grade students' knowledge and skills in economics*

change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how?

The pre- and post-assessments were designed to measure what students learned about the economic concepts (both knowledge and skills) introduced in the One Hen unit that helped them start and run their social businesses. I field tested both the pre- and post-assessments with a student entering fourth grade the summer prior to the study. I chose this student partially out of convenience, and partially because his achievement level closely represented beginning knowledge of students entering the fifth grade at the time the pre-assessment would be administered. This student described difficulty understanding some of the vocabulary in some of the assessment items, including the names chosen to represent people in the items and scenarios. He also expressed confusion over the lengthy directions for the multiple choice items. Based on his feedback, I made changes to the layout of the assessment (grouping the short response items together and the multiple choice items together instead of mixing them throughout the assessment) to minimize confusion over directions. I also made some changes to word choice. The assessments were also revised based on feedback from colleagues with expertise in social studies education, as well as Lynn, before they were administered.

The pre- and post-assessments were designed to capture the students' knowledge of important economics concepts before beginning the One Hen unit and after completing the unit, and were given to all the students in the classroom as part of their regular classroom social studies instruction (Appendix B). These assessments could also be used formatively to evaluate the effectiveness of the instruction. Although a causal claim can't be made that the One Hen unit is responsible for any change in economics knowledge that may be represented in this

assessment, the examination of learning gains through a pre- and post-assessment analysis can shed light on if and how students' learning developed after the unit was taught.

The pre- and post-assessments measure students' knowledge of three of the National Content Standards for Economics (Appendix A), which align with many of the Michigan GLCEs that upper elementary teachers in Michigan are required to teach. Although the unit includes objectives grounded in the fifth-grade CCSS in ELA, the assessments measures only economics knowledge and two questions targeting public discourse and decision-making to answer Research Question 1 and 2.

A week before the implementation of the One Hen unit, I gave the pre-assessment to all students in Lynn's class. Although all students took the assessment, in this study, I only used assessment data from the students whose parents had provided consent (Lynn kept the pre-assessments from the students whose parents did not provide consent). The assessment took approximately 50 minutes. Both the pre- and post-assessment consists of two parts. The first part features seven short-answer questions and three multiple choice questions. The second part requires the students to read a scenario of a real-life entrepreneur and to answer five short-response questions about this scenario.

The part one is the same on both the pre- and post-assessment, but the scenario in part two of the post-assessment is different from the pre-assessment. Because of this, three of the five short response questions related to the scenarios are slightly different on the post-assessment. I selected different scenarios for the two assessments so I could analyze how the students applied their knowledge of public discourse and decision-making standards to different situations. Based on feedback from the pilot of the assessments, I decided to read the scenario in part two aloud to the students on both the pre-and post-assessment. The students worked independently on part

one, then I collected them and distributed part two. After reading the scenario from part two aloud, the students worked independently on the questions and then I collected the finished assessments, kept the assessments of the students whose parents had provided consent, and returned the assessments of students whose parents had not consented to Lynn.

I administered the post-assessment three days before the final lesson of the unit. I chose to give the post-assessment before the unit had finished because Lynn had made the decision to extend the time for the students to run their social businesses. We had already taught all of the economics lessons in the unit, and I wanted to capture the students' economics learning soon after the instruction ended. I administered the post-assessment in exactly the same away I administered the pre-assessment. Again, the students worked individually and independently on part one, then I read the scenario in part two aloud before the students worked on the questions for part two. I separated the consented assessments from the non-consented before analysis.

Student interviews. At the beginning and the end of the One Hen unit, I conducted interviews with 10 students. A week before the implementation of the unit, I interviewed each of the 10 students one-on-one for approximately 15 minutes. I asked them about their previous experiences with identifying problems and helping solve problems within the community. Their responses gave me baseline knowledge of their beliefs and understanding about civic engagement and their personal experiences with helping the community. This data source helped to inform the answer to Research Question 2: *Do fifth-grade students' knowledge of and beliefs about civic engagement change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how?*

The initial questions for the student interviews are based on NCSS's standards for Civic Ideals and Practices, which encompass the goals for civic competence described in previous

chapters, as well as the Michigan GLCEs for Public Discourse and Decision Making. Students' responses to the questions indicated how students understand these standards of civic competence and engagement. Throughout the unit, other questions were determined as important to ask students that were specific to the One Hen unit. These questions arose from interactions that went on in the classroom (for example, the students' field trip to another social business in the community). A week after the implementation of the One Hen unit, I interviewed these same students for approximately 20 minutes each. In the post-interview, I asked them to elaborate on their experience with the One Hen unit; more specifically about how they experienced civic engagement during this unit (Appendix C). Throughout the interviews, the students were encouraged to discuss their experiences with the unit more broadly, which included discussing what they learned about economics and how they felt about the unit in general. I asked follow-up questions based on these responses.

Teacher interviews. Since the classroom teacher and I worked closely to co-create the One Hen experience for the students in her classroom, understanding her perspective on the students' experiences was also important (Appendix D). I interviewed Lynn a week before beginning the One Hen unit for 60 minutes. The purpose of this interview was to gather information from her about her students' economics knowledge and beliefs about civic engagement to help answer Research Question 1: *Do fifth-grade students' knowledge and skills in economics change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how?* and Research Question 2: *Do fifth-grade students' knowledge of and beliefs about civic engagement change after participating in a project-based economics and civic engagement unit in which they run their own social business?*

If so, how? I asked Lynn about her students' experiences with the NCEE and NCSS standards, as well as about her students' experiences with the One Hen unit.

The teacher interview also helped me answer Research Question 3: *What are the affordances and constraints of teaching economics and civic engagement using a project-based approach?* In the interview, I asked Lynn to speak about her past experiences with teaching project-based learning units, how she approaches teaching social studies, and what she believed to be the extent of her students' prior knowledge about economics. Her perspective is important since her experiences may resonate with other fifth-grade teachers in school settings like Lanley Elementary who may face challenges such as teaching social studies with limited instructional time.

A week after the unit ended, I once again interviewed Lynn for approximately 60 minutes. In this post-interview, I asked Lynn what she thought her students learned from the unit, both about economics and about their beliefs about civic engagement. I also asked Lynn to elaborate on her experience with the One Hen unit specifically: its benefits, its weaknesses, and any modifications she would make to the unit in future iterations.

Student and teacher reflections. Periodically in the unit, the students wrote reflection responses about what they were learning in the One Hen unit in their writing journals (specifically after economics lessons) or during "Sacred Writing Time." Sacred Writing Time was a routine in which every morning, when the students came back from specials class, Lynn gave them a prompt to write about for 10 minutes uninterrupted. The writing prompt was either a quote or a video about student activists or human rights issues, or it asked students to write about something they learned the day before. Sometimes the students were allowed to write about anything they choose; some of the students chose to write about One Hen during this time. I

collected copies of the student reflections to use as secondary data sources. Their reflections added detail to the analysis of the main data sources (pre- and post-assessments and the student and teacher interviews), and I also used them during the instruction of the One Hen unit to get a sense of student understanding in the moment.

After each One Hen lesson, I wrote my own reflection memos about what had happened in that lesson. I captured my own feelings about how I felt the lesson had gone, what I believed to be student understanding at that time, and student interactions, comments, and quotes that I felt were important. I used these memos to cross-reference events that the students mentioned in interviews with my perspective on these events in order to formulate a description of the students' experience.

Both student responses and teaching reflections are measures that classroom teachers use to determine student learning and engagement and to determine the future direction of classroom instruction on a regular basis. In this project, these sources not only helped determined the instruction of the One Hen unit, but corroborated findings from the assessments and interviews.

Data Analysis

I analyzed data in this study after the One Hen unit was implemented. Some data were analyzed concurrently with data collection; responses from interviews, reflections, and student work were used to guide the instruction of the One Hen unit. The following sections describe the analysis of each of the data sources.

Pre- and post-assessment of economics knowledge and skills. These assessments ask the students to state an answer and expand on their thinking to questions designed to measure economics concepts that are taught in the One Hen unit. I created a four-point rubric to analyze the students' answers (Appendix E). A score of 1 indicated "does not meet expectations" and a

score of 4 indicated "fully meets expectations." Each question on the pre- and post-assessments was listed separately on each line of the rubric, and the range of possible answers was described for each question. To develop the range of possible answers for each question, I used a small sample of five randomly chosen assessments to help me modify wording within the rubric. I also worked with another researcher, who also scored a sample of assessments, to compare scores. This feedback helped me further modify the rubric wording and helped me maintain consistency with scoring.

I scored part one of the assessments blind to participant and blind to condition. I concealed the student ID numbers on each assessment and whether it was a pre- or post-assessment for part one of the assessments. Part one was identical from pre- to post-assessment; however, part two of the assessment featured a different passage to read aloud to the students, making it impossible for me to score blind to condition. I scored part one of all of the assessments first, and then scored part two of all of the assessments, assigning a score of 1-4 on each question in both parts. The student IDs were always concealed, but I could not be blind to pre- or post-assessment when scoring part two.

I analyzed these assessments much like a teacher would analyze assessments to gain a sense of what his or her students had learned from an instructional unit. Instead of a statistical analysis comparing pre- and post-assessment scores, I drew conclusions from the students' responses more holistically, to see a trajectory of student learning from the beginning of the unit to the end. I used Microsoft Excel to compare average scores from the entire data set on each question. The comparison allowed me to see which questions had the greatest amount of student growth and which did not. I also compared each student's average growth on the assessment as a whole to see which individual students made the most growth overall. I also looked at both of

these measures together to compare which students exhibited growth on which specific questions, and which students did not. It became clear that students showed growth in knowledge on certain questions more than others. I referenced these questions with the economic concepts and GLCEs the questions were designed to measure.

Student interviews. I digitally recorded the students' interview responses and had them transcribed by another researcher. I first coded the interview responses into categories that I developed based on the findings from the economics assessment. I looked for interview responses that triangulated findings such as understanding of price and specific definitions of loans. Interview responses added detail to these findings.

The main purpose of the student interviews was to shed light on how the students were civically engaged during the One Hen unit. I developed matrices that categorized students' responses in the interviews according to their references of behaviors and thoughts relating to the NCSS Standards for Civic Ideals and Practices (Miles & Huberman, 1994). These included categories such as "knowledge of community issues" and "teamwork." These categories needed to be expanded into more detail as I coded more responses; for example, "teamwork" became "student role on a team" and "value of teamwork." Students also discussed their experience with civic engagement related to running their social business, which is not specifically mentioned in the NCSS (2010) standards. I created new codes such as "knowledge of social business" and "examples of social businesses" to describe any student responses that did not fit into codes related to the NCSS civics standards.

Student and teacher reflections. Throughout the One Hen unit, students created written reflections such as "exit ticket" responses to economics lessons, or during free-writing time. I analyzed these as secondary data sources after I analyzed the assessments and the interviews. I

reviewed the students' written work to add more detail to the findings from the main data sources. Since the interviews were conducted with only 10 of the 21 students, but I had written reflections from all 21 consenting students, examining the reflections to triangulate interview responses helped me to see whether a finding was specific to the 10 students I interviewed or if a finding was consistent throughout all of the participants.

At the end of teaching every lesson in the One Hen unit, I wrote a reflective memo describing my thoughts on the data I was collecting as the unit was happening. These reflective memos helped me determine categories before coding interviews, but they were used most often after analyzing the data from the assessments and interviews. I went back and re-read my reflective memos to help flesh out the narratives that I used to describe my findings. In this case, my perspective as a co-teacher is also important to understand the affordance and constraints of teaching One Hen, and I used my reflective memos to support, add to, and confirm the responses from the teacher interview responses.

Teacher interviews. The teacher interviews were analyzed much the same way as the student interviews; I digitally recorded them and had them transcribed. Although when interviewing Lynn, I used terms such as "civic engagement" and "project-based learning" (after we talked about what these terms mean) and I was able to ask directly about student learning related to specific content standards. Her perspective on what her students understood and did not understand by the end of the One Hen unit triangulated the findings from the student assessments and student interviews. For example, I used some of Lynn's responses from the pre-interview about her students' prior knowledge to corroborate what the students were describing as their prior knowledge. I coded Lynn's responses about her students' economic knowledge

using the same codes that I used in the student interviews—categories that were based on assessment results.

The main purpose of the teacher interview was to understand her perspective on the affordances and constraints of teaching project-based learning. Since I was also a co-teacher of the unit, the teacher interviews were more akin to a conversation about student learning in the classroom between colleagues. Many times, I asked Lynn to expand on other conversations that took place between us during instruction of the unit. I coded conversations at first into the broad categories of "affordances", and "constraints." From there, I created sub-codes that were more specific such as "student engagement," "time," and "costs."

Data from the assessments, interviews, and written reflections described how Lynn and her students experienced the One Hen unit. I was able to use this rich description to form a narrative about what economics concepts the student learned, how they were civically engaged in their community, and what Lynn felt about teaching social studies with this approach.

CHAPTER FOUR

Student Findings

To understand how the students interacted the One Hen unit, this project seeks to answer two questions: Research Question 1: *Do fifth-grade students' knowledge and skills in economics change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how?* and Research Question 2: *Do fifth-grade students' knowledge of and beliefs about civic engagement change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how?* The findings reported in this chapter come from the students' performance on an assessment of economics knowledge given at the beginning and the end of the One Hen unit. Although all 29 students took this assessment as part of their regular classroom instruction in social studies, these findings are reported from the 21 students whose parents gave consent and who assented to participate in the study. I also selected 10 students to interview before and after the unit about their civic engagement with the unit as well as their economic knowledge. These findings mainly come from these two data sources; however, student work, field notes, and interviews with Lynn, the classroom teacher, also helped to illustrate these findings.

At the end of each section, I describe the stories of certain students using all of the main and secondary data sources. I chose the experiences of Summer, CeCe, Lucia, Gaby, and Derek to describe these findings because their stories are detailed representations of some of the findings from the entire class. In some cases, I chose certain students' stories because they showed the most growth of economics knowledge or civic engagement.

Research Question 1: Economics Knowledge and Skills

During their experience in the One Hen unit, the students had many opportunities to learn economic concepts and vocabulary and then practice economics skills during the project experience of running their social business. Students regularly worked in "learning clubs" in Lynn's classroom, which became the business groups for the project, with a few exceptions of students moving to make group numbers balanced. Each group had a manager who served as a facilitator of discussions of group business decisions and as an organizer of the group's day-to-day work on the business. Other group members were in charge of selling and advertising the product and others were in charge of design and production of the product. Students wrote a short essay for a job application indicating their desire for these positions and describing their qualifications. Lynn and I "hired" students based on these applications.

Each business group received a loan of $10, which the group used to buy materials from the "Whitlock Store" to start the production of their products. I purchased the materials ahead of time and set prices for the classroom store. Although this store was not quite as authentic as the students purchasing their materials on their own, with their own money, I could not expect the students' families to have the time, funds, or available resources to take their students shopping for materials. Some students did find materials on their own, but the students mostly purchased what they needed from the "Whitlock Store" over the course of the project. There were five social businesses, and each group sold a different product. These products were: homemade 2013 calendars, containers of slime, beaded keychains and friendship bracelets, beaded pins, and balloons filled with cotton ("stress balls").

Each day, the groups sold their products during lunch time at Lanley Elementary (and many groups also decided to sell to friends and family at home). After their store closed at the

end of each lunch period, the students totaled up their daily revenue, subtracted their daily costs, and calculated their daily profit. When setting an initial price for their product, students had to calculate unit cost of their product, and continue to revisit costs when considering any price changes throughout their experience selling. At the end of the projects, the business groups paid back their loans with 10% interest.

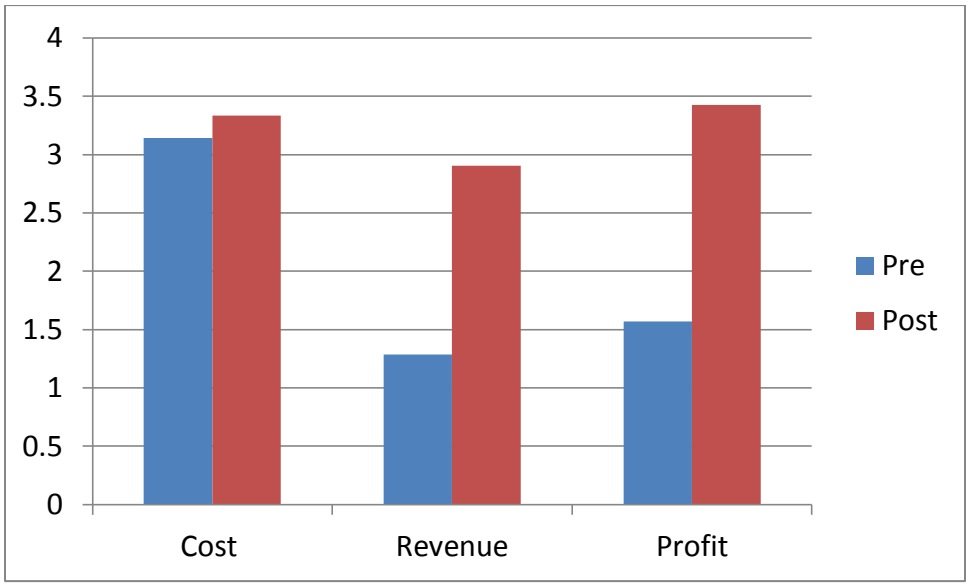
Prior to the sale of their products, students participated in mini-lessons that taught them the economic concepts of revenue, cost, profit, price, loans, and interest. Each lesson had opportunities to review vocabulary such as *goods* and *services* and to introduce new vocabulary related to these concepts (*entrepreneur* and *social business*, for example). The experience of running their business allowed them to use their economic knowledge to practice such economic skills like calculating loan interest, as well as revenue, cost, and profit and then using this information to determine price. The following sections describe how the students developed their economic knowledge and skills over the course of the One Hen unit, specifically focusing on their understanding of revenue, cost, profit, price, and loans. The experiences of two specific students, Summer and CeCe, illustrate more detailed examples of student understanding of these concepts.

Revenue, cost, and profit. Students were asked three multiple choice questions on the pre- and post-assessments that were related to revenue, cost, and profit. These questions ask the students to identify the examples of these concepts within a scenario about a lemonade stand business. These questions are similar to examples I taught during lessons in the unit about revenue, cost, and profit, however they use a different scenario so that students had to apply their knowledge of these concepts. Each time these concepts were taught or reviewed in the unit, I asked students to identify examples within business scenarios, including asking the students to

identify the examples from Kojo's business in the story read at the beginning of the unit. Figure 1 shows the students' knowledge of these concepts as measured by the questions on the pre- and post-assessment. All questions on the pre- and post-assessments were scored according to a rubric. A score of 4 on the rubric indicates the student gave a correct and detailed response (Fully Meets Expectations), a score of 3 indicates a correct and detailed response, but less detail than a level 4. The rubric indicates which details are important for each question for the student to include to receive a 4 response over a 3 (Appendix E). A score of 2 indicates that the student gave a correct response that was limited in details, or very general. A score of 1 indicates that the student gave no answer, or a tangential or incorrect answer. Figure 1 shows the average score of the class on each of the questions related to cost, revenue, and profit.

Figure 1.

Change in student knowledge of cost, revenue, and profit from pre- to post-assessment.



For interpretation of the references to color in this and all other figures, the reader is referred to the electronic version of this dissertation.

This chart shows that the students had some knowledge of the concept of "cost" prior to beginning the unit. Early on in the One Hen unit, students often confused "costs" of their

business (materials, time, etc.) with how much something "costs" (price). This confusion was especially evident in a lesson on calculating the costs of their product once they had chosen what they were going to sell. Students repeatedly referred to the price of what their materials cost them to purchase in the Whitlock Store as costs, when the costs of their business are also the materials themselves. Of course, these two conceptions of cost are very closely related—both the materials themselves and the amount of money business owners pay to obtain them are the costs of the business; however the distinction is important for economic understanding. The question on the economic assessment related to cost mentions both an item (lemons) and how much the business owner paid to obtain the lemons ($1 each). It appears that students were easily able to identify this as an example of cost before experiencing the One Hen unit.

However, despite the fact that their assessment performance shows no change in their understanding of cost, there is evidence from observing the students' experiences in each lesson that the students were beginning to adopt a more sophisticated definition of the term (especially in the context of running a business) during their experience of running their business. Once the students had to start purchasing their materials from the store and realized spending money on these items took away from their profits, the students started experimenting with their product design to include other items that were low cost, which suggests that they began to see that using different materials or using fewer materials can keep costs low. For example, one group sold balloons filled with cotton ("stress balls"). One student in this group realized, "I would buy less stuff so we could have a bigger profit…like if we ran out of cotton, we could have just used other stuff we could find [to fill balloons]." This comment shows that the student is beginning to think about the materials used to create the product as examples of costs.

Another group took into consideration the materials and the price of these materials when choosing a price to charge consumers for their product. This group sold large and small safety pins decorated with beads of varying colors and sizes and displayed them at lunch according to the price they charged for each one. When I asked a "seller" in the group, Gaby, how the group decided the cost of the different pins, she said "[we chose on] how it looks and how much the materials cost." The group understood that charging less money to consumers for a small pin with small beads made sense, but that they needed to charge more for larger pins with larger beads since those cost them more to make. Another business group decided to open up their business to include selling friendship bracelets in addition to key chains. Although more string was an added cost, this group went ahead because one group member could get more string that had been leftover from her family's craft projects. This group recognized that using recycled materials would not cost the group anything. The fact that some groups recognized the relationship among materials, price, and cost shows that perhaps the experience of working in the business is helping the groups develop a more developed definition of the economic concept of cost.

Students' understandings of the terms *revenue* and *profit* were less developed than their understandings of cost prior to the unit. In a pre-interview, Lynn predicted that economic vocabulary would be difficult for her students, saying "[the students] probably understand the concept[s] without knowing the vocabulary. I think once the vocab is attached to it, they would get it, but…at this point, I would say that most of them probably don't have the vocabulary." Unlike cost, the terms *revenue* and *profit* are vocabulary words that are not used in everyday language.

Figure 1 shows that students made gains in their knowledge of revenue and profit from pre- to post-assessment. The fact that the students had little knowledge of these terms before One Hen, and the fact that these terms are very specialized vocabulary related to the unit content, demonstrates that the experience of the unit is associated with these students' understanding of the terms. The term profit was used frequently, as students recognized that making profit was one of the important goals. A social business is not a "non-profit" company—even social businesses work to make profits so that they can continue to keep the business running to continue their social impact. The business group that made the most profit in the class sold homemade 2013 calendars. The students in the group created artwork for each month, made copies, and bound them together. The costs of the calendar were only paper and copy costs and a very small plastic binding for each calendar, and the group realized that they could sell them for more money than what the other groups were selling their products for. One student in the calendar group explained, "We went home and asked our parents…we asked them how much calendars really cost and they said a lot of money but since we are selling the calendars for kids and adults, [we] put them for $4…The calendars were a good product and they weren't a lot of money."

The One Hen project was not a competition for which group could make the most profit, but the students were aware of how much profit each group had made since each group reported their profits on a large chart in front of the class at the end of each day. The calendar group had the largest profit of any group, and the students regularly used the term *profit* to describe their success: One student commented, "We sold lots of calendars and we had the biggest profit. The day I figured out we had the biggest profit—like everyone had their mouth to the ground. It was hilarious." As will be described in the following sections, the students also measured their

success according to their impact in the community, as a social business does. This student recognized that bigger profits equated to a bigger impact they could have to solve a community problem.

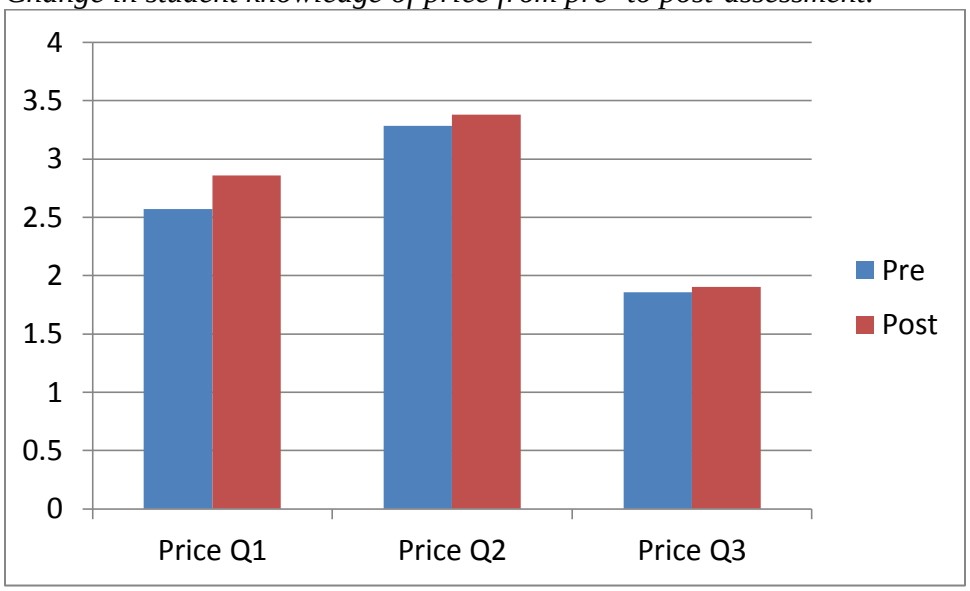
The experience of working with revenue, cost, and profit added to the students' understanding of these concepts, much like Lynn had predicted. Not only were students able to describe the concept of profit, but they had the opportunity to practice the economic skills of calculating profit and adjusting price and costs accordingly. Their understanding of these concepts means that the students have met parts of two Michigan Grade Level Content Expectations (GLCEs) for economics: *4.E1.0.2 Describe some characteristics of a market economy* and *4.E1.0.3 Describe how positive and negative incentives* (in this case, cost and profit) *influence behavior in a market economy* (Michigan Department of Education, 2007). Their social business experience showed the students how these concepts related to one another in a real life scenario, as opposed to learning them in isolation. The experience of running a business meets the GLCE *4.E1.0.7 Demonstrate the circular flow model by engaging in a market simulation, which includes households and businesses and depicts the interactions among them* (Michigan Department of Education, 2007).

Price. In addition to teaching revenue, cost, and profit as positive and negative incentives in a market economy for business owners, the experience of running a social business in the One Hen unit also targeted the GLCE *4.E1.0.4 Explain how price affects decisions about purchasing goods and services* (Michigan Department of Education, 2007). One goal in the unit was for the students to be able to choose the price for their product based on reasoned decisions about what their customers would pay for their product and adjust accordingly as they sold their product.

The pre- and post-assessments asked students to describe how prices of items affect their decision to buy them, specifically about the effects of high prices on a business and how businesses respond with prices when very few people are buying a product or service. The average score on all of the questions on the pre-assessment about price was 2.6, indicating that the students perhaps had background knowledge about how prices affect their purchasing decisions. Their prior knowledge about price seems logical considering their age; the students have most likely participated in purchasing goods and services themselves or been present with their families as they have made purchasing decisions. With the low SES of many of these students, it is possible that they have witnessed parents or other family members looking to purchase items at the lowest price. Figure 2 shows that there was very little growth on the questions related to price from pre- to post-assessment, which suggests that perhaps the One Hen experience didn't help students develop their already strong knowledge of price.

Figure 2.

Change in student knowledge of price from pre- to post-assessment.



It is important to note that the assessment asked the students only questions related to the negative consequence of having prices that were too high and how businesses solve the problem

of surplus by lowering prices. These questions seemed to tap into their prior knowledge that consumers are attracted to lower prices. Several students equated low prices as good and high prices as bad, without considering the worth of a high-priced item (certainly consumers buy high-priced items if the item is rare, in demand, or perceived as worthy of the price). Two members of the stress ball group, commenting in a post-interview, were proud of their low price (50 cents for each), saying "We decided on 50 cents because if we put it on a high price, nobody would buy it," and "Most people had their products at high prices and we thought if we set them lower, people would buy more of them."

Throughout the social business experience, I observed the students' concern for keeping their prices low for the consumer. Even after a lesson about choosing a price by surveying others about what they would pay, and another lesson about setting a price that is above the unit cost of their item, students were reluctant to set a price that was too high for the perceived worth of their product. The calendar group had set the highest price for their product than any of the other business groups, a decision based on market research ("We went home and asked our parents…we asked them how much calendars really cost and they said a lot of money"), but despite the appearance of a fair price, the group was concerned about selling calendars for such a "high" price (compared to the other groups, who all sold their items for under one dollar). One student commented in a post-interview about an argument the group had about whether to sell the calendars for $3 or $4. Initially, the group did not want to choose the highest price their research indicated their customers would pay. The group was concerned that students would not pay $4 for their product. "Kids, instead of them having to bring like $4, their parents might only give them $3 and then they can buy a calendar still."

Interestingly, not one business group raised the price of their product, even when their customers indicated that they would be willing to pay more. The pins group set different prices for each size pin, based on the amount of materials. However, the group realized that they were not making enough profit on the pins that were priced at 5 cents. Even though the pins were small, they still cost more than 5 cents to make. Even though the price on those particular pins was set too low, the students did not change the prices. One group member explained the decision: "The small [pins] cost 5 cents… because if you make them a high price they won't buy them and if it's a low price, they would."

The group that sold slime (who called themselves the "Goo Crew") also refused to raise prices. The Goo Crew chose a product with a number of costs: four ingredients in the slime and containers and lids to hold the slime. Despite the fact that the unit cost was high, the Goo Crew argued over charging a higher price for the slime. One student was concerned that the slime would be considered a "rip off" by potential customers: "I wanted [to sell the slime] for 50 cents because I was thinking maybe we didn't put that much in because they were going to be little containers. They were little so I wanted 50 cents because it's kind of like a rip-off."

In the end, the group decided to sell the slime for 75 cents, and there was high demand. The customers indicated that they did want bigger containers but that they would be willing to pay more for these. The Goo Crew did make larger containers of slime but didn't raise the price enough in relationship to the cost of the bigger containers. At one point, the group even offered a buy-one-get-one-free sale, despite the fact that customers said they would pay more, not less.

These examples suggest that students' prior knowledge of price may have actually hindered their understanding of how prices influence purchasing decisions. The students believed that lower prices were always better than higher prices to the point where they were not able to

consider another scenario where higher prices would also be good for businesses and consumers. Even when they were presented with these scenarios in an authentic context, they could not see where higher prices could be beneficial for their businesses. The assessment questions also only asked questions about low prices and what to do when so few people buy a product (and not about what to do with price when *many* people want to buy a product). These questions may have solidified the students' misconceptions that high prices are not good for business. Also, even though the Goo Crew's issue was also one of supply and demand, this economic concept was not specifically taught in the One Hen unit. Perhaps with more instruction on how supply and demand impacts price, the business groups would have set different prices and developed a deeper understanding of price.

Summer's story: "We were wasting too much money." Summer was one member of the stress ball group whose job was to coordinate the product's design. The group had many ideas, including selling T-shirts or sock puppets. Summer made sure to remind the group that it needed items that were lower cost. The group researched how much it would cost to purchase blank T-shirts and discussed how long it would take to make a sock puppet (it might require sewing), and Summer pushed for her idea of a stress ball. The group ultimately decided on the stress ball and came up with the design idea of a balloon filled with cotton because there were minimal costs and they were easy to make.

Nonetheless, her group struggled to make this decision, especially when her group manager, Derek, pushed for other products (such as the T-shirt idea) that had high production costs. "I did kind of a little bit of arguing with Derek first. He had too many ideas and others didn't like that either…" Over the course of the project, Derek and Summer continued to butt heads over the product design. Each time, Summer pushed to keep costs low on the product.

"[Derek] wanted a key ring stuck inside the stress ball to hang on car keys. We were saying 'what if [that makes it] too big?'… It didn't work because we were wasting too much money…It didn't fit in…" Although Derek's idea was innovative, as Summer reminded the group, adding a key ring was another cost and would "waste money." Summer's role as the product designer in the business kept her continuously thinking about cost, and she made design decisions with costs in mind.

The stress ball group was quite successful with its product; it became the first group to operate in the black. Very quickly, they had made enough profit to afford to pay back the $10 loan at 10% interest ($11 total). At the beginning of one day working on the business, Derek proposed that the group pay back the loan right away. Summer pointed out that paying back the loan would leave the group with very little profit money left to purchase what it needed to make more stress balls. The group did not have enough revenue yet to continue to purchase materials to generate more revenue. As she put it, "No product, no money." Summer later described this lesson as a frustrating day in her group; she had been consistently balancing the books on her group with another group member and felt she had more knowledge of how much the group had made:

> [Derek] wanted to pay the loan back fast, right when we had the $11. [He said] "Let's pay it back", and then the rest of us were saying well, then we'd have to use our profit then to get all that. And now you can look at us and all we have to do is pay back $11 and we still have a hundred something left over…If we did have to pay the loan right there, we would have had [less].

Summer was able to see, through her experience with product design and calculating revenue, cost, and profit for her group, how important it was to keep the cost of the stress balls as

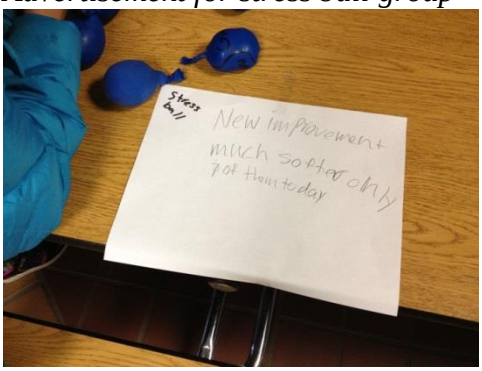
low as possible and to make wise decisions about how to spend profits. Summer believed that these decisions led her group to be more successful than other groups. Indeed, the stress ball group made a substantial profit. However, like many of the other business groups, Summer did not consider raising the price on her group's stress balls, even as the group made changes to the product that could have justified a price change. She was determined to keep the price low, regardless of evidence otherwise. When deciding the initial price of the stress ball, the group discovered through research that they could charge up to $2 for a stress ball, but they decided not to:

> The [cost of] the item was 10 [cents]. People wanted it a dollar or 75 cents but when we looked, we just said "do 50 cents" because others normally at the store are charging a $1.50 or $2 just for a stress ball. And ours are homemade so they could at least be 50 cents 'cause other kids would like to buy it because it's a lower price than other stress balls.

Summer described how her group decided not to maximize their profit on their low-cost item despite the research they had done on typical prices because they perceived other stress balls to not be worth the price. The group added enhancements to their stress ball product (googly-eyes, drawn-on faces) and even made improvements to the product (a softer feel caused by a different brand of balloon) that they advertised (Figure 3). This advertisement the group made even indicated that there was limited supply for the improved items, but still, the group never considered raising the price for these enhancements.

Figure 3.

Advertisement for stress ball group



"Stress ball: New improvement, much softer, only 7 of them today"

Summer's experience as a member of the stress ball group is one detailed example of how the One Hen unit appears to have had an impact on the students' understanding of revenue, cost, and profit; perhaps the fact that the students had real-life problems that arose with their social business project allowed them to better understand these concepts. However, the social business experience did not seem to alter students' prior knowledge of price and how businesses use price to increase profits.

Loans. One of the targeted Michigan GLCEs in this project states that elementary students need to participate in a market simulation: *4.E1.0.7 Demonstrate the circular flow model by engaging in a market simulation, which includes households and businesses and depicts the interactions among them* ((Michigan Department of Education, 2007). The One Hen project included a market simulation. Although the concept of how business owners use bank loans to start their businesses is not mentioned in the GLCE, this concept is a major point in the *One Hen* story and a key element to improving students' civic engagement as they learn about Kojo and other small business owners who rely on microfinancing to be successful entrepreneurs. The National Council for Economic Education (NCEE) standards (2010) state that students should understand that entrepreneurs take risks to start business ventures (Standard 14):

obtaining a loan could be considered a risk. Because the idea of obtaining a loan is central to the *One Hen* story and part of the national standard relating to entrepreneurship, measuring students' understanding of loans and how they relate to starting a business was important.

On the pre- and post-assessments, students were asked to define *loan*. On another question, they were required to list the steps involved with starting a business. Figure 4 and Figure 5 show that students made some positive gains on these questions.

Figure 4.

Change in student knowledge of loans from pre-to post-assessment.

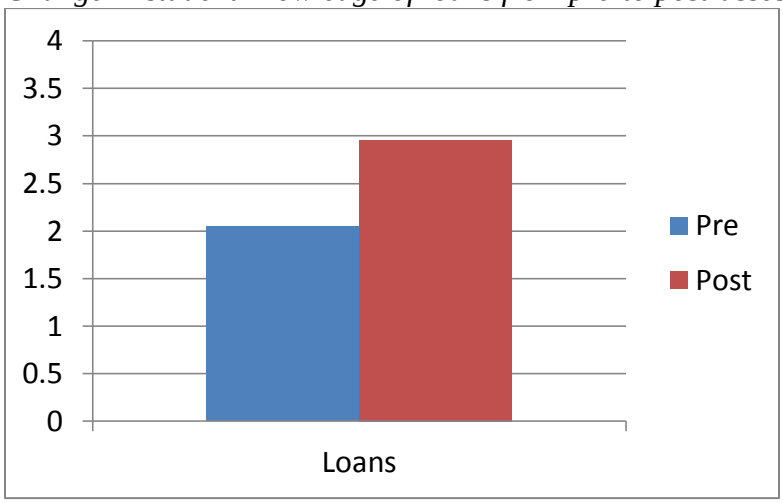
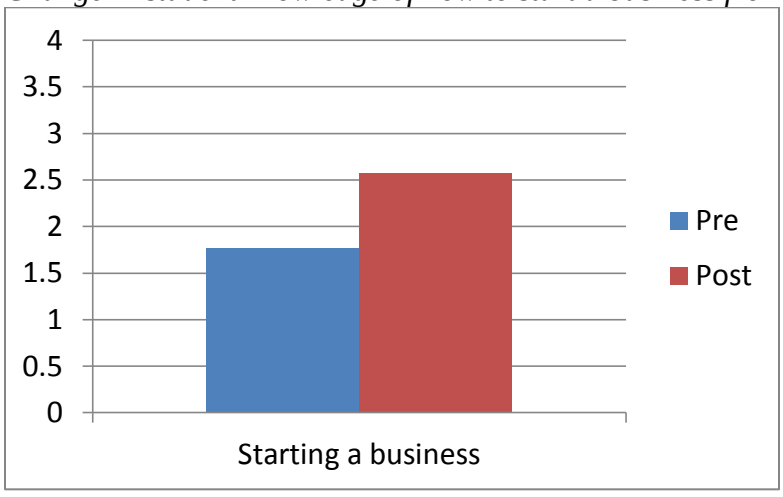


Figure 5.

Change in student knowledge of how to start a business from pre-to post-assessment.



The students made gains in the answers to these questions because of increased specificity in their answers from pre- to post-assessment. For example, Mario's definition of a loan on his pre-assessment was very simple: "[A loan is] when you borrow something, mostly money." Mario's definition could be considered correct, although it lacks detail. On his post-assessment, Mario was able to give a much more detailed definition: "A loan is when you go to a bank and ask for money that you can soon pay back." His post-assessment definition mentions banks, lending, and loan repayment. Other students performed similarly on the pre- and post-assessment.

The fact that the students experienced getting a loan and paying it back through the project may have contributed to their greater understanding of loans. In the project, I was the bank, giving each business group a $10 loan at 10% interest. The students experienced a lesson on the definition of interest and had to calculate the interest on their specific loan. Each group also signed a loan contract, promising to pay back the loan with interest at the end of the project. At the end, each group paid back its loans in full from its profits. For many students, loan repayment made the experience of running a business more authentic. "It felt great when we got our loan," said Gaby, "that means I thought in my head we were ready and I knew we would not give up the first time." Other students had anxiety about borrowing money, and the experience opened their eyes to the risks involved in starting a business. Alaina reflected in a post-interview:

> [Before One Hen], I knew what the word loan meant but I didn't know what it meant. Like I didn't think it was actually when [banks] give you money. And I didn't think you had to pay it back. I thought it was going to be bad because I didn't think we were going to make a lot of money to pay it back and I thought if we paid it back we wouldn't have any more money.

Alaina's group (like all of the others) did have enough to pay back the loan, with plenty of profit left over, but her anxiety about borrowing money is an example of how seriously the students took the responsibility of borrowing a loan. This seriousness could be a promising step toward increasing these students' sense of personal financial responsibility, but the goal of the One Hen project was not to show students that borrowing money is always a negative experience. The focus is quite the opposite—that students understand that borrowing and lending money to start businesses helped grow the economies and decrease poverty in nations like Ghana and Bangladesh. There is evidence that the students began to see that getting a loan is a necessary step to starting a business.

Students were asked to list the steps involved in starting a business on the pre- and post-assessments. Figure 5 shows the gains the students made on this question. Like the loan definitions, students' responses to this question showed growth in the specificity of answers. Again, Mario is an example of someone who developed increased detail and clarity. When asked the steps needed to take to start a business on the pre-assessment, he wrote simply, "big steps." On the post-assessment, he listed three steps: "Think of a [business] to start, get a loan if needed, and buy supplies." Although Mario had no knowledge to begin with about starting a business, he was able to answer this question after experiencing starting a business, and the role of loans is part of his description. Even students who had prior knowledge of how to start a business incorporated obtaining a loan into the steps involved when asked afterward. Another student, Max, wrote on his pre-assessment that to start a business "you would need to buy the stuff you want [to sell]." Max's description did not mention how an entrepreneur obtains what they need to sell, but in the post-assessment, he had added this piece: "One, you need to get a loan. Two, you

get the materials to start the business." This comment shows that Max now sees loans as an important part of starting a business.

Experiencing obtaining a loan and successfully repaying it may have added to the students' understanding of loans and how they are essential for entrepreneurs. However, many students were also inspired not only by their experience, but by learning about Kojo's experience in the *One Hen* story (Smith-Millway, 2008). In the book, Kojo uses a very small loan (leftover money his mother had from a loan she had gotten from a microfinance group in her neighborhood) to purchase a hen. He sold the eggs the hen laid, used that money to buy more hens, and then slowly over many years, used a bank loan to build a prosperous chicken farm. He then loaned money to others who wanted to start their own businesses. The character of Kojo is based on a true story, and many students were inspired by what he accomplished with such a small loan. The story helped some students to understand how micro-lending helps others in poverty. The students wrote reflection essays at the end of the project, where they wrote about the learning that connected to them the most. Alaina wrote about her connection between what the class accomplished and Kojo's story:

> A young boy named Kojo…asked some banks for a loan and one finally said yes. He bought one hen with the loan. He started his own business selling eggs. He gave money to help people just like we did. He got a loan and so did we.

Another student, Ally, wrote: "Kojo sold his eggs to people and he loaned some of his money to others. He made a difference too." Not only did the students develop a more detailed definition of loans during the project, they saw how important loans are to starting businesses, and, through the *One Hen* story, began to see how obtaining loans can help others in poverty around the world through microfinance.

CeCe's story: Making sense of microfinance. CeCe was a member of the business group that sold calendars. She took a very involved role in the design of the artwork on each calendar page and was very proud of her group's success. In an interview with CeCe before the project began, she had already realized that the class would be starting businesses, and was very eager to tell me her business ideas and her previous experience with selling products. She had previously sold lemonade to her cousins and had ideas about opening up a pet store. I asked CeCe how she would go about starting a pet store and she described all of the many materials one would need—cat food, fish tanks, and other supplies. To do this, she said she would "work at a job and then when I save a lot of money for working, I would open up a business with the pets." CeCe was aware that staring a business requires materials that require money to purchase, but like many of her classmates, did not mention loans as a way to get this money.

CeCe's pre-assessment indicated that she understood that loans involved banks loaning money, which is more prior knowledge than most of her classmates had. Her post-assessment revealed relatively the same amount of understanding, but with one more detail: "A loan is money you get from a bank to start a business." Her post-assessment response about what was needed to start a business now mentioned loans, whereas on the pre-assessment, her response was similar to her discussion with me about opening a pet store—that you need materials to get started, but no awareness of how entrepreneurs get these materials. In a post-interview, CeCe described her newfound understanding of the importance of loans and reflected on how other entrepreneurs may not have the same opportunities as her group had:

> I learned that getting a loan…it's really important for a business for starting it. And some banks say no [to a loan] because they're not sure if you can pay it back. Other

[microfinance] banks help people in the community. They're helping the world to make it a better place.

Kojo's story about being rejected for a loan from a big bank until he finally found one that would lend him money, and the videos I showed the group about Mohammed Yunus and his Grameen Bank, showed CeCe ways that small business loans can help get entrepreneurs out of poverty.

The calendar group made the most profit. Despite some of CeCe's classmates' anxieties about paying the loan back, her group was never in danger of not having enough profit to repay the loan. CeCe reflected on the kind of impact her group's profit could have on the community problem of child abuse that the class decided to address. "When children get hurt, it's taking away your safety, your family and taking away that human right. [Looking at the calendars] reminds people like first thing in the morning—Oh, stop child abuse. I think I can do that today…We made lots of money...I think we're going to help the teenagers and the children." The following sections describe how students like CeCe measured their success by their community impact rather than profits.

Research Question 2: Civic Engagement

What makes the One Hen unit unique from other experiential economics programs is the kind of business students run: a *social* business. A social business is a business that sells a product or offers a service that serves a community need, however social businesses are not non-profit organizations or charities. Social businesses generate profits, which are then used to keep the business going rather than paying shareholders (Yunus, 2010). By developing social businesses, students participate in civic engagement in the One Hen unit. There are specific lessons in the One Hen unit that provide students the opportunity to explore websites of different

organizations that serve to help solve larger global problems (e.g., poverty, homelessness, and hunger) in order to broaden their awareness of community problems. At Lanley Elementary, the students generated a list of community problems that they would like their social businesses to help address (Figure 1). After a whole-group brainstorming session and another follow-up discussion, Lynn's class decided to try to help address the problem of child abuse and neglect.

Child abuse and neglect is a global and a local problem. Many students willingly shared personal experiences with abuse and neglect, and also shared nationwide statistics they discovered during their web exploration about abused and neglected children in the United States. Because creating a specific product to address abuse and neglect was not possible (i.e., none of us were qualified to offer services such as counseling), the students and I took a few days to decide on creating products that serve one of two purposes: 1) to make kids feel happy, safe, and comfortable, and 2) to raise awareness of the problem of child abuse. The class decided that its products should all be a royal blue color, which they discovered was the "awareness color" for child abuse victims. Groups like the calendar group, the pin group, and the key chain group all made products to raise awareness and pass hopeful messages. The slime group and the stress ball group aimed to create products children would like and that were also blue to raise awareness.

Researching child abuse and neglect led the students to become aware of related problems such as teenage homelessness, which we discovered was a major problem in their city. The director of an organization that was dedicated to raising money to build a homeless shelter specifically for teenagers came to talk to the class several times, and at the end of the unit, when the social businesses stopped selling their products, the students decided that they should donate their final profits to this organization. The class raised $700 of profit, which they gave to be used

for the general construction of the shelter as well as a fish tank to place in the finished safe house. The organization, the Teen House, told the students that they could allocate their donation toward something specific, and I facilitated a large group discussion about what they could earmark their donation for that would match the vision of the social businesses. After a suggestion from CeCe, the group decided on a fish tank because it would give the homeless teenagers pets to take care of and watching the water and fish would be a calming, stress-relieving activity. The director of Teen House agreed to purchase a fish tank with the class's donation and to put a commemorative plaque next to the tank with all of the students' names.

The class's work with community problems served as an authentic example of social activism: the students saw that their impact was real. This specific part of the experience showed them that they can start with something small (a $10 loan) and use the loan to start a business, whose profit could make a significant, positive impact on their community. Specifically, the One Hen unit targeted the Michigan GLCEs for Public Discourse and Decision Making: *5.P4.2.1 Develop an action plan and know how, when, and where to address or inform others about a public issue* and *5.P4.2.2 Participate in projects to help or inform others* (Michigan Department of Education, 2007). These Michigan content expectations are closely aligned with the National Council for Social Studies (NCSS, 2010) Standard 10 for civics and civic engagement which asks students to 1) understand that key practices in a democratic society include civic participation based on studying community issues, planning, decision-making, voting, and cooperating to promote civic ideals, 2) ask and find answers to questions about how to plan for action with others to improve life in the school, community, and beyond, and 3) participate in civic discussion and action about a school or community issue (p. 90). The fifth-grade students had the opportunity to engage in these "plan-oriented" practices many times in the unit, and the

students' responses indicated that they are developing their civic engagement. The following sections describe how the students developed their beliefs about civic engagement over the course of the One Hen unit, specifically focusing on the students' awareness of global problems, their increased civic capacity and how their knowledge of social businesses contributes to this, and how they valued teamwork. The story of three students, Lucia, Gaby, and Derek, illustrates more detailed examples of how students were civically engaged in the One Hen unit.

Awareness of broader problems. Before beginning the One Hen unit, I asked Lynn how much knowledge she thought her students had about global problems. She pinched her fingers together close and said, "Their world is about *this* big." Lynn felt that despite many of her students living in extreme poverty, knowing homeless friends and relatives, or being exposed to violence or drug problems in the home, she believed that her students had very little awareness of their role in global problems. In fact, she described their age, but also their low SES as possible reasons for their "naïve" world views, commenting that her students don't travel much due to family and work responsibilities and limited transportation—even within their city. She has taught students who had never visited the library, even though there is a branch near Lanley Elementary. "Most of these kids are very naïve about the bigger world picture and about what's going on in the community."

When I interviewed students before the project, I asked them about a community problem that they would like to see fixed, or a community problem that they have helped to fix before. A common response was that they helped family members or neighbors with household chores, helped to babysit their cousins when their family needed them, or asked a friend to play after school whom they hadn't played with before. These responses indicated that their concept of community itself was limited (including only family, friends, neighbors, and possibly the school)

and the problems they described were more personal. Some students discussed broader problems such as safety concerns (people not wearing helmets when they ride scooters) or local crime problems (stealing from stores), but these responses still indicate that their community circle only expands to include the city. Some students mentioned that bullying was a community problem. Although bullying has recently become a national and perhaps global epidemic and serious problem, the students who mentioned bullying as a community problem did not state that it was a problem beyond their school or their own playground. During the time I was conducting the pre-interviews, some students in the class had bullied other students at lunch and the playground. As a result, Lynn devoted class time to discussing the problems with bullying and how to treat each other with respect. These discussions may be why some students mentioned bullying. In summary, students' conceptions of problems tended to be problems in their immediate environments rather than in the nation or world.

The One Hen unit was specifically designed to expose students to broader, more global community problems. Several lessons in the unit were aimed to help students think about global problems. The use of children's literature like *One Hen* (Smith-Millway, 2008) and the book *If The World Were a Village* (Smith, 2011) were used to help students develop awareness of other cultures. After reading *Village*… many students were surprised to learn that the United States is not the largest country in geographic area or population. Other lessons were designed to help the students choose a problem that they were passionate enough about to start a social business with the goal of addressing the problem. The students spent one lesson exploring Internet sites to help them gain awareness of problems such as homelessness, poverty, and hunger. Shortly after the students chose child abuse as their problem, Lynn introduced the students to the Universal Declaration of Human Rights (United Nations, 1948) and the students worked on defining and

illustrating the human rights outlined in that document. Throughout the unit during Lynn's writing time, she often showed the students YouTube clips of people who were fighting for human rights in their communities and had the students write a journal response to what they saw. In their reflections, students described how these lessons resonated with them. The lessons also and helped the students meet the NCSS (2010, p. 90) Standard 10 of civic ideals and practices, where the students study community problems and make plans to promote civic ideals (the planning being their social businesses).

When I asked the same students about community problems during the post-interviews, the students were able to draw on the *One Hen* story, as well as Lynn's lessons on the Universal Declaration of Human Rights to describe community problems that were broader. For example, Alaina, who described a community problem of helping a neighbor mow lawns in the pre-interview, now included a community problem of people living in poverty in Ghana, a connection to Kojo in the One Hen story. Jack, who described asking a new friend over to play as a way to help the community in the pre-interview, now described child abuse and child welfare as a serious community problem—a direct connection to the cause the students chose for their businesses. Jack was able to connect the cause they chose to human rights as well, saying "people [who] hit their kids…they're taking away their rights. [If they are] human rights, you can't [take them away]."

It appears that the significant amount of time spent on these problems in the One Hen unit helped the students broaden their definition of community and speak about global problems. NCSS (2010, p. 166) defines civic engagement partly as participating in communities that "work to address an array of cultural, social, political, and religious interests and beliefs." Through the

One Hen project, the students began to see that an "array" of interests, beliefs, and problems exists, which is the first step toward being able to address them.

Lucia's story: "You don't know what other people need." Lucia was a member of the Goo Crew, the business group that made a large profit selling slime—a product that raises awareness of child abuse because it is a product that kids enjoy and because the slime is blue, the color of child abuse awareness. Lucia made gains in her economics knowledge in the One Hen unit, especially on the assessment questions on economic vocabulary like *goods*, *services*, and *loans*, and on the questions related to the steps needed to start a business. However, in my interviews with Lucia, it was evident that the lessons on human rights and global problems had made an impression on her.

Before the One Hen unit, Lucia described babysitting her cousins and helping her mom clean their church as ways she helps her community. Her answers implied that her community consisted of her family and her fellow church members. Lucia also described bullying as a community problem that concerned her, even mentioning that perhaps bullying is a larger problem than just her school: "We watched a video about a kid getting bullied and the kid didn't want to get bullied anymore so he killed himself." Lucia could be described as a student who had already begun to understand more global problems, but she was affected by her experiences studying human rights as part of the One Hen unit.

For example, Lucia described a time when a video that Lynn showed the students during writing time affected her concern for the homeless. Lucia described how this video made her think about the feeling she got from helping others:

> One day in school when we were watching the video…There were people that came to help other people who were homeless and they check their blood to see if they are sick

> and give the medicine like the flu shot and the stuff that they need. I learned that it's nice to help because it's good to help people because you don't know what they are going through and you have everything that you need and you don't know what other people need.

This quote from Lucia about her thinking reveals that Lucia is even beginning to recognize her own awareness. Her words "you don't know what they are going through" and "you don't know what other people need" indicate that Lucia, through these videos, had realized that there is a world beyond her own, and that there are community problems and human rights violations beyond those in her immediate community.

In her post-interview, Lucia described how homelessness is a community problem that bothers her, specifically mentioning how the organization building the teenage homeless shelter, the Teen House, helps the community and how she played a role in helping as well. When describing the experience of helping homeless youth, Lucia specifically mentions the Universal Declaration of Human Rights:

> We helped the homeless teenagers…[We] helped them out because they didn't have the things they need and they don't have human rights pretty much because one of the freedom of rights…number 22…says that they should have medical help and shelter. And no matter how much money they have…only if they have a little, but they should have that. I don't think the kids that were homeless had that.

Lucia is actually referring to Article 25 in the Universal Declaration of Human Rights adopted by the United Nations in 1948 "Everyone has a right to a standard of living adequate for the health and well-being of himself and his family, including food, clothing, housing, and medical care…" (United Nations, 1948). The project helped Lucia not only identify broader

global problems, but also to understand why addressing these problems is important—because people who are homeless are being denied basic human rights. Even though the unit doesn't go into depth about the larger problems of why teenagers are homeless, the fact that Lucia is beginning to understand how homelessness violates human rights is important, and her citation of the Universal Declaration of Human Rights suggests that Lynn's lesson on this document had an impact on her civic engagement.

More importantly, Lucia had also become aware of her role in helping solve community problems, and how the class's social businesses played a role in helping teenage homelessness through the Teen House organization and child welfare. She stated,

> We gave the money to Teen House to help the teens that are homeless. They didn't have shelter and food and clothes before, probably because they made bad choices or their parents made bad choices, because they're, like, on the streets and they have no place to go, so we gave them that feeling that they can come to the Teen House and be safe. Teen House is helping out teenagers, and…One Hen is kind of like that because we're helping other people be safe.

Lucia's story shows how the specific instruction in the One Hen unit had an influence on students' awareness of global problems, which were the goals of these specific lessons. NCSS (2010) describes civic engagement as when individuals exhibit "concern for the rights and welfare of others [and] social responsibility" (p. 166). Students cannot be expected to have concern for others on a global scale or understand their social responsibility without being made aware that they need to be. One Hen appears to give the students that first step, and has certainly appeared to have opened Lucia's eyes to the problems of homeless youth.

Using a social business to address community problems. The NCSS (2010) definition of civic engagement does not just include studying community problems or becoming more aware of problems, but having the ability and desire to plan for action. In the One Hen unit, students are exposed to the concept of a social business as a way to model how to take action on a problem they are inspired to address. Before the unit began, the students were aware of small actions they could take to help others. Students who described bullying as a problem in their community said that they could take action by standing up to individual bullies they encounter. CeCe, for example, was aware of larger problems such as people devastated by Hurricane Katrina and the 2010 earthquake in Haiti. She described her way of helping: to donate money to help. "There was this jar and there was like a whole bunch of money. It said to put in for Haiti to help out because of the big earthquake."

The students had also limited knowledge of how businesses work to solve community problems. When asked about how businesses help the community, many students described a hospital because they take care of people when they are sick, or schools because they help students learn. Two students listed businesses that sell food as helpful to people because people need food, and places like grocery stores sell food. It is not surprising that the students, with their limited world view before the unit began, had trouble describing the role of a social business, or even a business that makes large donations or sponsors charities.

The One Hen unit's goal was to introduce students to the concept of a social business. As a class, we discussed Mohammed Yunus and his example of Grameen Danone, a social business that sold yogurt fortified with vitamins and nutrients to combat malnutrition in Bangladesh (Yunus, 2010). The students started their own social businesses and they frequently used that term to describe what they were doing. The class chose a community problem to solve and a

product that would tie closely with their goals. And near the end of the unit, they partnered with a community organization that also shared their goals. However, despite the authentic experience of running a social business, the students still had trouble giving examples of social businesses in the post-interview. Many students were able to define the term and could explain that the purpose of a social business is to meet a community need, but they had misconceptions about how a social business works. For example, CeCe described a social business as "a [business] that helps stop a cause that is bad", suggesting that she is aware of a purpose of the social business, but she went on to say "they help people in the community by…the business can do a food drive or a penny drive."

It is possible that CeCe saw what the students in the class were doing with their businesses as fundraising, and not entrepreneurship. She was not the only student who may have had that idea. After the unit, when asked what they could do to solve community problems, many students described organizing fundraising efforts such as food drives. For example, Lucia described a food drive as a way to solve the hunger problem in Africa: "I could ask friends if they have food, or do a food drive at school, and drive there to give it to them." Summer was another student who described "raising money" as a way to take action, describing our class's work with the Teen House as a successful way to help the community. "We're helping them by giving money to make that house for teens. We help them by giving to an organization that is making a home for them."

In this case, the experience may have given the students a misconception of what a social business does to help the community. The One Hen unit was designed to be a 16-lesson unit, where the students choose a cause and a product early on in the unit and then have the experience of running a social business for a short time (i.e., three or four days). Lynn chose to expand the

One Hen unit by 10 lessons, also choosing to have the students sell products for four weeks instead of three to four days. This resulted in a large gap in time between when the students chose a community problem and product until they actually began selling products (the reasons for which are discussed in the following chapter). The students chose a community problem and cause on October 16, but did not begin opening their regular store at lunch selling their products until November 19. They ran their social businesses until December 20, at which time they had decided to partner with the Teen House to donate their profits. This large gap in time may have caused the students to forget that they were selling the products to help solve a community problem. All of the groups except the stress ball group and calendar group stopped making their products exclusively blue near the end of selling their product. The key chain group stopped putting inspirational messages on the key chains and instead began personalizing them with names, perhaps realizing an untapped market. By the time the experience had been redirected back to the cause by partnering with an organization that also is concerned with child welfare, the students were at the point where they had profit money left to donate. Although ending the social businesses was designed to happen (the students could not feasibly continue to run their social business for many years), the fact that in the end the students did end up making a donation to an organization may have contributed to the idea that social businesses are fundraisers. The gap in time between the initial introduction of a social business and the completion of the experience may have contributed to the idea that they were fundraising in this project instead of seeing themselves as entrepreneurs.

There is a positive way to look at how the students understood how to take action for community problems. Prior to the unit, the students had ideas of what they could do to help--give money to fundraising efforts, or stand up to individual bullies. This is in line with Westheimer

and Kahne's (2004) definition of a personally responsible citizen, participating in civic life as an individual. By the end of the unit, even though the students still saw fundraising as community action as opposed to social business efforts like the unit intended, these students were at least seeing themselves as the organizers of these fundraising efforts, which are characteristics of a participatory citizen, who works with others to organize community involvement (Westheimer & Kahne, 2004). Lucia and Summer saw themselves as willing to take on a large job of raising money or hosting a food drive instead of being donors. Their generosity indicates that perhaps the One Hen experience helped them see themselves as having the ability to take more of an activist role, and may have contributed to them becoming a different kind of citizen.

Gaby's story: The color blue. One student in particular, Gaby, took on a leadership and activist role in the One Hen project from the beginning and developed her civic engagement as a leader in the class. Prior to the unit, Gaby seemed to have a fairly broad understanding of global problems and even had experience organizing for action. In her pre-interview, Gaby described donating cans of food to a community action organization in her city that gives to those in need in the community, but she also spoke about an experience organizing fundraising. Gaby talked about her friend, a student her age, who had bone cancer and her family was unable to afford medical treatments: "I helped her by starting a charity and [we did] lemonade stands, dessert stands, car washes…I saved up a lot of money so they could pay for the hospital…I raised over $500." Clearly the experience helping her friend with cancer was more extensive than that of many others in the class, but still could be seen as organizing action for a smaller, personal cause to help a friend. Still, well before the One Hen unit, Gaby's efforts to help her friend showed compassion and a willingness to take action to help others.

Gaby's compassion and desire to help perhaps caused her to be a leader within the One Hen project. When the class had chosen child abuse as the community problem the students wanted to help address with their social businesses, Gaby took the initiative to research at home some possible ideas for social businesses, without prompting from me or Lynn. Gaby returned the day after the class decided on child abuse as their cause with the idea that the class should sell blue items, since royal blue was the color of child abuse awareness. Gaby had made a connection to how other diseases and cancers have "awareness colors" and thought we could take our social businesses in the direction of making others aware of the child abuse statistics we had spent the previous day discussing. I encouraged Gaby to take the lead in a class discussion that day to propose her idea. By the end of the discussion, the students had nearly unanimously decided to sell blue items.

Gaby's group had decided to sell pins of varying sizes with different shades of blue beads and inspirational messages in them. Although Gaby was not the manager of her group, her group respected her ideas about all aspects of the business—designing the product, advertising, and balancing the books. Gaby, as the person in charge of advertising in her group, decided to focus the group's ads on raising awareness for child abuse victims as much as advertising for their product. Gaby downplayed her own leadership role, saying that "I think we didn't need a manager because everybody worked together. I think everybody were like managers." Near the middle of the unit, I was part of a conversation with Gaby and another student in her group. Gaby had asked me if we could also help homeless kids with our project. The other student asked Gaby what homelessness had to do with child abuse, sharing some skepticism. Gaby explained to me and this student that she was concerned about what happens to students who run away from their families who may abuse them—where do they go? Who helps them? Admittedly, I did not

know what organization in our city, if there was one, worked with runaways or homeless youth specifically.

After class, I asked Lynn, who was familiar with a new organization just starting up and looking to raise money to build a teen homeless shelter—the Teen House. I contacted the director of that organization, Becky, who shared with me many disturbing statistics about the amount of homeless teenagers in our county and the lack of services available to identify them and get them the help they need. I asked Becky to come speak to the students about homelessness, an invitation that began our partnership with the Teen House. Gaby's connection between the problem of child abuse and another global problem of homelessness had a profound impact on the direction of the latter half of the project. Due to Gaby's comment, Lynn and I also learned more about a problem that I was not aware was so prevalent in our community.

At the end of the unit, Gaby still saw herself as an organizer for action, and although she didn't describe starting a social business specifically, in a post-interview, Gaby told me about several ideas she had to continue to help homeless families that were entrepreneurial in nature, like starting a bake sale, organizing a garage sale, and opening a Goodwill-type store. "I would make [a] store and put furniture in it…and old clothes. Just bring them to use and we'll donate it to people that need it."

Perhaps more importantly, Gaby felt that the One Hen experience inspired her to think a bit more globally, and to examine her role in helping solve global problems:

> I would like to change that people shouldn't be homeless outside in the streets. People have the right to live and have a family…We made a change by trying to help stop child abuse and helping the Teen House too…I learned that young people can make a big difference in the world by one tiny thing or a big thing.

Gaby mentioned Kojo's story in the One Hen book as inspiring for her to keep working as she does to help others, and to persevere when it becomes difficult:

> I liked the *One Hen*…the book for Kojo because it inspired me…It inspired me how he didn't give up when the bank—the first bank said no and so he didn't give up and he was working hard to get to the next bank to have his loan.

In her final written reflection on the experience, Gaby once again mentioned the One Hen project and Kojo's story specifically as influential in her development:

> Even if you're small or big you can make one change…That *One Hen* book inspired me to start to make a difference. Look, I didn't know I was an entrepreneur. I can make the smallest thing and still get money to help…"

Gaby's story is an example of how the students, though the One Hen experience, came to understand not only that there are larger global problems that exist, but that students can be an active part in helping. Even if the students are still developing their understanding of how social businesses specifically help, the project still perhaps helped them take a more active and less passive role. Even a student like Gaby, who had experience actively working to help others before was inspired by the message in the experience—that even small steps can make big impacts.

Valuing teamwork. An important part of the project-based learning instructional approach is that students work collaboratively to create projects or solve problems (as in problem-based learning). Working collaboratively is often called a 21st century skill—since many current and future occupations will require people to work in groups both small and large, project-based learning requires this kind of authenticity to what the students create (Larmer & Mergendoller, 2010; Thomas, 2000). Collaborative work gives students the opportunity to

practice working in groups for a common goal. NCSS (2010) also describes civic engagement as using "group problem solving" (p. 166) to "promote civic ideals" (p. 166), so collaborative work is also necessary to develop students' civic engagement as well as being an important element of project-based learning.

The students in Lynn's class did not have strong collaborative group skills at the beginning of the project, despite Lynn's commitment to giving them practice. The students sat in "learning clubs" from the first day of school, but many learning clubs struggled to work together. Lynn claimed that instead of switching students out of a group that might not work well together, she instead purposely keeps them together until the group members can learn how to collaborate. This practice was evident during my time there; several students in each learning club continued to have difficulty collaborating, but Lynn never rearranged groups.

Unfortunately, Lynn's class quickly developed a reputation at Lanley Elementary for being a class of troublemakers. There were several reports of bullying incidents on the playground and in the cafeteria at lunch. Lynn frequently had students fill out behavior plans or sent students to the office for incidents of disrespectful actions in the classroom toward her, other students, or myself. Both Lynn and the principal spent instructional time talking to the students about how to work together and how to treat each other. Lynn later explained that she chose to tie in a theme of human rights to the One Hen unit in the hopes that the students would start to see connections between human rights violations and the actions and behavior of a few students in the classroom. Although severe behavior problems regularly occurred with perhaps as few as five students, others did not know how to work and collaborate with these students.

The students struggled with teamwork skills at times during the One Hen unit. Many groups had disagreements over product, price, and balancing their books in their business that

required either me or Lynn to step in and facilitate a resolution. The students believed that for the most part, they worked together well, but they were aware of their teamwork difficulties as well. One student, Nat, said that "[we were] successful…sometimes we worked together and sometimes we argued about counting the money." Lucia even recognized her own faults with her collaborative skills, saying "I get distracted most of the time and sometimes I would say [that] I don't want to be in that group."

Nonetheless, at the end of the One Hen unit, the students valued their time working in a group. Nat commented on how much his stress ball group was able to accomplish working together. "It's rough if you [start a business]…if you do it alone. I learned that if you work as a team, you will get a lot of things done." Lucia, despite her difficulties working with her group, valued the individual ideas her group members brought. [It was good] to listen to other people's ideas that they have. We had a different idea of doing [another product], rather than slime, but when we actually listened to [another student] saying about the slime, we voted for slime." In this case, Lucia valued an experience when everyone took the time to listen to a quieter member of the group and appreciated his idea.

The group valued working together, and by the end of the unit, there was evidence that the students had improved at working together. Many groups discussed how at the end of the unit, they went about making tough decisions more diplomatically, instead of arguing. Alaina described how the calendar group decided on a product: "We put our heads down and we had to raise our hands for what we wanted and we got calendars." Nat described how eventually, his group stopped needing me or Lynn to settle disputes:

> I didn't argue a lot and I didn't complain that much. I wouldn't let the teacher decide every time who is going to count the money. [I said] we should do rock, paper, scissors and then the final [winner] gets to count the money.

Lynn reflected on her students' experience at the end of the unit in a post-interview and believed that the students had improved their behavior toward each other. She also noted that their behavior for substitute teachers had improved, which had been a source of much frustration for Lynn at the beginning of the year:

> This was a tough group of kids and there were a lot of behavior issues when we started. But, you know, other than being chatty and excited, we really haven't had too many major behavior issues in a really long time. A really long time. I don't think since at least they started running the business…They had a guest teacher in here on Tuesday. He said they're like a different group of kids because he saw them earlier in the year and he said, 'You know, they were a little chatty working on stuff', but he said they were working and getting along. And he said, 'I don't care if they talk a little bit. Nobody was fighting. Nobody was giving me attitude.'

It appears that the opportunities to practice collaboration both as part of the One Hen unit and as a regular routine in Lynn's classroom had helped the students make some improvements in how they approached working together. The students saw that working in groups was valuable, and in some cases, necessary for running a successful business. They were also beginning to put those values into practice and were trying to find ways to work successfully together.

Derek's story: "Working together is better than working separately." Even before the school year had started, Derek had developed a reputation in Lynn's classroom. Most of this

group of fifth graders had been in the same fourth grade class the year before, and Lynn had been warned of Derek's problems with attention and impulsivity from his previous teacher. If any of his fellow classmates were unaware of his behavior before, they were reminded at the beginning of the year when Derek frequently got in trouble from Lynn for random outbursts during class, not doing his homework or not bringing supplies like his writing journal, and for bothering other students. Derek was also prone to angry outbursts of disrespectful comments aimed at Lynn, especially after she redirected him about any of the above listed behaviors. Lynn described Derek as an intelligent student despite his unwillingness to silent read or write, and his general disorganization with homework. Derek had the second-highest score on the pre-assessment of economics knowledge and skills, indicating that perhaps he had quite a bit of prior knowledge on the topic—more so than most students in the class.

When the class first began the project, students were required to write a short essay response indicating the job they would like to do in the business (Manager, Seller, or Maker). There could only be one Manager per group, but there could be any number of Makers and Sellers. Students were instructed to state their claim for the job they wanted and give reasons for why they would be a good fit. Derek wanted to be his group's Manager and was determined to convince me to pick him. His application was a very well-written, well-reasoned three-page personal essay about why he would be a good leader; one particular reason was his many ideas he had for products. Lynn believed that Derek was searching to be seen in a different light by his classmates, and we decided to give him the opportunity to be a positive leader in the class.

Derek's leadership within his group started off a bit rocky. He frequently disagreed and argued with Summer over the group's product ideas. His group members did not see his ideas as productive. However, as the group continued to work together, even Summer started to value

Derek's many ideas. Summer was working hard to convince her group to make stress balls, but could not articulate how they should be made. She credited Derek for coming up with the idea of a balloon: "Derek ended up saying 'Why not just do balloons where you can tie it and stuff inside anything we're putting in.'" His idea seemed to get the group "unstuck" from their deadlock and push it in the direction of making stress balls. Near the end of the experience of selling products, Derek had another idea about what to do with the ends of the balloons that the group had been cutting off to fill the balloon with cotton, which he described as the "best idea" he came up with: "[I] made bouncy balls out of the stress balls…more people bought them and we sold six of them!" Derek had discovered a way to make another product out of scraps from the stress balls and found another source of revenue for his group.

In a post-interview, Derek also saw the value in working with a group, despite some of the disagreements the group members had in the beginning. He saw teamwork as essential for productivity and the overall morale of his group:

> I didn't like when we argued a lot. When we argued, we got mad at each other and didn't want to work or talk, [like when] we didn't have enough products…[Making the stress balls] was really fun because we all had something to do and there was no arguing. It was just calm.

Derek recognized that when his group worked together to organize for a goal, they got along much better. He reflected on the success his group had later on, saying that near the end of the unit "when there were problems, we didn't argue a lot." Derek's story of his struggles to work together and then later figuring out ways to collaborate productively is representative of other group's experiences as well. However, it appears that the One Hen experience also allowed Derek to contribute to a collaborative effort in a different way than he was used to. In this

experience, his energy was eventually seen positively by his group, and he was able to develop his own teamwork skills in the process. More importantly, Derek valued his teammates and what they could accomplish together, which may have led to fewer behavior issues among his classmates, as Lynn believed. In Derek's words: "Working together can be better than working separately."

Summary of Findings

This study examined the student experience with the One Hen unit in two areas—their growth in economics knowledge and skills (Research Question 1: *Do fifth-grade students' knowledge and skills in economics change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how?*) and the growth of their civic engagement (Research Question 2: *Do fifth-grade students' knowledge of and beliefs about civic engagement change after participating in a project-based economics and civic engagement unit in which they run their own social business? If so, how?)* Students' demonstrated growth in economics knowledge and skills and their beliefs about civic engagement following the One Hen unit, although students showed growth in some areas more than others.

I measured the students' growth in their economics knowledge and skills primarily by their performance on pre- and post- economics assessments based on the Michigan economics GLCEs. I used student responses from their pre-and post-interviews to provide a richer description of their growth. I found that the students had some background knowledge in economics, mostly related to the concepts of price and cost (when cost refers to the price of an item and how much it costs to purchase). By the end of the unit, the students were able to add to their understanding of the concept of cost based on the context of a running a business. The

students were also able to describe and give examples of revenue and profit and the relationship among revenue, profit, and cost. Students also practiced calculating cost and profit throughout the experience, which added to their understanding of how these concepts connect. This practice may have helped the students meet the GLCEs *4.E1.0.2 Describe some characteristics of a market economy* and *4.E1.0.3 Describe how positive and negative incentive influence behavior in a market economy* (Michigan Department of Education, 2007). In the One Hen project, revenue, cost and profit are the specific characteristics and incentives that were taught to meet these standards.

The students' already extensive background knowledge on the concept of price did not change following the One Hen unit. Before the unit began, many students were already able to meet the GLCE *4.E1.0.4 Explain how price affects decisions about purchasing goods and services* (Michigan Department of Education, 2007), especially as it related to the personal purchasing decisions they make on a regular basis. The students had plenty of previous experiences where low prices made them more likely to purchase a product, so they applied this knowledge to their businesses, even when occasions arose where raising the prices would have been beneficial for increasing profits. None of the business groups raised prices when their product was in high demand (and in some cases scarce), indicating that the experience perhaps did not add to their knowledge of price like it did to their knowledge of costs.

Students obtained a loan to start their businesses, which they then had to pay back with interest. Before the unit began, the students were able to define a loan in general terms, but after the unit, they demonstrated a more detailed understanding of how loans work, including that people get loans from banks that they have to pay back with interest and those loans are sometimes used to help entrepreneurs start businesses. There is also evidence that the students

were beginning to understand microfinancing, due to the story of Kojo and the videos of women borrowing from Yunus's Grameen Bank in Bangladesh. Understanding loans is not specifically mentioned in the GLCEs (although it could be included as one of the NCEE (2010) standards for economics for upper elementary: *Content Standard 14: Students will understand that entrepreneurs are people who take risks of organizing productive resources to make goods and services.*), which indicates that after the One Hen unit, students' economic understanding was beyond what is expected of them at their grade level.

I measured students' beliefs about their civic engagement by pre-and post-interviews, and in some cases, supported these findings with students' written reflections they created throughout the unit. One of the fifth-grade Michigan GLCEs for Public Discourse, Decision Making, and Citizen Involvement requires students to develop an action plan and know how, when, and where to address or inform others about a public issue (5.P4.2.1) (Michigan Department of Education, 2007). This GLCE is similar to the NCSS (2010) Standard 10 for Civic Ideals and Practices, which asks students to 1) understand that key practices in a democratic society include civic participation based on studying community issues, planning, decision-making, voting, and cooperating to promote civic ideals, 2) ask and find answers to questions about how to plan for action with others to improve life in the school, community, and beyond, and 3) participate in civic discussion and action about a school or community issue (p. 90). The One Hen unit offered students the opportunity to be civically engaged in each of these three areas, and there is evidence that after the unit, the students described a more developed understanding of civics knowledge and skills.

Specific lessons in the One Hen unit were focused on developing students' awareness of broader global problems and "studying community issues" (NCSS, 2010, p. 90), and many

students described some of these lessons as influential in how they saw community problems differently. Before the unit, students defined community problems as more local, related to safety issues, personal theft, or playground bullying. By the end of the unit, the students provided broader problems like child abuse and welfare and homelessness, citing their work on helping to address these problems (through the donation to the shelter) as crucial to their understanding. Their social businesses gave them the opportunity to plan for action and make decisions about solving their selected problems of child abuse and homelessness; however, by the end of the unit it was unclear whether students understood that social businesses can help solve social problems. Instead, the students saw what they were doing to earn money as more fundraising than entrepreneurship (and social businesses are not charities or non-profit fundraisers). Nonetheless, the students still began to see themselves as organizers of major fundraisers or projects instead of donors and participants, indicating that the experience still allowed them to plan for action in some way and experience success in doing so.

Another aspect of civic engagement is cooperating and planning for action with others. At the beginning of the year, the students struggled with working together in groups, despite Lynn's commitment to group work. There were many behavior and discipline issues that both Lynn and the principal addressed with the class. Although some students struggled to work in business groups during the One Hen unit, Lynn noted that by the end of the unit, the students improved their teamwork skills and that there were fewer behavior problems. Students also were aware of the successes and challenges of working together and felt that they were improving their own teamwork skills. Perhaps more importantly, the students valued working together as important for their productivity of a successful business and meeting their goal of helping child welfare in their community.

Overall, the experience of running a business to meet a community need helped the students met the GLCEs *4.E1.0.7 Demonstrate the circular flow model by engaging in a market simulation, which includes households and businesses and depicts the interactions among them* and *5.P4.2.2 Participate in projects to help others* (Michigan Department of Education, 2007). True to the project-based learning approach, the students showed knowledge of social studies content through an authentic experience. The students' experience with One Hen is an example of how project-based approaches can be beneficial for student learning and development. The students saw relevance in their economics learning and responded positively to the student-centered approach. The students were excited to run their businesses and eager to learn new and complex topics. The project also gave students the opportunity to be civically engaged in a meaningful endeavor to solve a community problem. The authenticity of the project showed the students that they could have a tangible positive impact on their community.

CHAPTER FIVE

Teacher Findings

Many studies describe the benefits for students that result from a project-based approach in many different subjects. The real-world problems and issues that students work on, which are characteristics of project-based learning approaches, can lead to students making greater connections to and deeper learning of content (Barron et al., 1998; Halvorsen et al., 2012). Opportunities for student choice and collaborative work with peers have also led to increased student engagement and motivation and fewer behavior problems among students participating in project-based learning units (Hernandez-Ramos & DeLaPaz, 2009; Hertzog, 2007; Krajcik et al., 1998). Despite the benefits of project-based learning, teachers in these studies have also found that implementing project-based learning units can be very challenging. Project-based learning units often take a considerable amount of instructional time (Krajcik et al., 1998) and are also very complex to manage logistically both with academic content and behavior expectations for the students (Hertzog, 2007).

Even if students have a positive experience with project-based instruction, if teachers do not find this approach feasible, they may not attempt project-based learning despite the perceived benefits. In addition to examining the student experience of the One Hen unit, this study also examined the teacher experience. Teachers' perspectives are critical to capture as well since teachers are the gatekeepers of content and instructional approaches that they choose to present to their students. To explore the teacher experience in the One Hen unit, this study sought to answer Research Question 3: *What are the affordances and constraints of teaching economics and civic engagement using a project-based approach?*

In this One Hen experience, two teachers were involved in classroom instruction—the regular assigned classroom teacher, Lynn Rey, and me, the researcher. Collaborating with Lynn allowed me to see her perspective on the affordances and constraints of the instructional approach of One Hen. I wanted to co-teach this unit with a classroom teacher in order to get an insider's perspective on Research Question 3. Three data sources supported this question: interviews with Lynn, informal conversations with Lynn, and my daily reflections of teaching One Hen lessons. In this chapter, I begin by describing Lynn's background and how we collaborated to teach One Hen. The remainder of this chapter describes Lynn's beliefs about the affordances of teaching project-based learning in One Hen—the students' meaningful learning, the student behavioral engagement with the project, and the community benefits of One Hen. This chapter also outlines the constraints of the project-based learning approach in One Hen, including the lengthy amount of instructional time and the difficulties with the interpretive nature of the unit.

Lynn Rey: A Veteran of Project-Based Learning

Lynn's principal recommended her as a possible participant in this study several months before the study began. He recommended Lynn for her experience with teaching using a project-based learning approach and for her many years of teaching experience. Lynn was hired in the school district 17 years ago as support staff and taught various grades in many buildings within the district. Lynn began her teaching career as a "non-traditional student." After being inspired to enter the education field by an experience as a children's worship leader in her church, Lynn began a teacher preparation program in her early-30s as a mother of young children.

Lynn described her teaching style when she was a worship leader as "very Montessori" and student-centered. She described feeling very out of place in her teacher preparation program

full of "ITIP (Instructional Theory Into Practice) kids" and professors who taught the structured, direct instruction-style of lesson planning developed by Madeline Hunter (1994). Lynn considers her approach to lesson planning the opposite of direct instruction, calling herself an "extreme constructivist." She credits her mentor teacher during her student teaching experience with cultivating her teaching style. Her mentor taught using an integrated and thematic approach and Lynn described their collaboration as "the perfect match." Lynn's beliefs about the value of a student-centered approach to education validated her instructional choices and further solidified her beliefs about what type of instruction was successful.

In the pre-interview, Lynn described her beliefs that social studies instruction should prepare students for global citizenship:

> I want them to be responsible citizens. I want them to be knowledgeable on how our country works, their role as a citizen and being active in their community. This can be within the classroom community all the way up to global. [The students] are citizen[s] and they have a responsibility beyond themselves. To do that you have to know how to vote, how to make informed decisions, how to get information. You need to understand historically where we've been to understand where we are and where we are going…The biggest thing I want them to know, I guess, is as a single individual they can make a difference and they have a voice.

Her beliefs about social studies match the goals of NCSS (2010) and also the broader goals for the One Hen unit of developing students' civic engagement.

Lynn's approach to teaching social studies for global citizenship is to integrate social studies with other subject areas. She stated that labeling social studies as a separate subject "does the kids a disservice" because they don't see how the concepts relate across subjects. Lynn writes

a daily agenda for her students on the board so her students can review the objectives they will be working on each day. She bemoans the fact that her administration requires that she label when she is teaching writing or reading or social studies on her agenda so they can monitor how many minutes a day is being spent on each subject. She would prefer to write a class topic or question on her agenda such as "writing a Constitution" and have students write objectives, activities, and homework in their agenda under whatever subject heading makes sense to them.

Lynn's beliefs about curriculum integration led her to design large scale projects for students that incorporate many subjects. These projects included the following: a Colonial Day where students researched historical figures and spent the day role-playing these figures; nominating the school, Lanley, for "green" certification to the state; and various field trips in the community. Lynn described her largest and most involved project-based learning unit as one she did with her second-grade students. She had the students identify a problem in the school that they wanted to solve. The students decided they wanted to improve their school playground. Lynn helped the students narrow down their project to designing a quiet space on the playground called the "reading garden" and guided them through the design, fundraising, and creation of the garden. She described this project as "a ton of work" to accomplish but she felt it was successful because her students had understood the math, social studies, and science concepts she taught using the garden as meaningful application—calculating area and perimeter, taking opinion surveys and displaying data in presentations, and planting and caring for plants and flowers in the garden. Lynn "looped" with these second-grade students, remaining their classroom teacher for the next four years. She described how students still remembered these concepts and the experience years later.

Lynn's beliefs about teaching with a project-based approach and her goals for social studies instruction aligned well with the instructional approaches in the One Hen project. Lynn was even familiar with the *One Hen* book and its publisher, Kids Can Press, which is known for publishing many books that introduce global issues to young children. Lynn's experience as a veteran of education, and her background and comfort level with project-based learning and curriculum integration meant that she could draw from her many experiences to describe the affordances and constraints of teaching One Hen.

My Partnership with Lynn

This study took place during the fall of 2012 when Lynn was beginning her fifth year at Lanley Elementary. A few weeks before school began, Lynn and I discussed the overall structure of the One Hen unit to determine pacing and how to integrate One Hen into other subjects. There were lessons already written for the unit that integrated literacy, but Lynn expressed the desire to make the project a part of as many subject areas as she could, under a unifying theme for the year. Before meeting the students, we each worked separately to brainstorm logistics of integration and the social business part of the project.

Other than the one day a week when I had to teach my own university classes, I spent every day at Lanley Elementary from the first day of school for the 2012-2013 school year until the students' last day before winter break in December. At the beginning of the unit, I was there at the start of school each day and usually co-taught with Lynn until lunch time. Near the end of the unit, as One Hen became more integrated into other subjects, I co-taught all day in Lynn's classroom.

The first few days of school were an adjustment for us both. Lynn had just finished looping with her group of students for the past four years, but at this time, Lanley was phasing

out the practice of looping and Lynn remained teaching fifth grade with a new group of students. As a remnant of the old structure, most of her new students had been in the same fourth grade class together. Her students were familiar with each other, but not with her. Lynn commented on how she had not gone over classroom procedures in many years—her students had always remembered the procedures the years before. And I had to adjust to the flow of a self-contained classroom. Most of my five years of previous teaching experience had been in a middle school setting where I saw groups of students for 45 minutes before they moved to another class. Although I have taught students as young as Kindergarten, it had been nearly seven years since I had taught in a self-contained classroom.

Every day of the project (which lasted September to December), Lynn and I worked together during morning planning time to talk about the One Hen unit. We talked about the current day's upcoming lesson, future plans, and how to meet the needs of certain students. Each morning, I was responsible to teach the One Hen lesson and/or facilitate the students' work on their social businesses. In the afternoon, Lynn would integrate One Hen concepts into her literacy and math lessons. As the unit went on, the lines between "One Hen time" and "literacy time" became more blurred as I started to work with students on math lessons and Lynn started introducing each One Hen lesson with a writing prompt related to the unit. I believe the students saw Lynn and me as co-teachers and I believe we successfully planned an integrated, project-based experience for her students. The following sections describe our experience, mostly through Lynn's perspective of the affordances and constraints to teaching One Hen.

Affordances

There were various benefits to teaching the One Hen unit that all stemmed from the fact that the unit provided students a rich learning experience. Throughout our interviews, Lynn

described the main affordances as 1) the unit meaningfully integrated math and ELA into social studies, 2) the unit contributed to students' behavioral engagement, and 3) the unit had a community impact outside of the school.

Meaningful integration. Long before teaching One Hen, Lynn had seen the benefits of meaningfully integrating school subjects. In the pre-interview she described projects such as her Colonial Day, her reading garden project, and various field trips to places like the City Hall as successful because students worked with several different subjects at once and were able to make connections across content areas which led to a deeper understanding of concepts. In Lynn's experience, what makes integration so successful for her students is the fact that she integrates subjects around a central problem or project that allows students to apply learning in a "real-world" situation (Thomas, 2000). In our interviews, Lynn frequently referred to project-based learning as "real-world learning," and praised the approach, saying that the "learning sticks" with students when they are given the opportunity to work on a meaningful task.

For example, in Lynn's reading garden project, her second-grade students quickly grasped the concept of area and perimeter when they measured the perimeter of their garden by walking around it. Lynn claimed that she "never had to review area and perimeter" when introducing related math concepts in the coming years after the garden project; the students referenced the experience and remembered what they had learned from second grade because, as Lynn attributed it, she was able to connect area and perimeter to a real-world use. Lynn said that One Hen was another example of successful integration for her:

> [The students'] awareness and understanding of [economics] concepts wasn't compartmentalized. It was pervasive throughout everything we did…They went so deep

with the concepts instead of a super surface level. They became very connected to it and they got the concepts in a lot of different ways.

One of the broader goals for One Hen was to provide students the opportunity to understand economics concepts, but also to give students the opportunity to be civically engaged in their community. Lynn believed that integrating the subjects of literacy, math, and social studies in this unit helped the students develop their economics knowledge and civic engagement in meaningful ways.

Literacy integration. The main literacy experience in the One Hen unit is the *One Hen* book. The purpose of the book is to introduce the students to the economics concepts of loans and microfinance through the story of Kojo. *One Hen* is a true story; Kojo is based on a real person—Kwabena Darko, who used a small loan to build a large chicken farm and then gave other microfinance loans to other small business entrepreneurs in his village (Smith-Millway, 2008). Lynn's students were highly engaged with the story, often choosing to read the book again on their own during silent reading time.

The students' engagement with the story helped them use the text to work on CCSS for interpreting literature. Lynn and I used the book to teach cause and effect, and Lynn modeled making text-to-text connections between *One Hen* and other picture books she and I read with the students, including *If the World Were a Village* (Smith, 2011), and *One* (Otoshi, 2008). Both books teach about making a difference in a global society, a central theme of *One Hen*.

As the unit went on, Lynn made her literacy instruction more thematic to relate closely to the students' work in their social businesses. Since the students had chosen a cause that was related to human rights, Lynn introduced many texts into her literacy time (both fiction and non-fiction) that related to human rights violations, people who have fought for human rights, and

historical examples of human rights development. She read biographies of human rights activists such as Cesar Chavez, Mahatma Ghandi, and Mary McLeod Bethune to the students. A story about Anne Frank inspired the students to want to learn more about the Holocaust and World War II, so Lynn stocked her large classroom bookshelf with books on these topics. Lynn also placed *One Hen*, *If the World Were a Village*, and *One* on this shelf along with the biographies they read and other novels where the narrative centered on bullying, acceptance, and treating people fairly, such as the popular recent novel *Wonder* (Palacio, 2012).

Throughout the One Hen unit, the students were constantly writing in a variety of genres. Many times the students wrote responses in their journals as exit tickets that I used to gauge their understanding of economic concepts. Other times, the students wrote reflections about the experience of running their business. Lynn also implemented a regular classroom routine called "Sacred Writing Time." During this time early in the year, the students were allowed to write about whatever they wanted and the purpose was to increase their writing stamina. Lynn would set a timer for 10 minutes and instruct the students to write about something the entire time. As the One Hen unit progressed, Lynn gave students a prompt for Sacred Writing Time. Sometimes the prompt was to write a reflection about a certain quote (like this one from Anne Frank: "You can always, always give something, even if it is only kindness") sometimes Lynn showed a video of elementary and middle school aged students who had done something to help in their community.

One day, a guest speaker, a team leader for a large local company, talked to the students. He discussed ways he works in a team and suggested ways the students could be good managers and leaders within their business teams. Before he arrived, the students wrote questions for him. After his presentation, the students wrote a reflection about what they learned, how they would

use what they learned in their business, and any other questions they still had. Among writing the questions, writing the response from the presentation, and our daily Sacred Writing Time, that day the students spent 45 minutes writing. Most of these 45 minutes were also spent writing something meaningful and authentic—questions for a guest speaker and a plan for how to work in a team in their real business. This kind of instructional time in class just for writing is rare without a Writing Workshop model, but the One Hen unit offered students many opportunities for meaningful writing.

Lynn also used the One Hen unit to integrate CCSS that addressed informational text. The students developed a large print advertisement for their businesses that they posted around the school and she used the advertisement assignment as an assessment in persuasive writing. The students examined different print advertisements and evaluated the elements that made them persuasive and effective. Then the students used software in the computer lab to create their own ads. Advertisements were another way that students were working on literacy standards in a meaningful way—the advertisements could contribute to increased profits. Many students understood the importance of advertising in running a business. Some groups decided to increase or change advertising to draw more customers to their business when they had days where they didn't make much profit.

Lynn also felt that activities such as writing advertisements increased her students' literacy achievement. At regular intervals throughout the year, Lynn is required to give all of her students a DIBELS (Dynamic Indicators of Basic Early Literacy Skills) reading assessment of their oral reading fluency and comprehension. Lynn commented in her interview that although she gave the students no direct practice with reading fluency to prepare for the test (stating, "We spent very little time actually hav[ing] kids do oral reading or any reader's theater"), all of her

students, with the exception of two, made progress. Some students even achieved grade-level proficiency on a progress monitoring test she gave near the end of the One Hen unit. In the post-interview, Lynn credited these gains to the fact that the One Hen unit gave students the opportunity to read and write in various genres about global topics and to be exposed to meaningful and complex vocabulary. She believes the One Hen content added to the students' background knowledge and world view, which could have led to their increase in reading comprehension. As Lynn pointed out, "They read in here when they can, they're getting information given to them about the world, about what's going on and they're expanding their horizons…Their retellings are amazing."

Math integration. During the experience of running their social businesses, the students were expected to use a lot of business math—adding and subtracting costs and profits, calculating interest on their loan, and calculating the unit cost of their product. Lynn was very intentional during our planning to make sure the students had practice with the CCSS for mathematics, including adding and subtracting decimals. To make integration more meaningful, Lynn moved math to right after lunch so the business teams could "balance the books" after each day of purchasing materials and creating products in the morning and then selling their products at lunch. During this time, the students counted money, added their costs, subtracted costs from their revenue, and found a total amount of profit for the day. Not only were the students practicing math concepts and skills, but also their learning of the concept of the revenue, cost, and profit relationship was being reinforced.

The students balanced the books every day after selling for nearly four weeks. Lynn described this practice as instrumental in her students' success with meeting math standards. She stated, "They became much more accurate with their addition and subtraction. They know how

to add and subtract decimals, they know how to regroup. I didn't have to teach any of that." Lynn went on to explain that by "not having to teach" these concepts, her "up front on the stage time" was minimized—she felt the students learned these concepts through the experience more than her direct instruction and the fact that their practice came in the form of a real task made this method more beneficial for them. Lynn also commented that the experience prepared the students for when she will eventually have to introduce multiplying decimals ("When I get to it now, they already know it"), and allowed them to review more basic math skills that some students struggled with, like counting money and place value.

Lynn integrated graphing and data displays into her math instruction by having students graph their profits over the course of the week for homework, or by having them add up the class's total profits and make a bar graph to determine which day of the week of selling is most profitable. Lynn introduced these lessons by saying that these tasks are what real business owners have to do. She felt that the students had benefitted from a real-world example of math. One student even commented that he was excited that they hadn't "done math" in a long time (referring to traditional work out of their math books), even though they were using math every day for nearly a month. To the students, this math was essential for their business, a likely contributing factor to their engagement.

Of course, spending every day for nearly a month practicing computing decimals, counting money, and graphing should lead to student learning. But Lynn was convinced that this kind of real-world application practice was better for student learning than traditional direct instruction and then homework practice of a concept. When another colleague asked her about how the One Hen project was going, Lynn was most proud of how specifically she had

integrated her math unit on adding and subtracting decimals into the project, exclaiming that for those particular standards, "I haven't had to touch my math book!"

Increased student engagement. Another significant affordance of the One Hen unit is the evidence of behavioral engagement among the students. Behavioral engagement refers to students choosing to actively participate in their own learning. This could be shown by students participating in discussions, willingly completing their work, participating in extra-curricular activities, or showing persistence, concentration, or motivation for a task (Billig, 2010; Jimerson et al., 2003; Ladd & Dinella, 2009). Research shows that this can lead to increased student achievement (Boykin & Noguera, 2011). Students who are engaged in this way can make the teacher's work easier since discussions become richer, required work can be completed on time and be of good quality, and students are more likely to have positive attitudes and work ethics.

Before the unit began, Lynn had hopes that One Hen would help her students be more engaged with school. At the time of our pre-interview three weeks into the year, she felt that the students were still getting used to the classroom routines and her constructivist teaching style. Lynn was encouraged by how One Hen could hook her students into how differently they were going to be learning in the upcoming year:

> [The students] do what they're told because that's what's expected of them, but I'm not seeing a vast majority of them at this point loving being here every day and there are some that are starting to get it. They're starting to realize…it feels different in here but we haven't really jumped in with both feet so they really realize how different it is going to be and I'm excited about doing [One Hen] early because they are going to find out early and then they're going to be hooked.

There is evidence that the students in Lynn's classroom were engaged in the One Hen unit by how they showed initiative and motivation in class, how they worked on their businesses outside of class, and how they shared their excitement with their families at home.

Whole-group discussion was built into almost every lesson of the One Hen unit. Once the students began working on their businesses, each day started with a "trust group" meeting. I borrowed the concept of trust group meetings from Mohammed Yunus (2010), who hosted meetings for the women who had borrowed money from the Grameen Bank to share advice and business strategies with each other. Every day before working in their businesses, each team shared what they were working on and what they needed help with. Trust group meetings in the One Hen unit were a time where the groups could offer their advice to each other. For example, during one trust group meeting, Tommy (who was the manager of the group that sold beaded pins) mentioned that the younger students (first and second graders) never seemed to have money to spend on products during lunch selling time but were interested in purchasing pins. Another member of the class suggested that maybe the younger students need to be told in advance how much the various products cost so they know to bring money ahead of time. Another classmate said that they should make an announcement over the loudspeaker to the whole school to advertise to all classes. During work time that day, a few students wrote a script for an ad and practiced how to read it and make it exciting.

In the trust groups, the students were engaged in the work without needing external motivation. There was no competition among the groups for the most profit or the best product; quite the opposite, the students were all working toward the same goal of helping to raise awareness for child abuse, and each student was motivated and excited to help each other. When the stress ball group needed help making products, students from other groups jumped in to help.

Not only did the trust group meetings involve students in an engaging discussion every day, but they also helped to foster a sense of classroom community.

The students were frequently engaged in whole group discussions, especially when we deliberated about which community problem to take on and which organization to give our profits to. Some of the most engaging discussions were near the end of the unit, after we had decided to donate to the Teen House. Becky, the organization director, said that the students could decide exactly where their money would go within the organization—it could be a general donation, or students could furnish a room in the house or use their donation to purchase anything else they think homeless teenagers would need. The class spent over an hour brainstorming ideas, giving their reasoning for their favorite ideas, and coming to a consensus. One student, CeCe suggested buying a large fish tank for the house, and the students responded to this idea, saying that water helps calm people down and the teenagers would have pets to care for, so the shelter would feel more like a home. I believe these students were engaged in this discussion because it had a specific outcome—we had to talk about how our donation could be used, and in the end, they had the satisfaction of knowing there would eventually be a large fish tank in the house with a plaque saying, "Donated by Mega Minds."

Students also showed their engagement by sharing some of the connections they were making to the content they were learning. Summer showed me that a character in the book she was reading was paying his friend interest on a loan. Another student, Liliana, mentioned that she saw a special on Univision about kids starting their own businesses just like they were doing. Other students were inspired to extend their learning further. Cory sent a letter to a YouTube channel with a sample of slime that his group made that described our business because the creators of the channel were looking for examples of people making a difference. Other members

of the Goo Crew (the slime makers), Ally and April, made plans to continue selling slime with new recipes and colors after the project had finished.

The real-world experience also sparked the students' interests in related economics concepts. The stress ball group was paid with a Canadian two-dollar coin and did not know what it was. When I indicated that it might be worth more than two American dollars, the group was instantly interested. I pulled the group members aside and gave a very brief mini-lesson on exchange rates, showing them a Currency Converter online. We discovered that their Canadian two-dollar coin was, in fact, worth more than $2—it was worth $2.02. The group insisted on counting that coin's value in its profit, factoring in the exchange rate. The group then spent many minutes calculating how much profit it had made and then converted the profit to the Mexican peso and the Cambodian riel—countries where the students' families were from. This spontaneous inquiry kept these students engaged for several minutes learning about an economic concept that is far beyond their grade level expectations. Again, this opportunity was spurred from an authentic, real-world question that had meaning to this particular group.

The students were also engaged enough to continue their work outside of class. When the class had decided to make products that addressed the problem of child abuse, one student, Gaby, conducted research at home about the problem. She had been excited about the possibilities for the cause the class chose and worked on her own to think of business ideas. Gaby discovered that royal blue was the official awareness color for child abuse victims and suggested to the class the following day that they create products that are blue to raise awareness of their cause. Many groups willingly stayed in for recess and lunch to work on advertisements, research ideas, and create products. Many students sold products at home, in addition to the lunch store the class opened. Max, recognizing the possibility of a profitable business opportunity, sold 10 calendars

to his family over Thanksgiving break. During parent-teacher conferences in the fall, Lynn commented that several parents had heard their children talking about One Hen at home. In front of their parents during conferences, students told Lynn that One Hen was the most fun part of the day and the subject (social studies) that they were most successful in.

Perhaps the strongest example of student engagement came on the very last day of the One Hen unit before winter break. The students were presenting their work at a school assembly in the afternoon and spent the day preparing for it. At this assembly, the class was presenting Becky from the Teen House with a check of the profits and the class was excited to show her how much they had made. The class tie-dyed T-shirts for their "uniform" (blue, of course), made a "giant" check to present to Becky, wrote a script of their presentation, assigned parts, and practiced them. Two students even volunteered to translate and read the script in Spanish so that the presentation could be bilingual. This entire day was student-led and related to One Hen and what the students needed to do to finish the project. At the end of the day, after a successful presentation attended by hundreds of parents, teachers, and students, Lynn noticed that even though it was the last day before the break, not one student complained about not having a traditional "holiday party." The class next door had ordered pizza and was eating treats in front of a movie, and the Mega Minds paid no attention. They were fully engaged in the project.

Lynn believes the students' engagement in all of the One Hen activities was responsible for their gains in their performance on the DIBELS comprehension test. She believes that the relevance of all of the integrated subjects under the One Hen project caused the students to be more excited about their learning and be motivated to put in the work:

> I could sit here and skill and drill them every day, all year long, and I don't think they'd make the same progress because you've got kids going "It's boring, I don't want to do

that." So I can have you engaged and you can be learning and not know it and your brain's growing, or I could read a script on the page and bore you to death and you're not going to go anywhere.

Community benefits. The broader purpose of the One Hen unit is to have students engage with their community for their benefit—this engagement can make students more globally aware, more compassionate, and help them see themselves as agents for change. However, the students' civic engagement also has tremendous benefits for the community as well. The One Hen unit certainly benefitted Lanley Elementary's community.

In the pre-interview, Lynn described how she had incorporated the community into her project-based learning units in the past. She described "learning trips" she provided for her students where they could visit somewhere in the town that would add to the relevance and real-world aspect of the unit they were studying. For example, Lynn mentioned her trip to the City Hall, where the students witnessed an actual jury trial or a local tourist attraction where historical re-enactors performed a living timeline. Lynn valued the learning trips as a way to add to the authenticity of the unit and as a way to give the students practice in writing questions, reflecting on the experience in writing, and in some cases, writing thank you letters to the hosts.

In this unit, Lynn and I organized a "learning trip" for the students to a local social business: a high-end home decoration store located in the downtown shopping district. This store helps entrepreneurs in third world countries by giving them floor space to sell their goods. The students talked to the manager about how to run a successful social business and shopped for some of the store's less expensive items that came from places they had learned about, such as Ghana and Bangladesh. Some students took great pride in purchasing items that came from

countries where their families were from, such as Mexico and the Philippines. This trip was not part of the original design of the unit, but Lynn wanted to add this community connection.

The One Hen unit also had members of the community come to Lynn's classroom to speak, showing the community members the value in the students' work. A team leader at a large local furniture company came to talk to the students about how to work well as a team to make their businesses successful. A member of a local child welfare advocacy group came to talk about the work they do to protect children in our county. And, as mentioned previously, Becky from the Teen House made regular visits to the Mega Minds to talk to them about the homeless shelter.

The Mega Minds' partnership with the Teen House was another benefit to the community. The students made nearly $700 of profit, all of which they donated toward a fish tank to go into the Teen House as well as to contribute to their general construction fund. I also donated around $100 of profit from the "Whitlock Store" to the Teen House, so the students were able to present an $800 check to Becky on the final day of the One Hen unit. This money will directly help homeless youth in the community. The students developed a relationship with Becky from her many visits and her ease in working with fifth graders and plan to continue their partnership with the Teen House the rest of the school year. Lynn had plans for the students to create artwork to auction off at an upcoming fundraiser and the students expressed a desire to help with the actual construction of the house in the spring. Lynn shared with me some ideas she had about how to incorporate their construction work into a math or science project. The students' continued partnership with a community organization can only benefit both parties, and was a very important affordance to teaching the One Hen unit. The students' partnership with the Teen House could also have possible long-term benefits for their civic engagement. Their

experience working with the Teen House could make them more likely to participate in community partnerships like this in the future.

Constraints

Despite the many affordances to teaching One Hen, including such important benefits as meaningful learning for students, increased student engagement, and opportunities for community partnerships, One Hen also had challenges. Lynn described the biggest constraint to the project-based learning approach in general was the many demands the approach places on instructional time. In my experience with the One Hen unit, another constraint was the very open-ended, interpretive nature of the project.

Demands on instructional time. The original One Hen unit that I created prior to working with Lynn and her class was 16 lessons. These lessons were a mix of social studies and literacy lessons, and some of these were mini-lessons designed to be implemented with students for 15 to 20 minutes prior to the students working independently in their business groups on their products. Each lesson was originally designed to be 50 minutes long. Not many elementary classrooms have 50 minutes available in a day to teach social studies, but the integrated nature of these lessons allowed for teachers to be justified in teaching them during their scheduled literacy time as well. However, in this case with Lynn and her students, the One Hen unit was extended from 16 lessons to 26. The lessons were sometimes split from their original 50-minute design to two 25-minute lessons which would not increase the instructional time; however, the unit was expanded mostly because lessons were added to the unit (by Lynn), including many mini-lessons and many days of students creating and selling products.

All additional lessons were Lynn's suggestions, and Lynn had various reasons for wanting to add on to my original design of the One Hen unit. The primary reason Lynn added

lessons to the One Hen unit was to address what she believed were specific needs of her students. For example, Lynn felt that because the students struggled with working in teams so early in the year, lessons should be added for students to practice teamwork skills. The first lesson in the unit was to have the students put together a puzzle working in groups without talking. Early on in the unit, Lynn also had the students do the team-building activity The Human Knot, where students had to link hands and untangle themselves. Although it was not a lesson that introduced new content, Lynn spent over an hour working with the students on the Human Knot activity, giving students multiple opportunities to try the activity when they weren't successful initially.

Other content lessons in the One Hen unit, such as a literacy lesson on cause and effect with the *One Hen* book and calculating unit cost took longer than 50 minutes and additional practice was required for the students to master these concepts. Lynn also chose to give her students many opportunities to practice concepts even when students had mastered them, especially the math lessons on adding and subtracting decimals and the economic concepts of the revenue, cost, and profit. Adding these lessons may have been just to meet the needs of these specific students. Other teachers who teach One Hen or other large project-based units may not need to review, practice, and support essential concepts as much as Lynn did (or felt she needed to).

Lynn added lessons to the One Hen unit that I believe were improvements from the original design. I had initially written the unit before meeting Lynn, but as with any good working relationship, I welcomed Lynn's feedback on how to improve the unit and she had many great ideas. Lynn suggested reading *If the World Were a Village* to the students to help them start to understand how different the world is from what they know. Lynn also suggested bringing in a guest speaker to talk to the students about teamwork and another speaker to talk about how our

community helps children in need. Once the students had decided they wanted to learn more about the Teen House, we thought it was beneficial to bring Becky, the director, in to talk to the students as well. It was Lynn's idea to take the students on a learning trip to a local social business. These activities added lessons to the One Hen unit but were beneficial for the students and added to their experience.

In most school calendars, 26 lessons may take roughly five to six weeks. Considering how many social studies, literacy, and math lessons are covered in this unit (Appendix A), five weeks may not be unreasonable. However, in this case, the 26 lessons were spread out over the course of 12 weeks at Lanley Elementary, and schedule changes and interruptions were partially to blame. The students spent four full instructional days taking the state standardized tests, which forced Lynn and me to either eliminate or split One Hen lessons to make them shorter. The students also had late-start days and half days for teacher professional development, all-school assemblies for Veteran's Day or orchestra performances, and reward parties for the last hour of the day on certain Fridays (for students with good behavior) that all either forced us to modify or eliminate One Hen lessons. Near the end of the unit, Lanley Elementary reworked its lunch and recess schedules, which changed every classroom's master schedule. The students' lunch time was moved, forcing Lynn to rework when she placed certain subjects on her agenda.

In the post-interview, Lynn commented that the One Hen unit took longer than she thought: "Some of the stuff that I expected to go through that would take less time didn't actually take less time." Lynn gave the example of the students balancing their books after each day of selling. "It should have taken them 15 minutes to count money and it invariably always takes longer than 15 minutes. Why does it take [them] so long to do this? The routine doesn't change." Lynn also expressed frustration with how she rushed the students through writing a reflection

essay about the One Hen to fit it in before winter break, saying that "I wish I had more time to integrate", possibly suggesting that she should have begun the reflection earlier in literacy time, or that she wished she didn't have to finish before break.

Despite her comments in our interview about feeling rushed, or feeling like lessons took too long, in practice, Lynn didn't seem concerned with time constraints as the unit was progressing. Once the students were ready to sell their products, Lynn wanted them to sell every day at lunch for four weeks, when the original design of the unit called for three or four days of selling. Although the extended time allowed the students practice with the market system and allowed them the opportunity to increase their profits, the large amount of time between choosing a cause and donating the money to the Teen House may have caused the students to forget the purpose of a social business. Also, the students' behavioral engagement began to decrease over the course of the four weeks as the novelty of this project-based experience became routine. Students stopped doing their homework regularly and began to complain about taking shifts to work at lunch.

Another influence on the extended time for the One Hen unit was the nature of Lynn's students. Lynn spent considerable instructional time addressing the students' behavior. At the beginning of the year, there were several incidents of bullying reported on the playground or in the lunch room that involved Lynn's students. Lynn chose to address these issues in the classroom, often during her Morning Meeting time. On three occasions, Lynn chose to talk with the class (for over an hour) about bullying and how students treat each other during Morning Meeting. On two other occasions, the behavior incidents were so troubling that Lynn chose to talk to the students about them for an entire morning. For example, one day the students were so disruptive for a substitute teacher that several other teachers in the building and the principal had

to intervene to help the substitute teacher. I was present for some of this incident, and even I, who was a regular presence in the classroom, struggled to manage behavior. The following day, Lynn spent the entire morning discussing the incident with the students, and she also had the students write a reflection about how it felt to get a bad report from the substitute teacher. Then, Lynn required the students to sit quietly with their heads down for several minutes as reflection time before the principal came in to have another talk with the students about their behavior. Dealing with this incident took the entire morning. Not only did the One Hen lesson go poorly the day before due to behavior, but we were not able to get through the entire lesson the following day. Over the course of the unit, Lynn was absent seven times, mostly for professional development in-services. After each day she was gone, she had to address poor behavior from the previous day. Lynn would have chosen to address behavior problems whether or not she taught a project-based learning unit, but in this case, dealing with the disruptive behavior was partially responsible for the extended time of the unit.

There were also at least two other occasions where students did not complete homework or were disrespectful to Lynn in class, and as a result, Lynn chose for them to not participate in the One Hen lesson as a consequence. One day near the end of the unit, more than half of the class did not complete the homework assignment. Lynn was understandably frustrated and required all of these students to complete the homework in class at their desks instead of participate in One Hen. The students were not happy about missing One Hen, which presumably, is why Lynn chose this as a consequence for not completing homework. However, this lesson was one where I was going to be introducing new information. With so few students able to participate in the lesson, Lynn and I decided to push this lesson to the following day and do a

review lesson instead. This review was most likely not necessary or essential, but it would not have been effective to introduce new information with so few students present.

In this case, schedule changes and student behavior issues were very specific to Lynn's class; however, these are not unique issues in the broader sense. Many teachers constantly have to work around interruptions in their schedule or classroom management issues that take time to address when implementing any unit. If project-based learning units already require more time to implement than other units, teachers who are aware of other external forces affecting instructional time may choose not to use this approach despite the benefits the approach offers.

Open to too much interpretation. One of the strengths of project-based learning approaches is in the amount of student choice involved in every project. In the One Hen unit, the students chose a community need, they chose their products, and they even chose how their profits would be used at the Teen House. Letting students guide the course of the project can contribute to their engagement—behavioral and civic. The original design of the One Hen unit allowed for points where teachers could adapt the lessons toward the choices their students made with the project. For example, I designed the portion of the unit where students sell their products to be somewhat open-ended to whatever the teacher and students decided. I recommended that students sell their products for three to five days, but how the products were sold (at home, at school, in a "store", or taking orders) could be decided by the students (and their teacher). The open-ended nature of the One Hen unit to allow for student choice led to some distinct benefits, but also constraints involving time and lack of focus. With the unit being so open-ended in parts, it is possible that teachers may choose to deviate significantly from how the original lesson designs. On the one hand, teachers' modifications, such as Lynn's inclusion of guest speakers and centering the unit on a human rights theme, could result in greater student

engagement. On the other hand, deviating too much from the original design could cause teachers and students to lose sight of the intended learning goals. In this case, following students' interests could lead to the unit taking much longer than needed or for students to forget the big ideas and purpose of the unit or project.

Lynn describes herself as an "extreme constructivist." She plans instruction around student interest whenever possible, especially with large projects. In our pre-interview, Lynn gave the example of a project-based learning unit she did the previous year in which the class applied for Lanley Elementary to be a certified "green" school by the state. Lynn had not intended to teach this unit with her students, but they had such a strong desire and interest in environmental issues that she decided to take on the project. Although she claimed to be comfortable with the uncertainty involved with following student interests, she recognized that with project-based learning, "you don't know where it's going to go" and that this could be a constraint for some teachers:

> Real world projects…you have to go into it knowing [that they] tend to have a life of their own and it tends to get bigger than I think you expect it to. If kids are going to learn and are going to learn well, you have to let go of controlling everything and be willing to…release responsibility to the kids and let go. And that's hard.

Lynn was comfortable with letting go of controlling the direction of the One Hen unit as well.

Even though the integration of social studies and literacy was planned in the original design of the big ideas of the unit, Lynn wanted a broader big idea to integrate the rest of her subjects with:

> We have One Hen. What's the big idea that we want the kids to walk out with? The big global idea…How do we weave other things in with it? I don't have it yet because I haven't talked to the kids about it.

Lynn and I brainstormed several possibilities including thematic titles such as "Conflict and Resolution" or "What Makes a Leader?" however when the unit began, we did not have a broad theme or big idea to integrate all subjects. Lynn was not concerned with this in the beginning. As the above quote mentioned, she needed to get a sense of what the students needed first. Lynn's desire to see what the students were interested in first is in line with her beliefs about how project-based learning units should be student-directed. However, we began teaching the One Hen unit without a specific plan to integrate other subjects.

I believe our lack of focus in the beginning made it difficult for Lynn and me to smoothly integrate lessons with her master schedule. For example, I taught a lesson about cause and effect using the One Hen book that took three days. This lesson could have easily been taught during Lynn's designated literacy time in the afternoon, and in the morning social studies time, one of us could have taught several of the economics lessons on those same days. Instead, Lynn preferred I teach the cause and effect lessons during her designated social studies time, and she introduced other literacy strategies and genres during literacy time that were unrelated (writing personal narratives). Although Lynn and I collaborated on the One Hen lessons and I made suggestions for places to integrate, the first time Lynn integrated One Hen into math and literacy was just over a month into the unit.

Lynn was aware of her struggle to find a big idea or theme to integrate her subjects. In the post-interview, Lynn commented this project was more difficult for her to integrate other subjects into than previous projects. She said this challenge was not reflective of the One Hen

unit, but rather of her students. She described her students as "tougher to read" and motivate and she had trouble understanding the direction the unit would take. Lynn described the day when she finally figured out that she could organize her subjects (including One Hen) around a broader theme of human rights:

> The day I knew I had them was the day they did the human rights connection with Anne Frank. I had picked a quote…her famous quote about kindness. The kids read the quote but they weren't really getting it. I had attributed it to Anne Frank and I gave a little bit of information, like she died at age 13 during World War II simply because she was Jewish. I have the picture book of Anne Frank and I read it aloud to them and their reaction…that's when I knew they were hooked.

Perhaps Lynn had planned to read this picture book to the students for a literacy lesson (I was not present for this lesson), but this quotation indicates that Lynn was following the thread of student interest as opposed to following a set lesson plan. She continued:

> They all wanted to read the picture book. We happened to go to the library that day and they were all looking for books on World War II. I've got kids now who are reading biographies about it. That fascinated them. Up until then, I didn't know where I wanted to go with it because I couldn't figure out where they wanted to go with it. Until I figured out [what they were interested in] I had no idea where I was going with this. No idea. I would just pull one thing and OK, we're going to do this today…we'll try to build background knowledge.

At this point, the students' interest in the Holocaust gave Lynn the idea to study larger human rights violations. She recognized that she could have students reading more about these topics throughout history as well as current events. Over the next weekend, she had created a "Human

Rights Wall" in her classroom of images, book covers, and articles about human rights. Lynn also described searching for Youth for Human Rights website to get inspired about how to introduce the topic to the students. Now that Lynn had a large theme or big idea, she indicated that she wants to organize her instruction for the rest of the year around human rights.

Her choice of theme resonated with the students. In their post-interviews, many students brought up the connections they were making between One Hen and human rights stories and videos that Lynn shared. These deeper connections, however, didn't begin until well beyond the originally designed duration for the One Hen project. Waiting to get a sense of student interest can be beneficial, but can also be a significant constraint. Not only is it a constraint on time, but students may not be able to reflect back to make connections to the parts of the One Hen unit that were not integrated into the human rights theme, which, in this case, were most of the social studies content. Waiting for student interest in this case, because it took Lynn so long to find what "grabbed them," may have done the students a disservice in developing their civic engagement. The original design of the One Hen unit did not outline a larger theme under which to integrate subjects, but Lynn was very comfortable re-working the original design to fit her students. Whereas overall, the theme was beneficial to her students' learning, it did add time to the unit and perhaps contributed to a lack of efficiency with instructional time in the beginning.

The fact that project-based learning units are often so open to interpretation and open to student choice can be difficult for teachers to "let go" of the project, as Lynn explains. It can also be tempting for teachers to attempt too much with projects. In this case, Lynn often veered toward the latter. The biggest example of this is the amount of time Lynn allowed the students to sell products. The students had decided to sell products at lunch by their own choice, and they were very excited to open their stores each day. So many students wanted to participate at lunch

each day that I implemented a "shift schedule" for students to split the lunch period up into work shifts so that more students could take a turn selling each day. Selling at lunch was an engaging learning experience for the students, and Lynn wanted to continue it as long as possible--longer than the recommended three or four days. Lynn had the students sell each day for a month. This extended time allowed the students to make more profit and practice math skills, but the students' engagement decreased as the selling went on. The students became less interested in selling each day, often closing their store before lunch was over. Also, during this month, some business groups stopped making their products blue, indicating that perhaps so much time had passed that they had forgotten about the purpose of their social businesses. Although my original unit design does leave the options for selling products during this project as open-ended, there is that danger of doing so much that the logistics of the project begin to overtake the learning.

Lynn also approached each lesson within the One Hen unit as open to interpretation as well. The lessons in the unit are not scripted, nor are they meant to be followed to the letter. However, many times Lynn deviated so far from a lesson's design that focus and pacing suffered. Lynn's desire to "pull one thing" and say "we're going to do this today" led to lessons that were more slowly paced than they could have been. For example, Lynn decided to add an integrated lesson to the One Hen unit a few minutes before we started teaching one day. Lynn started an integrated literacy and social studies lesson where students compared the Preamble to the Constitution and the preamble that the students wrote for their class constitution. She indicated to me before the lesson that she wanted to have the students reference these documents for 15 minutes before moving on to working on their businesses, but as the lesson went on, Lynn brought in the Universal Declaration of Human Rights for a close reading comparison and the lesson became 50 minutes long. This is a prime example of how even during a lesson, Lynn is in

tune with what her students are interested in and curious about; she was willing to extend a lesson and go more in-depth at the last minute, and even in mid-lesson if the students were ready and willing to do so. However, this deviation from the plan contributed to extending the unit even further. What we had planned for the day was pushed into the next day.

In the pre-interview, Lynn predicted that 50 minutes for a One Hen lesson might not be enough time for her students to learn some of these concepts. However, she had no problem extending lessons and the unit when she saw the opportunity to enhance the unit or give students more practice. The choices Lynn made with pacing and extending the unit enhanced the project-based experience with One Hen, and she responded to what the students needed and let them direct the pacing. However, her interpretive license with the unit was not always beneficial to the students in a sense that they were not aware of the purpose of their learning, and did not always allow students to see connections between subjects until much later on in the unit.

Lynn is correct that giving up control of the direction of the unit may also be difficult for some teachers and this may also be so big of a constraint that teachers do not attempt project-based learning. It is also just as likely that some teachers may let projects get so big that they begin to overshadow the important benefits of meaningful learning and civic and behavioral engagement. This was the case during some aspects of teaching the One Hen unit with Lynn. Project-based learning is characterized by student choice, but also by teaching planning for assessment, feedback, and monitoring of student learning (Larmer & Mergendoller, 2010). There needs to be a balance. Teachers that may not want to attempt project-based learning for fear of giving up control may also fear not being able to find that balance between student choice and teacher facilitation and direction in their projects.

Summary of Findings

The purpose of examining the One Hen unit from the teacher perspective was to study the affordances and constraints of teaching economics for civic engagement with the project-based approach. Pre- and post-interviews with Lynn and my reflective memos contributed to the data in this chapter examining whether or not the affordances and constraints of the unit would make the unit feasible for other teachers to implement.

There are important affordances to the One Hen unit, the one of them being that Lynn believed that the project-based elements of the unit provided students the opportunity for meaningful learning that Lynn attributed to an increased student achievement in literacy and math. The children's literature the students read in the unit like *One Hen, If the World Were a Village*, and *One*, as well as the novel studies allowed the students to make connections between economics, the literature, and the overall theme of studying human rights. The students also spent time writing for authentic purposes (questions for guest speakers, the script for their final presentation) and reflecting on their learning in their writing journals. Lynn believed the literature broadened the students' prior knowledge and that their exposure to the topics in those books contributed to increased comprehension scores on a reading achievement test given near the end of the unit. The students also learned math concepts through authentic application by counting their money and calculating their profits at the end of every day selling their products. Lynn also believed the practice of computing with decimals in this authentic way (without the math book) made the learning "stick."

The students were engaged with the unit, often choosing to spend their time out of school (recess, lunch, and at home) doing further research on their chosen cause, brainstorming and creating ideas for products, selling their goods, and sharing with their families about what they

learned. Again, Lynn attributed this to the real-life application of their economics learning and the opportunity to work in groups, to be creative, and to have choice within their social businesses. Also adding to the "real-world" elements of the One Hen unit was that students had a connection to their community. They heard from guest speakers from various industries in our city, they visited a working social business, and they addressed the problem of teenage homelessness in the city through their partnership with the Teen House. The real community connections, as well as the meaningful learning and student engagement were important affordances of the project-based approach in the One Hen unit.

The largest constraint with the One Hen unit is a similar constraint of project-based approaches outlined in some of the literature on project-based learning —the large amount of instructional time required for students to work on projects. The One Hen unit was originally designed to be 16 lessons, but after addressing students' needs, adding enhancements to the project specific to our community, and dealing with schedule changes, interruptions, and behavior issues, the One Hen unit at Lanley Elementary expanded to 26 lessons that spanned 12 weeks of instructional time. This could be problematic for teachers that are wary of spending this amount of time on a social studies project, even if the unit integrates other subjects.

Another important characteristic of project-based learning is increased student choice. This is a strength of project-based learning, but it can also be a constraint. Project-based learning units like One Hen that are open to adaptations and interpretation can tempt teachers to follow students down paths that lead away from the project's goals or to allow the project to become so big that it takes away from the learning. Deviating too much from the set goals of a project can contribute to not only increased instructional time, but the fact that students might not be able to make as meaningful of connections between the project and content.

It is important to note that although Lynn indicated that parts of the unit took a long time to complete and said that project-based instruction can be overwhelming at times, she was not concerned with these constraints during the teaching of One Hen. The possibility of an overwhelming project or lack of time did not deter her from attempting the unit, and she didn't feel that the constraints had a negative effect on the students. The students showed gains in content knowledge and skills on the pre- and post-assessment, and Lynn believed that the students also showed growth in math and reading comprehension. Her students had an authentic, successful experience running social businesses that resulted in a $700 donation to the Teen House. Although the lengthy amount of instructional time involved with the project-based approach may be able to explain some of the reasons why students didn't learn more academic content or their community, overall, Lynn believed it was a successful endeavor.

The choices Lynn made throughout the teaching of the project to extend time for lessons often benefited her students. Her decision to integrate the theme of human rights (even though doing so extended the project considerably) may have been a reason for the students' high levels of behavioral and civic engagement with the project. In our collaboration, I supported these decisions rather than sticking to a strict following of the original design of the unit. I believe that her experience with project-based learning and my experience with the unit made us effective collaborators. The unit was open to interpretation, and between the two of us, we constructed a learning experience for the students that was ultimately beneficial for them. Our collaborative efforts were more important to the learning experience than maintaining a strict fidelity of implementation with the One Hen unit, in the long run.

Also, despite these constraints, Lynn felt that the One Hen unit was worth the instructional time. In addition to Lynn's own engagement with the unit, Lanley Elementary was

very proud to be a part of the community partnership with the Teen House. The principal and I wrote an article about the project to be published in the district's newsletter to show all of the parents the results of the students' learning. In the post-interview, Lynn described how she would implement the One Hen unit again in future years and even address some of the difficulties with extended instructional time. The fact that Lynn would be willing to give the unit another try, using the constraints with the approach as feedback for future implementation, shows that she believes the affordances far outweighed the constraints.

CHAPTER SIX

Discussion

"I used to think that things happen because of a miracle, but now I know [it's because] somebody is willing to help."

Following the experience of the One Hen unit in Lynn's class at Lanley Elementary, students' showed growth in their economics knowledge and skills and their beliefs about their civic engagement. The unit introduced the economic concepts of revenue, cost, profit, microfinance loans, and entrepreneurship. Based on my analysis of the students' performance on pre- and post-assessments, after the unit, students demonstrated a more sophisticated understanding of these concepts. The students also demonstrated a deeper understanding of economic concepts that they already had prior knowledge about, such as loans, price, and cost. The students showed growth in their knowledge of complex economic concepts (some even beyond what is expected of them at their grade level according to national and state standards) that could be linked to their experience of running their social business in a real-world context.

The students' experience of running a successful social business gave them the opportunity to become more civically engaged in their community. After participating in lessons that introduced the students to global problems (e.g., the *One Hen* story, video writing prompts), students' awareness of broader problems in their community changed. After the One Hen unit, in which students had an impact on community needs in their city such as child abuse and teenage homelessness, students demonstrated that they understood they could be organizers and activists of other initiatives to help community problems. Not only did the students' awareness of global problems become evident, but they saw that they had the confidence and ability to address these issues in some way.

This study also examined the teachers' perspective on the affordances and constraints of teaching the One Hen unit. In the analysis of my interviews with Lynn as well as in reflecting on my own experience as a co-teacher of the unit, I found that the authentic nature of project-based learning units like One Hen helped make the learning "stick" for the students in Lynn's class. Lynn attributed the success of the unit to the fact that the students' experience of running a social business allowed her to meaningfully integrate all of the other subjects and focus on a theme of human rights, which fit in with the community problem the students had chosen to address. The students read novels with human rights themes, wrote in many genres related to running their business (e.g., advertisements, reflections, questions for guest speakers), and practiced adding and subtracting decimals with their business financials for math. Lynn believed this authentic integration of her subjects within the One Hen project kept her students engaged. They frequently chose to work on the project outside of school, shared their learning with their families, and worked on improving their teamwork skills with their classmates. The real experience of running a business also allowed the students to make a real profit, which they donated to the Teen House, an organization that is constructing a homeless shelter for teenagers. Therefore, the community also benefitted from the students' social businesses.

The One Hen unit also had challenges in implementation. Lynn chose to expand the unit to include a broader theme by which she could integrate all of her subjects, including the One Hen unit. Lynn wanted to wait until the students had chosen a community problem to address before choosing a theme by which to integrate her subjects, and once the students had chosen a problem, she struggled with finding something that would resonate with the students. This extension of the reach of the One Hen unit from its original design may have led to a lack of cohesion and focus of some of the earlier One Hen lessons since the students experienced them

without being aware of a larger purpose. Lynn took time (i.e., many additional lessons) to integrate subjects, which, along with many other factors (student need, schedule changes, interruptions for standardized testing), contributed to the One Hen unit expanding from 16 lessons in its original design to 26, and spanning over the course of 12 weeks. This extended period of time may have also hindered student learning. The students at times lost sight of the purpose of their social business and needed several mini-lessons of review of economic concepts to keep the content at the forefront of the experience.

Despite the constraints, Lynn felt that the One Hen project was well worth the time and the initial struggle to integrate her subject areas. She believes in the project-based learning instructional approach as an effective way for students to internalize content when they can connect it to a real-world experience. In the post-interview, Lynn described how she felt validated by seeing positive results in student learning and engagement in the One Hen unit: "The unit proved what I already knew. This isn't a new way of teaching for me…to me, it just works. To me, it just makes sense to [teach] this way." The following sections situate the findings from this study within the literature on meaningful learning in project-based instruction, civic engagement, and constraints to teaching project-based learning; describe the implications of this study on teaching practice; describe the limitations of the study; offer suggestions for future research; and argue for its educational significance.

Situating the Findings in the Literature

The One Hen unit features many characteristics of a project-based instructional approach (Larmer & Mergendoller, 2010; Thomas, 2000). The entry event was reading the *One Hen* book together as a class. Kojo's story introduced the concepts of microfinance and social entrepreneurship to the students as well as showed them a culture in Ghana that is different from

theirs--the first step in broadening their global awareness. The students worked on a driving question throughout the project: How can we use a small loan to start a social business to make a difference in our community? The students chose child abuse and teenage homelessness as the problem they wanted to address to make a difference in the community; this problem was real to the students because they had choice in determining the problem and had full control over running their social business to address the problem. The students worked in groups to practice "21st century skills" (Larmer & Mergendoller, 2010; Pink, 2006) and Lynn and I guided the groups in learning economics knowledge and skills within the experience of running their business. In the end, the students' efforts had a public audience; both in the presentation they gave at the end of the unit, and with their donation that will help build the homeless shelter for teens. In the One Hen unit, the "project" is the social business and everything involved in running it—designing the product, creating advertisements, and selling the product. Savery (2006, p. 16) describes project-based learning as "following correct procedures" toward the creation of a project; however, the focus of the One Hen project was more than procedures. Since their businesses are social businesses and the project was designed to address an ill-structured problem, One Hen also has characteristics of problem-based learning (Savery, 2006).

Meaningful learning. The authentic experience of running a social business also allowed opportunities for Lynn and me to integrate other subject areas within the unit. The original design of the One Hen unit included specific lessons for ELA, and Lynn contributed the expansion of math lessons in the unit to meet the CCSS (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010) for mathematics. Even though we were able to integrate other subjects into this unit, the social studies emphasis was never lost or put on the backburner. Alleman and Brophy (1993) express caution that integrating other

subjects with social studies in an activity or unit should still meet social studies goals and not distort social studies content. The students not only learned from lessons that addressed several Michigan Grade Level Content Expectations (GLCEs) for economics, but their work in other subjects was always centered on economics. For example, even when practicing adding and subtracting decimals to meet the math CCSS, the students were calculating their real profit using their total revenue and costs. They were practicing applying the revenue, cost, and profit relationship to an authentic situation as well as practicing math skills. In this study, the project helped the teachers meaningfully integrate subjects while still keeping social studies as the focus.

Lynn attributed this meaningful learning to the fact that the students were engaging in a "real" experience of running their businesses. She described that this real experience made the learning stick, whether it was math, social studies, or ELA. In *Experience and Education*, Dewey (1938) described how education based on experience is a "continuous spiral" of learning (p. 79), where students encounter problems that come from an experience. Solving these problems should also inspire students to seek new problems and new lines of inquiry. In Lynn's class, the experience of running a social business led the students to inquire about new problems and intellectual challenges—from the problem of homeless youth in our community to how to write effective advertisements, to how to convert a Canadian dollar to U. S. currency. Lynn believed that the students' learning and desire to explore related lines of inquiry in this project came from their experiences running a social business. "Traditional" education (Dewey, 1938, p. 79) may not have inspired such curiosity.

Elementary economics is often taught in an experiential approach, where students experience some real aspect of participating in the economy (Broome & Preston-Grimes, 2011; Kourilsky, 1977; Kourilsky & Ballard-Campbell, 1984) and this unit is no different. Brophy and

Alleman (2006) have recommend an approach to elementary social studies they call "cultural universals," which are fundamentals of human life, and one of them, "money" belongs to the field of economics. Grasping the concept of money is critical for understanding how to participate in the economy. They found that students struggled with grasping the concept of money. The One Hen unit provided the students at Lanley many opportunities to practice working with money and to understand how money is essential to running a business. The students were also able to help younger students in the school work with real money as consumers of their products.

Brophy and Alleman (2006) suggest that a deeper understanding of money will emerge early on in a student's life if he or she has frequent, real experiences with money. In the One Hen unit, students have experiences working with money every day that they sell their product, which in this case was nearly four weeks. Without the experiential approach of One Hen, students may have developed misconceptions about money and may never have fully understood revenue, cost, profit, and loans on their own (Miller & VanFossen, 2008). These misconceptions could have more serious implications for these students in their adult lives when faced with their own personal financial decisions (Meszaros & Evans, 2010). Lynn's students took their real experience of getting a loan for their social businesses seriously, and the "real" experience of One Hen could possibly help these students make smart decisions when getting a loan (or a small business loan) of their own one day.

Sylvester's (1994) study was an example of how students learned economics through a simulated neighborhood he and his students created in his classroom that the students named "Sweet Cakes Town." In Sweet Cakes Town, the students were participants in a simulated market economy; they applied for jobs, received a paycheck for being "good classroom citizens,"

paid taxes, and eventually even started their own businesses such as hair salons and plant stores (p. 312). Sylvester (1994) described how his students learned more than just economics through the simulation; they were practicing important skills in every subject area through this experience. Sylvester called this "meaningful drill" (1994, p. 324) and he gave an example of how his students were continuously practicing math skills when calculating their weekly pay and business profits. He claimed that because this math was necessary for the neighborhood simulation and therefore a real application of skills, the students mastered these skills faster. He wrote that student mastery extended to each subject area that had an authentic purpose within Sweet Cakes Town, including geography, science, and writing as well.

Lynn explained how the students' math skills improved with continuous practice, but with practice that was meaningful to them. Students were often not even aware they were "doing math," since they weren't taking home practice problems out of the book. Sylvester (1994) wrote, "[story problems] ask students to pretend that they are using math skills in a real situation" (p.324). In One Hen, the students didn't have to "pretend" to use math, and Lynn felt that their understanding of place value, money, and adding and subtracting decimals improved because the students were required to practice these skills when balancing the books for their social businesses.

The One Hen unit helped develop the students' economic knowledge of advanced concepts like revenue, profit, microfinance, and starting a business. The students also demonstrated a sophisticated understanding of economic concepts they already had some prior knowledge about, such as cost and loans. The students' understanding could be related to their direct experiences with getting a loan and designing a low-cost product in the project of running a business. This study adds to the literature about the possibilities of project-based learning for

increasing student learning in many subjects, including math and science as well as social studies (Barron et al., 1998; Halvorsen et al., 2012; Krajcik et al., 1998). The fact that many subject areas are integrated into projects also makes them more meaningful and therefore can increase student achievement and engagement (Alleman & Brophy, 1993; Halvorsen et al., 2012). The study by Halvorsen et al. (2012) is similar to One Hen in a sense that the researchers found that the integration of subject areas within project-based learning units in economics and civics may have been linked to gains in content knowledge in social studies for students from low-SES populations. The students in their study performed just as well as high-SES students who were not taught social studies with a project-based approach. The success the Lanley students experienced in literacy, math, and social studies during One Hen is another example that shows the promise of project-based learning for students from low-SES backgrounds.

Civic engagement. Another promising aspect of the One Hen unit is how the students in this study described a change in their beliefs about civic engagement through their experience with solving a community problem with their social businesses. The fact that the low-SES students at Lanley had an authentic opportunity to become more aware of larger global problems and experienced success with solving a global problem locally makes One Hen a unique project-based economics unit.

Comments from students in their interviews suggested a change in their beliefs about civic engagement that could be linked to their experience with running a social business as part of the One Hen unit. Their beliefs about civic engagement indicate that perhaps One Hen could help with closing the "civic empowerment gap" (Levinson, 2012). Levinson describes the "civic empowerment gap" as akin to the "achievement gap." She writes that much like the academic achievement gap, where reading and math achievement is higher among White, middle-class and

wealthy students than among minority students and students in poverty, civics knowledge and skills are unevenly distributed as well. Minority students in poverty perform worse on the National Assessment of Educational Progress (NAEP) civics test than non-minority, high-SES students their same age (Levinson, 2012). Not only do minority and low-SES students perform lower on measures of civics knowledge, but they are less likely to participate in government (such as voting) and less likely to participate in their community in other ways, such as volunteering, attending a community event, or work on addressing a community problem (Levinson, 2012). The civic empowerment gap is especially problematic because the students who could be considered the most disadvantaged are not learning the skills necessary to have a voice in making changes in society.

Levinson argues that students need to see "civic equality in practice" (2012, p. 188) to narrow the civic empowerment gap. In other words, students need to experience civics, and not just government participation. This experience could come in the form of engaging students in a democratic discussion in the classroom, or in the case of what the Lanley students did, experiencing collective action to make a change in the community. Levinson believes the school is the place for minority and low-SES students to experience civic action that these students often don't see in their everyday lives: "Schools need to exemplify the civic world that students have 'never seen'" (p. 185). She writes that the school's role in authentic civics is so crucial, since minority and low-SES students rarely get the chance to be treated as productive citizens or have many positive interactions within their communities.

Another example of students experiencing civic engagement through a school experience is in Sylvester's (1994) economic simulation called "Sweet Cakes Town." Sylvester's students also learned about important civic and economic issues through their experience. As the teacher

and facilitator of the simulation, Sylvester set up situations in the simulation that required students to discuss and practice dealing with civic and economic problems such as collective bargaining, outsourcing, homelessness, and welfare. Sylvester wrote:

> I began to think that if students were to overcome the obstacles presented by changes in the economy—or better yet, to play a role in breaking down these obstacles—they would first need practice imagining how they might do it (1994, p. 312).

Sylvester's inspiration for Sweet Cakes Town reflects Levinson's recommendation that the school could be the place for students to get practice becoming valuable community members. Although in Sylvester's case the community was simulated, he still guided his students to think about real community problems and gave students a safe place to develop their understanding of these issues and possible responses. Sylvester (1994) describes how two students were using homelessness as an insult in a verbal argument, so he took that opportunity to discuss with the class why and how homelessness is a societal problem and not necessarily the result of an individual's work ethic. Sylvester believed discussing the causes of homelessness as a class allowed his students to develop an understanding of how society works. He wrote, "students used the cultural capital *from* their community to create 'dividends' to *take back* to their community." (1994, p. 328).

The discussions in the One Hen unit about deciding on the community problem that would be the center of our social businesses were instances where the Lanley students got to share their previous experiences. During these discussions, I was able to see how their lives shaped how they wanted to participate in this civic action. Each time the students contributed a new item to our brainstorming list, such as a problem in the community, they explained how this problem affected them and also why they felt their business should address the problem. These

lessons in the One Hen unit gave students the opportunity to talk about these problems and move forward with their collective action. By the time students chose child abuse as their problem, many students had shared their own experiences with abuse. Many of them knew friends or family members who were dealing with abuse, and some students even volunteered their own experiences as abuse victims or witnesses of abuse. The discussions gave them the opportunity see what drives people to engage in helping others in the community. Instead of seeing the problems of abuse as unsolvable, the students' used their social business experience in the One Hen unit to engage in work to address their situations.

In the One Hen unit, the students drew upon their background knowledge, and in the case of some students, their personal experiences with child abuse and child welfare, to modify their sense of community and related problems (youth homelessness). Dewey (1938) describes previous experience and background knowledge as part of the "continuity of experience" and the way we respond to experiences (whether they are initiated in school or in life): "The principle of the continuity of experience means that every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after" (p. 35). The One Hen experience was heavily influenced by the students' prior experiences—their choice of child abuse as the problem to address came from their connection to it. Their prior knowledge and experience defined the direction of the social business experience, and the social business experience expanded their knowledge of community problems.

The students' success in donating so much money to the Teen House was important to developing students' civic engagement. Not only did these students' experiences allow them to practice collective action for change, but One Hen gave them the chance to experience success in

this endeavor. This success could help boost students' confidence that they can be successful with future collective action, otherwise described as "civic efficacy" (Levinson, 2012, p. 34)

Levinson (2012) argues that there is a considerable gap in civic efficacy between minority, low-SES students and White, high-SES students. Civic efficacy is the belief that one can influence government or society (p. 34). Levinson writes, "Efficacy is clearly correlated with [civic] engagement. The less efficacious one feels, the less likely one is to participate" (2012, p. 39). Students' civic efficacy evolved throughout the experience of the One Hen unit. At the beginning of the unit, many students were unable to describe larger community problems; by the end of the unit, the students described ideas they had about organizing for community action—food drives, clothing drives, and educating their fellow community members about the problem of child abuse and teenage homelessness. The students ran successful social businesses and made $700 profit that will directly benefit the construction of a teenage homeless shelter in their community. The project-based learning involved in One Hen gave the students the opportunity to engage in authentic civics learning.

Now that they were successful, their interview responses indicated that they felt more efficacious about their role in solving community problems. It is possible that the students' experience with One Hen can be a step toward increasing these students' civic empowerment in their future lives by building their civic efficacy early on. Levinson describes a former student who believed that there was nothing she could do to change society, her fate was just "in God's hands" (2012, p. 40). One student at in Lynn's class, Bre, believed something similar: "[I learned that] social business can help stop issues in the world…I used to think that things happen because of a miracle, but now I know [it's because] somebody is willing to help." Bre's comment reflects a similar sentiment to Levinson's student. Before the unit, Bre felt that

anything good that happened in the community must not be under anyone's control, but she wrote about how her One Hen experience made her think that it takes the actions of committed individuals to make positive change.

After experiencing their social businesses in the unit, students' interview responses showed how they developed into more participatory citizens (Westheimer & Kahne, 2004, p. 234). Westheimer and Kahne (2004) describe participatory citizens as people who work with other citizens and institutions to participate in civic life. For example, a participatory citizen might serve on a committee or organize a community fundraiser. As a contrast to this, a personally responsible citizen views their participation in civic life as more individual, like paying taxes, obeying laws, or donating time or money to a charity. Prior to the beginning of the unit, students described in pre-interviews the ways that they were "personally responsible citizens"—they donated money to charity drives and recognized that following school rules was important to helping others, as they listed things like locker theft and playground bullying as community problems. In the post-interviews, the students' descriptions of their civic engagement shifted. When asked about how they could help the community in a post-interview, students described how they could organize clothing drives for homeless youth, send medicine to African children, and brainstormed ideas for their next project to help the Teen House. Not only were their concepts of community problems more global, this change in their descriptions is evidence that their first experience with solving a community problem helped them demonstrate several qualities of a "participatory citizen" (Westheimer & Kahne, 2004, p. 234).

According to Westheimer and Kahne (2004), another kind of citizen is a justice-oriented citizen. Justice-oriented citizens call attention to social justice issues by questioning the larger societal structures that allow community problems to become problems. In this study, Lynn's

students developed their global awareness, which shows that they were exhibiting some characteristics of justice-oriented citizenship. For example, some of the business groups' products were designed to make others aware of the problem of child welfare in our community (especially the group that made calendars). Even though the students did not reach the point of questioning why child welfare was such a problem in our community, some individual students, like Lucia, began to question the injustices described in the videos that Lynn showed as writing prompts. For example, Lucia wondered why some African governments were denying medical care to children, claiming that it "wasn't fair." Although at the time, Lucia's questions didn't spur further research, they did inspire her to talk about what she could do to help during her post-interview. Perhaps students need to be aware of global problems and feel inspired to take action before they can start to examine the bigger picture.

To address the civic empowerment gap, Levinson suggests that "old school civics" isn't going to work. She calls for instructional approaches that:

> …take seriously the knowledge and experiences of low-income youth and adults of color to teach in ways that are consonant and that even build upon their knowledge of experiences in ways that are engaging and empowering rather than disaffecting and disempowering (Levinson, 2012, p. 54).

Levinson describes "interdisciplinary experiential programs" as an instructional approach that exemplifies "new civics" (2012, p.54). As Dewey (1938) writes, "every experience is a moving force" (p. 38). A successful experience "arouses curiosity, strengthens initiative, and sets up desires and purposes that are sufficiently intense to carry a person over dead places in the future." The One Hen unit is an example of the kind of instructional approach that can be a moving force. The approaches in the unit can give students practice in being participatory

citizens to close the civic empowerment gap and, possibly help inspire a future generation of justice-oriented individuals.

Constraints to teaching the project-based approach. Even though the project-based approach has many benefits for meaningful learning, and, as this study shows, also for improving students' civic engagement, project-based approaches do have constraints. For example, some studies of project-based learning units (e.g., Barron et al., 1998; Krajcik et al., 1998) describe difficulties teachers had with implementing project-based learning, especially with regards to the time it takes to have the students explore a project or problem. Alleman and Brophy (1993) also noted that in order for integration to be successful, it also needs to be feasible and worth the instructional time given to all subjects involved. The implementation of One Hen in this study did take a lot of time; at times this was frustrating for Lynn, as she didn't expect certain lessons to take so long. Lynn felt that despite the amount of time the unit took to implement that it was still feasible and worth the instructional time. (She even said she would teach this unit again the following year.)

This study showed that even an affordance of project-based learning can also be somewhat of a constraint. One of the important pieces of the One Hen unit and project-based approaches in general is the allowance for student voice and choice (Turner & Paris, 1995) within the project. One Hen was designed to give teachers flexibility to follow the desires of the students—the community problem they address, the products they create, and all decisions they make in their social businesses belong to the students. The unit is designed to help the teacher facilitate the student-led lessons, which adds to the student engagement in the unit, both behavioral and civic. In this case, Lynn purposely waited to determine a larger theme for integrating other subjects with One Hen based on student input and interest. Unfortunately,

allowing students to have so much say in the direction of a project can sometimes be a constraint of project-based learning. With so much opportunity for student voice, it is possible for teachers to lose sight of the unit's original goals when the original design of the unit is so flexible for interpretation.

Balancing the student experience and subject matter can be difficult for teachers (Dewey, 1902). Dewey (1938) wrote about the role that teachers must play in balancing students' experience and subject matter:

> There is incumbent upon the teacher who links education and actual experience together a more serious and harder business. He must be aware of the potentialities for leading students into new fields which belong to experiences already had, and must use this knowledge as his criterion for selection and arrangement of the conditions that influence their present experience (p. 76).

Dewey's quote explains that teachers who attempt an experiential, or project-based approach have the added complexity of trying to use students' prior experiences and their own interests to arrange another experience. Lynn wanted to wait a little while in the unit to learn about and determine how to use the students' prior experiences and interests before "leading [them] into new fields." However, in today's educational climate, with emphasis placed on accountability and testing, often teachers cannot afford to wait to ascertain that information before launching a project.

For example, in this study, Lynn struggled with finding the big idea to integrate her subjects, or what Barab and Landa (1997) would call the "anchor" of the unit. Having anchors that represent broader topics as opposed to trivial topics ensures that students will find the content meaningful and relevant (Barton & Smith, 2000; Hargreaves & Moore, 2000; Shanahan,

Robinson, & Schneider, 1995). Lynn was committed to discovering what possible anchors the students connected to first before choosing one to integrate the lessons. Finding a theme took her some time and as she explains, some trial and error, but she eventually chose the anchor of "human rights" about a month into the unit. In her case, waiting to discover students' interests took longer than she had originally intended because she did not want to rush the process. When projects involve many lessons, teachers need to find ways to meet standards through the project. There can be a dilemma between a teacher's desire to make the project relevant to students' interests and external pressure to meet the large amount of content standards they are required to cover. In Sylvester's (1994) Sweet Cakes Town project, which was enacted well before NCLB, even Sylvester describes struggling with how to incorporate standards he was required to cover that didn't "naturally" come up during the simulation, such as correct comma usage.

The delay in choosing an overarching theme for the One Hen unit could have caused the earlier lessons in the unit to be disconnected for the students. A theme for integrating subject areas was not outlined in the original design of the One Hen unit, but the earlier lessons in the unit were organized around a meaningful topic of "social business," so the students were still able to find meaning and relevance in this topic because they were preparing to start a social business. One of the characteristics of project-based learning is that student interests and ideas drive the projects (Thomas 2000), and that this can lead to more meaningful learning and engagement. This should be considered an affordance of project-based learning. However, the open-ended nature of project-based approaches could tempt teachers to take projects in directions based on student voice that (inadvertently) lose sight of the original goals. Perhaps student learning in all subjects could have been increased if the integration had been focused from the start.

The overly interpretive nature of the One Hen unit and project-based learning can also have negative consequences on both instructional time and student engagement. Being flexible and allowing for student choice could mean the unit extends far beyond (in length of time) what was originally intended. In the current educational climate, many teachers are not able to devote so much instructional time to one project or may not have the support from their administration to do so. Giving students so much choice can take teachers down paths that are unexpected and deviate from the original plans. These unexpected turns can be beneficial and rich—such as when Gaby's comment led Lynn and me to research the Teen House—but can also add time to the unit and cause students to lose focus, as when Lynn chose to have the students sell their products for several weeks instead of days. In the original design of One Hen, I suggested that students sell their products for four or five days. However, teachers could extend the selling period based on their individual circumstances. After seeing how excited her students were with selling products at lunch, Lynn extended the selling time for nearly 20 days. Unfortunately, by that point, the students were beginning to lose their behavioral engagement with selling at lunch. Extending projects for such a long time can be a constraint with project-based learning as well. Because project-based learning units can have such a high level of student behavioral engagement initially, teachers may be tempted to keep the students working on projects long past their excitement about the task has passed.

Lynn's struggles with this unit are similar to reports of teachers' struggles when teaching project-based learning. For example, Barron et al. (1998) wrote that learning to organize projects and subjects under a theme while still tracking student learning toward required standards is a difficult shift for teachers to make when implementing project-based learning units. This study describes how project-based learning can be challenging, as even a teacher like Lynn, who is a

veteran teacher with previous experiences implementing project-based learning units, struggled with integration in the unit. Lynn did not attribute her struggles to the project-based approach; instead she attributed her difficulties to getting to know what motivated this particular group of students. Lynn believed the benefits of the One Hen unit outweighed the constraints.

Implications for Practice and Teacher Education

This study shows the promise of One Hen, a project-based economics unit for elementary students specifically designed to teach economics for civic engagement by introducing students to the concept of social business and microfinancing. In this section, I describe the implications this unit could have for practitioners and teacher educators.

Practitioners. In our current educational climate, elementary teachers are under pressure to focus their instructional time on reading and math (Houser, 1995). It is often encouraged to integrate social studies within these tested subjects, especially for students who need academic intervention in the tested subjects (Buffam et al., 2009). Brophy and Alleman have written extensively on the subject of integrating social studies with other subjects. Brophy (1999) wrote that integrating any subjects together can be beneficial for all integrated subjects if the content is taught well. Alleman and Brophy (2010) wrote that social studies and ELA lend themselves well to being integrated together because of the common skills that the two subjects share. However, they also caution teachers against integrating social studies and ELA without taking care to make sure that both subjects are taught in a meaningful way, without one subject being sacrificed for another in an integrated unit (Alleman & Brophy, 1993; Alleman & Brophy, 2010; Brophy & Alleman, 1991).

Research has also shown that teachers may need help with integrating subjects, especially with integrating authentic, real-world application into their curriculum such as in project-based

approaches. Barron et al. (1998) describe learning how to implement project-based learning units as a "shift" in thinking for many teachers, and that facilitating effective project-based learning units while still giving attention to each individual student's progress toward standards is complicated. Barron et al. (1998) describe learning how to implement project-based learning units is a "project" itself. They suggest professional development (PD) such as long-term collaborations with colleagues to try new approaches and PD that gives teachers the opportunity to engage in a project-based approach to learning themselves and to be made aware of potential challenges that could arise. If desirable integration and meaningful learning is a desired goal for students, then teachers will need support in their endeavors.

Using One Hen as an example for teachers during PD on project-based learning can be a form of this support. Teachers can see real examples of how this approach benefitted students and the challenges that Lynn and I faced with implementation. As more teachers try One Hen, a network of teachers who have tried this specific project could begin to develop as another valuable resource. For example, One Hen, Inc. is working on developing a network of teachers to share their work with their individual implementations of One Hen through its website.

Teacher educators. Although this study was not focused on using One Hen with pre-service teachers, there are implications for teacher education, especially for using One Hen to introduce pre-service teachers to project-based learning. According to NCSS (2010), effective social studies is meaningful, integrative, value-based, active, and challenging. Social studies methods courses at Michigan State University, for example, are designed to teach effective social studies as outlined by NCSS (2010) and to give pre-service teachers examples of effective social studies practices that are grounded in theory. This instruction could include introducing project-based learning as an effective instructional approach for social studies.

Pre-service teachers need to see examples of theory into practice, especially critical pedagogy (Stanley & Longwell, 2004). However, as Stanley and Longwell (2004) argue, standards-based education reform has forced the social studies methods course to focus on teaching specific content standards, often at the expense of introducing pre-service teachers to critical pedagogy. Nonetheless, working with social studies content standards are a reality that these pre-service teachers will face in their future classroom. Project-based learning units like One Hen, or like Sylvester's (1994) example of Sweet Cakes Town that have a strong civic engagement component can show pre-service teachers examples of teaching to standards with a critical perspective. Sylvester's (1994) Sweet Cakes Town was an economic simulation that examined inequalities and community problems while teaching students about the market economy. One Hen was designed around content standards in social studies, ELA, and math while engaging students in addressing a community problem.

As a methods instructor, I know showing students examples of meaningful, integrative, value-based, active, and challenging social studies instruction can be difficult. Because social studies has been on the back burner in K-12 education compared to the tested subjects (Fitchett & Heafner, 2010; Houser, 1995), even if elementary methods students have a field experience, I know from personal experience that most likely the pre-service teachers will see very little social studies instruction in their field placement classrooms.

Showing pre-service teachers One Hen as an example of an integrated social studies unit that has potential for strengthening students' civic engagement can show pre-service teachers that this type of social studies instruction is possible. Combs and White (2000) found that when pre-service teachers were given opportunities for practice in their methods courses about how to design integrated units and lessons, they designed units that were more authentically integrated

and expressed appreciation of the collaboration between teachers that occurred when planning for interdisciplinary instruction. Milson and King (2001) also found that when pre-service teachers were given instruction in how to integrate social studies and science, the students saw the importance of integrating these subjects for meaningful learning for their students. However, few of the students in Milson and King's (2001) study chose to design integrated lessons for their assignment in their course. The researchers suggest that it's not enough for pre-service teachers to understand why integrated curriculum is beneficial; they also need to be given the instruction in skills to implement the approach.

Pre-service teachers should be given real examples and the skills to integrate subjects and attempt project-based learning. These examples could include a discussion of the constraints of teaching project-based learning along with the many benefits so that the pre-service teachers can be aware of the complexities of teaching project-based learning units. I hope that this example of Lynn's class, with all of the highs and lows of the experience, could encourage pre-service teachers to attempt project-based learning in their future classrooms, the skills they need to hone to be successful, and the examples of theory into practice.

Limitations

There are limitations to this study regarding ecological validity and the small sample size related to the case study design of the study. The choice to co-teach the unit with Lynn, as opposed to just observing her, has its limitations, particularly with regard to affecting the ecological validity of the study (Bronfenbrenner, 1979). First, since I wrote the original design of the unit, I had a particularly close understanding of the lesson plans, knew the pitfalls to avoid when teaching the unit, and had familiarity with the content—an intimate knowledge that most teachers who teach this unit do not have. Second, having two professional educators teach the

unit together may have played a role in the students' experience of the unit—the students learned from a unit that had the benefit of two teachers' collaborative planning. When Lynn or I was not "on stage," we were able to observe the class and conduct formative assessments.

However, I believe the limitation of having two teachers in the classroom was also a strength of the study. Teaching the unit in collaboration with the classroom teacher was important to the study so that I could get an insider perspective on how the students experienced the unit. Also, co-teaching eliminated the need to the give Lynn a one-shot PD training around the One Hen unit; instead we worked through instructional decisions and assessing student learning as a team, which served as more of an on-going PD experience. Another limitation of this study was that the One Hen unit ended up expanding from the original design of 16 lessons to 26 lessons over the course of 12 weeks. This is more time than is usually devoted to a social studies unit covering six GLCEs. The increased amount of time intended for this study may have had an impact on the reported results of student learning in economics, literacy, and math more so than the instruction in the unit.

The goal of this study was not to "prove" effectiveness of the curriculum in increasing student learning or civic engagement; instead, it is a descriptive case study about the ways students learned economics and became civically engaged during the unit. The fact that this is a descriptive case study of one experience may be a limitation because it prevented me from making any causal claims that the unit had an impact on the students' development. It is possible that the experience of the unit was positive because of Lynn or the community connections we were able to make within our city. If this unit was to be replicated in another setting in another community with a different classroom teacher, the results may be different. Although I believe

the findings are generalizable to fifth graders in this type of school setting, the fact that this study is just one example may be considered a limitation.

Suggestions for Future Research

I suggest two main areas for future research based upon my experiences conducting this study: 1) examining the implementation of the One Hen unit in another setting, and 2) using One Hen to examine the project-based approach with an experimental design methodology.

The experience of the Lanley students with One Hen was heavily influenced by their teachers—both me and Lynn. Another area of research would be to examine the implementation of the One Hen unit with a different classroom teacher, perhaps a teacher who is not as experienced with project-based learning or perhaps a teacher new to the field. This study would add to the findings about the benefits and constraints of project-based learning approaches; a teacher in a different environment and at a different stage in his or her career might have a different experience, as well as a different perspective on the experience.

Conducting this study with a different demographic of students may also shed new light on what the students learn about economics and how their beliefs about civic engagement change. Perhaps implementing One Hen with students from high-SES, non-minority environments may not experience a change in their beliefs about civic engagement, being that these students are on the other side of the civic empowerment gap (Levinson, 2012). Or perhaps the One Hen unit could be adapted for younger students (perhaps second or third grade) to determine whether and how students that young can begin to develop their own civic engagement through a project-based approach.

Further research could examine the One Hen unit using an experimental design methodology with a group of classroom teachers implementing One Hen in place of their regular

economics instruction, and another group of classrooms serving as a control group. A study using this kind of methodology would allow for causal claims to be made about the possible effectiveness of project-based learning on students' economics learning and civic engagement. Other comparison studies could be done comparing One Hen implementation between different contexts (e.g., One Hen in low-SES schools and high-SES schools, for example).

The results from the experience at Lanley have also inspired me to explore other related research ideas. Further research could be done examining students' behavioral engagement with project-based learning or the connection between the use of children's literature in the unit and their economics learning and civic engagement.

Educational Significance

This study's findings about the fifth-grade students' experiences with the One Hen unit, as well as Lynn's experiences with the project-based elements of the unit, are educational significance in several areas. First, scholars have shown time for social studies is decreasing in elementary classrooms (Checkley, 2008; Fitchett & Heafner, 2010; Houser, 1995) and this is especially true among low-SES students, like the students at Lanley Elementary (Camburn & Han, 2011). Low-SES students are overrepresented among students that are below grade level in the core subjects of ELA and math (Lee & Burkam, 2002), and some intervention programs and strategies to improve test scores among the lowest-performing students advocate the elimination of social studies entirely (Buffam et al., 2009). The implementation of One Hen at Lanley is an example of how student achievement in literacy and math could possibly be improved without eliminating social studies. Lynn reported that her students showed growth on her classroom literacy and math assessments, which she attributed to their One Hen experience. The students

experienced more effective social studies instruction, not less, and, according to Lynn, the project enhanced their learning in the tested subjects as well.

Levinson (2012) also addresses another gap other than the achievement gap between low-SES students and high-SES students—the civic empowerment gap. Minority students from low-SES backgrounds are less likely to participate in government or believe that they can make a difference in their community. The One Hen unit might offer a way for students, even at a young age, to realize how they can engage in their community as an agent for change, even possibly discovering a future career as entrepreneurs. Introducing the students at Lanley to social businesses, and the fact that they had a successful experience running one, helped the students see that they could make a tangible impact on their community by starting with very little. It is possible that the One Hen unit, and units similar to it, might instill in students empowerment in their communities. The One Hen unit also encourages teaching civic engagement, something that is not often connected to economics teaching in the literature. There are many examples of project-based economics, but none that encourages students to start a social business. This study offers insight on how fifth-grade students' civic engagement develops through economics instruction.

However, even though I believe the One Hen unit was a beneficial experience for students, expanding the implementation of the unit to other teachers and schools will be difficult if the unit is not perceived as beneficial by other teachers. This study is significant for exploring the teachers' experiences with the unit as well. Other teachers can look to this study for a view of whether the project-based approach to teaching economics and civic engagement together might be feasible, manageable, and worth the time and effort in their own classrooms. Even though Lynn believed the unit to be worth the time, any instructional approach that is potentially time-

consuming should be examined closely. In this study, I attempt to describe both the benefits as well as the constraints of the One Hen unit.

The experience at Lanley is an example of how students are capable of social responsibility (Berman, 1997). Berman (1997) found that young students are far more capable of civic engagement than researchers had previously thought, stating that often it is the misconception of adults that young students are not able to be socially and politically aware. He writes:

> Our conception of the child as egocentric, morally immature, uninterested in the social and political world, and unable to understand it has effectively deprived young people of the kind of contact they need to make society and politics salient. Young people's distance from politics and their lack of interest may be the effect of our misconceptions, our ignorance of their potential, and our protectiveness (p. 193).

The One Hen experience shows the potential of young students to develop into effective citizens that benefit their greater communities, and to be what Berman (1997) describes as socially responsible. Although the goal of this study was to examine *one* case study and *one* experience of students learning the One Hen unit at Lanley Elementary, their story has the potential to show others what young students can accomplish when given the guidance and opportunity to be civically engaged. The project-based approach in the One Hen unit does show promise as a way to encourage civic engagement in elementary students while they learn social studies and other subjects. This study has the potential to serve as an example to educators of how we can brush aside our misconceptions about what elementary students are capable of and focus on instructional approaches that nurture students' civic engagement.

APPENDICES

Appendix A

One Hen Unit Overview

Abstract

The One Hen unit gives students a real experience of starting their own business by introducing the students to a real-life entrepreneur. The unit begins with reading a book about Kojo, also called *One Hen;* the true story of a boy who successfully obtained a microfinance loan of one hen in his small village in Ghana to eventually build a large farm (Smith-Millway, 2008).

The story serves as an "entry event" into the project the students create, which is to obtain a small microfinance loan from their teacher to start a small business selling a good, or offering a service. Each student works in collaborative teams to create their business, as teachers guide them toward understanding of the relationship between economic concepts of revenue, cost, and profit so they can be successful entrepreneurs. The students make real money and deal with real money when purchasing supplies from the teacher for their small businesses. During the unit, the students learn that Kojo's business in Ghana actually helped improve his entire community, as he loaned money to others to help build their businesses and gave back by donating his profit to others as well. The students research an issue in their community and design a plan to be a part of a solution for that need, using their business to help.

Table 3.

National Content Standards in Economics

Content Standard 7	Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services
Content Standard 8	Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives

Table 3 (cont'd)

Content Standard 14	Students will understand that entrepreneurs are people who take the risks of organizing productive resources to make goods and services. Profit is an important incentive that leads entrepreneurs to accept the risks of business failure

Table 4.

National Curriculum Standards for Social Studies

Standard 10- Civic Ideals and Practices	Understand that key practices in a democratic society include civic participation based on studying community issues, planning, decision-making, voting, and cooperating to promote civic ideals
	Ask and find answers to questions about how to plan for action with others to improve life in the school, community, and beyond
	Participate in a civic discussion and action about a school or community issue

Table 5.

Michigan Grade Level Content Expectations Social Studies

4.E1.0.2	Describe some characteristics of a market economy
4.E1.0.3	Describe how positive and negative incentives influence behavior in a market economy
4.E1.0.4	Explain how price affects decisions about purchasing goods and services
4.E1.0.7	Demonstrate the circular flow model by engaging in a market simulation, which includes households and businesses and depicts the interactions among them
5.P4.2.1	Develop an action plan and know how, when, and where to address or inform others about a public issue
5.P4.2.2	Participate in projects to help or inform others

Table 6.

Common Core State Standards- Language Arts Fifth Grade

5.RL.2	Determine a theme of a **story**, drama, or poem from details in the text, including how characters in the story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text

Table 6 (cont'd)

5.RL.3	Compare and contrast two or more characters, settings, or events in a **story** or drama, drawing on specific details in the text
5.RL.9	Compare and contrast stories in the same genre on their approaches to similar themes and topics
5.W.4	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience
5.W.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic
5.W.9	Draw evidence from literary or informational texts to support analysis, reflection, and research
5.SL.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly, a) come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion; b) follow agreed-upon rules for discussions and carry out assigned roles; c) pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others; d) review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions
5.SL.2	Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally
5.SL.3	Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence
5.SL.6	Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation

These standards were not assessed in the pre- and post-assessments in this study, but Lynn assessed them for grades.

Table 7.

Common Core State Standards- Math Fifth Grade

5.NBT.3	**Read, write**, and compare decimals to thousandths
5.NBT.4	Use place value understanding to round decimals to any place
5.NBT.7	**Add, subtract**, multiply, and divide **decimals to hundredths**, **using** concrete models or drawings and **strategies based on place value, properties of operations, and/or the relationship between addition and subtraction**; relate the strategy to a written method and explain the reasoning used

These standards were not assessed in the pre- and post-assessments in this study, but Lynn assessed them for grades.

Big Idea

- A market economy involves entrepreneurs making decisions to benefit their business and possibly their community.
- Entrepreneurs take risks to start businesses
- A social business is one that uses profits to help the community

Essential Questions

- What kinds of business decisions do entrepreneurs make to increase profit?
- How can entrepreneurs help the community?

Unit Objectives

- Explain how problems are solved in the *One Hen* story
- Describe a problem in their community that needs a solution
- Describe the concept of opportunity cost as it appears in the *One Hen* story
- Describe real-life example of the concept of opportunity cost
- Describe how Kojo's business in the story *One Hen* helped others in his community
- Describe how businesses make choices to help others
- Define economic terms: borrow, lend, loan, interest, entrepreneur
- Describe the concept of microfinance
- Describe how businesses help the community
- Research and describe a need or problem in the community that they would like to help solve
- Determine a problem in the community that the class can solve
- Explain the relationship between revenue, cost, and profit
- Explain how a business works
- Explain the concept of loans and interest
- Explain how price affects decisions about purchasing goods and services
- Explain how setting a correct price for a good or service can influence profit
- Explain how good marketing (slogan, jingles, etc.) can increase profit
- Create a persuasive slogan for their business
- Describe the economic terms: *interest, price, revenue, cost, profit, marketing*
- Create a persuasive jingle for their business
- Write a summary of their work in the form of a business report
- Explain how and why business decisions were made in a market simulation
- Create an action plan to continue working on a project to help others

Key Economic Concept and Definitions

Borrow: with permission, taking and using someone's money, which you will return to them

later

Choice: what someone must make when faced with two or more different uses for a resource, also called an economic choice (e.g., when you have to decide whether to purchase one thing over another)

Cost: the money that a business spends to create the good or service (e.g., ingredients for making cupcakes, wages to pay workers)

Entrepreneur: someone who takes the risk of running a business

Goods: objects that can be held or touched that can satisfy people's wants and sold in a business (e.g., bread, toys)

Interest: extra money that a person who borrows money must pay back in addition to the money they borrowed

Jingle: a catchy song that communicates a business's slogan in an advertisement

Lend: to let someone use your money, which they will return to you later

Loan: money that someone borrows (usually from a bank), and has to pay back later

Marketing: how businesses communicate and attempt to persuade people to buy goods or services (e.g., television commercials, billboards).

Microfinance: small loans made to people who may not have resources to obtain a large loan from a bank to start a business

Microfinance trust group: a group of people who apply for a microfinance loan together to fund their individual businesses; the group also helps one another repay a microfinance loan

Opportunity cost: the next best alternative that must be given up when a choice is made; not all alternatives, just the next best choice (e.g., when you want a bicycle and an iPod, but you only have enough to buy one; what you decide not to buy is your opportunity cost)

Price: how much a business charges its customers for its goods or services

Product: in this unit, a general word referring to a good or service the students choose to create

Profit: the money gained in a business when you can sell the good or service for more than what it costs to produce the good or service

Revenue: the total amount of money a company makes from selling a good or service (e.g., money that all of the shoppers at a grocery store gives to the store to purchase groceries)

Services: work or an act done that satisfies the wants or needs of consumers, offered in a

business (e.g., a car wash or a haircut)

Slogan: a catchy phrase that makes customers immediately think of a business's good or service (e.g., Nike's "Just Do It")

Social business: A business with the goal of solving a social problem using business methods, including the creation and sale of products or services.

Appendix B

Pre- and Post-Assessment of Economics Knowledge and Skills

One Hen Project Pre-Assessment

This assessment will help me understand what you already know about economics before beginning the One Hen project. Please answer each question the best you can, even if you're not sure of your answer. This will not be graded. Write your answers in the space below each question.

1. What are some goods that a business might sell? (NCSE 7, 4.E1.0.2)

2. What are some services that a business might sell? (NCSE 7, 4.E1.0.2)

3. What is a loan? (NCSE 7, 4.E1.0.2)

4. How might a loan help someone start their own business? (NCSE 7, 4.E1.0.2)

5. Let's say you start a business selling candy and you set a price for the candy to be very high (For example, you charge $10 for a candy bar). Describe what might happen in your business and why. (NCSE 8, 4.E1.0.3, 4.E1.0.4)

6. You have a business selling candy and you have a lot of candy that has not been sold. What could you do to solve this problem? (NCSE 8, 4.E1.0.3, 4.E1.0.4)

7. As a buyer, how does the price of an item help you choose if you would buy it or not? (NCSE 8, 4.E1.0.3, 4.E1.0.4)

8. The next three questions are about Mike's new business. Circle the correct answer under each question: (NCSE 7, 4.E1.0.2)

    a. Mike wants to sell lemonade. He borrows $10 from his mother and buys 10 lemons for $1 each. His lemons are an example of:
        i. Revenue
        ii. Cost
        iii. Profit

    b. Mike sets up his lemonade stand and sells 5 lemonades for $4 each, making $20 in all. His $20 is an example of:
        i. Revenue
        ii. Cost
        iii. Profit

    c. At the end of the day, Mike pays back $10 to his mother and has $10 left to spend. His $10 left is an example of:
        i. Revenue
        ii. Cost
        iii. Profit

Read this story about Magda, an entrepreneur from Egypt, and answer the questions below:

Magda Salem, a mother of three children and wife of a taxi driver in Cairo, Egypt, started her own business of buying fabric from suppliers, cutting and sewing it into scarves, and selling the scarves to her neighbors and relatives. Magda soon saw an opportunity in the very populated neighborhood in Cairo. She decided to grow her business by also making and buying dresses. She opened a shop in order to rent dresses to women in the neighborhood. "I realized that this could be a profitable business for me and a service that women need frequently for many occasions and events," explains Magda.

Magda received her first loan in 2007 from the Lead Foundation, which helped her to purchase materials to make dresses, as well as new dresses that were already made. "I keep watching the displays in the shops to identify the recent fashion trends and styles before purchasing," says Magda.

Magda now supports her family from her business renting dresses. Her income covers household expenses as well as her children's education. Since she has paid back her first loan from the Lead Foundation, the foundation is willing to loan her more money to help grow her business. Magda would like to work with Lead Foundation to improve her business by opening up a new dress shop in another area of Egypt.

1. How was Magda successful with her business? (NCSE 14, 4.E1.0.3)

Why do you think she was successful?

2. What risks did Magda take as an entrepreneur starting her own business? (NCSE 14)

3. How did Magda's business help others in her community (what economic need did the business meet)? (5.P4.2.1)

4. What steps would you need to take to start your own business? (NCSE 14, 5.P4.2.1)

One Hen Project Post-Assessment

This assessment will help me understand what you have learned about economics during the One Hen project. Please answer each question the best you can, even if you're not sure of your answer. This will not be graded. Write your answers in the space below each question.

1. What are some goods that a business might sell? (NCSE 7, 4.E1.0.2)

2. What are some services that a business might sell? (NCSE 7, 4.E1.0.2)

3. What is a loan? (NCSE 7, 4.E1.0.2)

4. How might a loan help someone start their own business? (NCSE 7, 4.E1.0.2)

5. Let's say you start a business selling candy and you set a price for the candy to be very high (For example, you charge $10 for a candy bar). Describe what might happen in your business and why. (NCSE 8, 4.E1.0.3, 4.E1.0.4)

6. You have a business selling candy and you have a lot of candy that has not been sold. What could you do to solve this problem? (NCSE 8, 4.E1.0.3, 4.E1.0.4)

7. As a buyer, how does the price of an item help you choose if you would buy it or not? (NCSE 8, 4.E1.0.3, 4.E1.0.4)

8. The next three questions are about Mike's new business. Circle the correct answer under each question: (NCSE 7, 4.E1.0.2)

    a. Mike wants to sell lemonade. He borrows $10 from his mother and buys 10 lemons for $1 each. His lemons are an example of:
        i. Revenue
        ii. Cost
        iii. Profit

    b. Mike sets up his lemonade stand and sells 5 lemonades for $4 each, making $20 in all. His $20 is an example of:
        i. Revenue
        ii. Cost
        iii. Profit

    c. At the end of the day, Mike pays back $10 to his mother and has $10 left to spend. His $10 left is an example of:
        i. Revenue
        ii. Cost
        iii. Profit

Read this story about Oscar, an entrepreneur from Florida, and answer the questions below:

Oscar Dolorier came to the United States from Peru with a college education and experience in business. However, as an immigrant, it was hard for him to find work in America that paid him enough. “I didn’t have any money”, he remembers, “I had only my will and my belief in myself.”

Soon, Oscar decided to put his brains, strength, and tiny old car to work and started a business removing trees and tree stumps. With very few tools, however, he was unable to remove enough trees and stumps to make money and get ahead. So Oscar applied for a loan from ACCION USA. No other bank or lender would lend money to Oscar because he didn’t have the correct paperwork—a common problem for immigrants new to the United States. ACCION USA was happy to support this entrepreneur; it gives loans to poor people who are not able to get loans from other banks. With the loan, Oscar bought a professional tree stump grinding machine and eventually began to make enough money to buy a home.

1. How was Oscar successful with his business? (NCSE 14, 4.E1.0.3)

   Why do you think he was successful?

2. What risks did Oscar take as an entrepreneur starting his own business? (NCSE 14)

3. How does ACCION USA provide loans to help others? (5.P4.2.1)

4. What steps would you need to take to start your own business? (NCSE 14, 5.P4.2.1)

Appendix C

Student Interview Protocols

Student Interview Protocol – Pre Interview

This interview involves a series of questions to gather information about the student's experiences with helping others in the community and his/her knowledge about how to start a business. It is conducted in a one-on-one interview that is audio recorded. Sub-questions are listed as possible follow-up questions to elicit richer responses from the student.

Begin by saying: "I am going to ask you some questions to find out what you know about helping others in your community and starting your own business. Please answer the questions the best you can, and feel free to ask me a question if you're not sure what I'm asking. I am going to take notes on what you say so I can remember it later, and I am going to record our conversation so I can listen to it again later if I need to. Do you have any questions for me before we start?"

1. If you had $100 what would you do with it?
2. Have you ever helped someone outside of your family?
    a. What did you do to help?
    b. Who did you help?
3. Do you spend some of your free time doing something to help your community?
    a. How?
4. What one change would you like to see in the world/ your community?
    a. How would you go about making the change you want to see?
5. Have you ever seen or heard of a business in the community that helps other people?
    a. What does it do?
    b. How does it help?
6. Have you ever started a business? Or, have you ever tried selling something?
    a. What did you do?
    b. Why did you start it?
    c. What were the results?
    d. How long did you run it?
7. Do you think you would be successful with your own business?
    a. What goods or services would you sell?
    b. How would you start a business?
    c. What would you need?
8. What do you think makes a business successful?

Student Interview Protocol – Post Interview

This interview involves a series of questions to gather information about the student's experiences with helping others in the community and their knowledge about how to start a business, as well as how they experienced these things in the One Hen unit in class. It is conducted in a one-on-one interview that is audio recorded. Sub-questions are listed as possible follow-up questions to elicit richer responses from the students.

Begin by saying: "I am going to ask you some questions to find out what you have learned about helping others in your community and starting your own business in the One Hen project. Please answer the questions the best you can, and feel free to ask me a question if you're not sure what I'm asking. I am going to take notes on what you say so I can remember it later, and I am going to record our conversation so I can listen to it again later if I need to. Do you have any questions for me before we start?"

1. If you had $100 what would you do with it?
2. Did you help anyone in the community during then the One Hen unit?
    a. What did you do to help them?
    b. Who did you help?
3. Do you spend some of your free time doing something to help your community?
    a. How?
    b. What did you learn from the One Hen unit about helping others?
4. What one change would you like to see in the world/ your community?
    a. How would you go about making the change you want to see?
    b. Did our class make a change in the world with our social business?
    c. How?
5. How can businesses in the community help other people?
    a. What is a social business?
6. Tell me about the business you started in the One Hen project:
    a. How did you decide on a product?
    b. How did you decide on a price?
    c. How did you decide on a marketing strategy?
    d. What were the results of your business?
    e. Was your business successful?
        i. If yes: What made it successful?
        ii. If no: What would you have changed about your business? Why?
    f. What was the best idea your business team had? Why was this the best?
7. How do you think you did as a team member?
    a. Was there something you would do differently?
    b. How did you contribute to the team?
8. How could you start another business to help others?
9. Can you think of a favorite day in the One Hen unit? Why was this your favorite?
10. How does One Hen fit into your learning about human rights?

Appendix D

Teacher Interview Protocols

Teacher Interview Protocol
Pre Interview

This interview involves a series of questions to gather information about the teacher's typical classroom instruction and her professional judgment on her students' prior knowledge of economics and prior experiences helping the community. It is conducted in a one-on-one interview that is audio recorded. Sub-questions are listed as possible follow-up questions to elicit richer responses.

Begin by saying: "Thank you for taking the time to be interviewed. As with any part of this study, you can withdraw your consent to participate at any time, and you do not have to answer any questions you do not want to answer. I will be asking about your typical classroom instruction and your professional judgment on your students' prior knowledge of economics and prior experiences helping the community. This should take about an hour."

1. What do you think your students already know about the economics concepts of:
    a. Goods & services
    b. Market system
    c. Revenue, cost, & profit
    d. Entrepreneurs & starting a business
2. What do your students know about the concept of social business?
    a. Banks and foundations that are willing to lend money to individuals considered at risk (microfinance)?
3. What are your goals for teaching social studies?
4. How often do you teach social studies?
    a. Minutes per day?
    b. Days per week?
5. What are some instructional approaches you have tried in your social studies lessons?
6. What economics instruction have you taught this year if any? In years past?
7. In your opinion, how aware are your students of problems or issues in their community?
    a. How likely are they to know how to address these problems or issues?
8. Have you ever organized lessons or units where students interact with their community?
    a. What did the students do?
    b. What did they learn?
    c. What were the benefits? Challenges?
    d. What about that experience do you imagine you will bring to teaching the One Hen unit?
9. Can you describe an economics lesson you have taught?

    a. Could you talk a little more about why was it successful/unsuccessful?
10. Have you ever taught a lesson or unit in a project-based way [explain if necessary]? If not, why not? If so:
    a. What were the challenges to teaching project-based learning?
    b. What were the benefits?
    c. What about that experience has influenced the way you currently teach?
11. What are some challenges and opportunities you can foresee to teaching the One Hen unit?
    a. Benefits for the students?
    b. Benefits for the community?
    c. Benefits for your teaching practice?

Teacher Interview Protocol
Post Interview

This interview involves a series of questions to gather information about her experiences teaching the One Hen unit, and what she knows about her students' experiences with the unit. It is conducted in a one-on-one interview that is audio recorded. Sub-questions are listed as possible follow-up questions to elicit richer responses.

Begin by saying: "Thank you for taking the time to be interviewed. As with any part of this study, you can withdraw your consent to participate at any time, and you do not have to answer any questions you do not want to answer. I will be asking about your experiences teaching the One Hen unit, and what you know about your students' experiences with the unit."

1. What do you think your students learned about the following economics concepts in the One Hen unit: (How do you know?)
    a. Goods & services
    b. Market system
    c. Revenue, cost, & profit
    d. Entrepreneurs & starting a business
2. What do your students know about the concept of social business?
    a. How do you know that?
    b. What do your students know about banks and foundations that are willing to lend money to individuals considered at risk (microfinance)?
3. Do you think the students were civically engaged during this unit?
    a. How do you know?
    b. Do you feel they have knowledge and confidence to solve problems (large or small?)
    c. If yes: In your opinion, what part of the One Hen unit had the greatest impact on the students' civic engagement?
4. Was there a lesson in the One Hen unit that you thought was particularly successful? If so, could you describe it?
    a. What made it successful?
    b. What did the students experience in this lesson?
5. Was there a lesson in the One Hen unit that was not as successful as you would have liked it to be? If so, could you describe it?
    a. What made it not as successful?
    b. What did the students experience in this lesson?
6. How did you approach long-range planning within the One Hen unit?
    a. What about lesson planning?

    b. How did you feel (or did you feel) that you adapted the One Hen unit to meet your students' needs?
7. Would you teach the One Hen unit next year? Why or why not?
    a. If yes: Can you describe the benefits to teaching the One Hen unit?
        i. To the students?
        ii. To the community?
        iii. To your teaching practice?
    b. What would you do differently?
8. How did the One Hen unit influence instruction in your other subjects?
    a. How did it influence daily quotes? Read alouds?
    b. Can you say a bit more about why you chose to focus on human rights?
        i. How did One Hen influence your decision to focus on human rights?

Appendix E

Economics Pre- and Post-Assessment Scoring Rubric

Table 8.

Part 1: Short response and multiple choice rubric

Question & Standards	**1 Does Not Meet Expectations**	**2 Beginning to Meet Expectations**	**3 Approaching Meeting Expectations**	**4 Fully Meets Expectations**
1. What are some goods that a business might sell? **GLCE**: Describe some characteristics of a market economy (4.E1.0.2)	I don't know Tangential remark Does not answer	Accurately lists at least one specific good that is sold in a business. List could include services instead of goods.	Accurately lists two specific goods that are sold in a business. Only lists products and tangible items, not services.	Accurately lists three or more specific goods that are sold in a business. Only lists products and tangible items, not services. Student 5: Some goods are like stress balls, slime, pizza
2. What are some services that a business might sell? **GLCE**: Describe some characteristics of a market economy (4.E1.0.2)	I don't know Tangential remark Does not answer	Accurately lists at least one specific service that is sold in a business. List could include goods instead of services. Student 12: A service can be when you need glasses for your eyes and you buy the glasses.	Accurately lists two specific services that are sold in a business. List does not include tangible items (goods).	Accurately lists three or more specific services that are sold in a business. List does not include tangible items (goods). Student 9: Insurance, cable, airplane tickets

Table 8 (Cont'd)

3. What is a loan? **GLCE**: Describe some characteristics of a market economy (4.E1.0.2)	I don't know Tangential remark Does not answer	A general and not specific response that states: (1) That a loan is something (money or another object) that is given to someone to use for a short amount of time. OR 1 of the following (2) That the money loaned must be paid back (3) That banks often loan money to others (4) That interest is charged by banks when borrowing money and interest must be paid back in addition to the loan Student 5: A loan is what they borrow from you and pay more back Student 15: A loan is something you give but have to pay back, like a bank	Accurately and specifically states that (1) a loan is an amount of money (or another object) that is given to someone to use for a short amount of time And 1 of the following (2) That the money loaned must be paid back (3) That banks often loan money to others (4) That interest is charged by banks when borrowing money and interest must be paid back in addition to the loan	Accurately states 3 or more of the following: (1) That a loan is an amount of money that is given to someone to use for a short amount of time (2) That the money loaned must be paid back (3) That banks often loan money to others (4) That interest is charged by banks when borrowing money and interest must be paid back in addition to the loan

Table 8 (cont'd)

4. How might a loan help someone start their own business? **GLCE**: Describe some characteristics of a market economy (4.E1.0.2)	I don't know Tangential remark Does not answer	Accurately states that (1) Starting a business requires money that a loan can provide	Accurately states 2 of the following: (1) Starting a business requires money that a loan can provide (2) Business owners can buy materials to make products or services (and lists examples) (3) Microfinance loans can help people in poverty start businesses who otherwise would not be able to receive loans from large banks Student 12: A loan can help someone's business by…they can buy the thing they're going to sell	Accurately states all of the following: (1) Starting a business requires money that a loan can provide (2) Business owners can buy materials to make products or services (and lists examples) (3) Microfinance loans can help people in poverty start businesses who otherwise would not be able to receive loans from large banks

Table 8 (cont'd)

5. Let's say you start a business selling candy and you set a price for the candy to be very high (For example, you charge $10 for a candy bar). Describe what might happen in your business and why. **GLCE**: Describe how positive and negative incentives influence behavior in a market economy (4.E1.0.3) Explain how price affects decisions about purchasing goods and services (4.E1.0.4)	I don't know Tangential remark Does not answer	Accurately states that (1) setting a price that is too high can have a negative effect on a business	Accurately states that (1) That setting a price that is too high can have a negative effect on a business And 1 of the following: (2) That consumers may not purchase a product where the price is set too high (3) That setting a price that is too high may negatively affect profits, as consumers may not purchase a product Student 15: When someone charges you a high price no one would buy a small candy bar for 10 dollars	Accurately states all of the following: (1) That setting a price that is too high can have a negative effect on a business (2) That consumers may not purchase a product where the price is set too high (3) That setting a price that is too high may negatively affect profits, as consumers may not purchase a product

Table 8 (cont'd)

6. You have a business selling candy and you have a lot of candy that has not been sold. What could you do to solve this problem? **GLCE**: Describe how positive and negative incentives influence behavior in a market economy (4.E1.0.3) Explain how price affects decisions about purchasing goods and services (4.E1.0.4)	I don't know Tangential remark Does not answer	Response does not accurately state that a business owner usually lowers a price or runs a sale when there is a lot of product that has not been sold. **OR** Response may offer other solutions that are not related to price, e.g. increasing advertising	Accurately states, in their own words that when a business owner has product that has not been sold that they sometimes lower the price or run a sale. Response is a general description that does not, or vaguely mentions price.	Accurately states, in their own words that when a business owner has product that has not been sold that they sometimes lower the price or run a sale. Response specifically mentions lowering price. Student 12: if my candy business is not selling, I would put all of my prices half off

Table 8 (cont'd)

7. As a buyer, how does the price of an item help you choose if you would buy it or not? **GLCE**: Describe how positive and negative incentives influence behavior in a market economy (4.E1.0.3) Explain how price affects decisions about purchasing goods and services (4.E1.0.4)	I don't know Tangential remark Does not answer Student 12: If I was the buyer I would buy some candy because I can save some money	Accurately states that (1) a price that is set too high might cause them not to purchase an item AND/OR: (2) People need to know if they have enough money to purchase an item	Accurately states that (1) a price that is set too high might cause them not to purchase an item And 1 of the following: (2) That a price that is low might cause them to consider purchasing an item (3) That price is also related to the perceived worth of an item, e.g. that they would not pay a lot of money for a small item, but would be willing to pay a lot of money for an item that is worth the price	Accurately states all of the following: (1) That a price that is set too high might cause them not to purchase an item (2) That a price that is low might cause them to consider purchasing an item (3) That price is also related to the perceived worth of an item, e.g. that they would not pay a lot of money for a small item, but would be willing to pay a lot of money for an item that is worth the price

Table 8 (cont'd)

8a. Mike wants to sell lemonade. He borrows $10 from his mother and buys 10 lemons for $1 each. His lemons are an example of: i. Revenue ii. Cost iii. Profit **GLCE**: Describe some characteristics of a market economy (4.E1.0.2)	Does not correctly identify the example of cost (choice ii)			Correctly identifies the example of cost (choice ii)
8b. Mike sets up his lemonade stand and sells 5 lemonades for $4 each, making $20 in all. His $20 is an example of: i. Revenue ii. Cost iii. Profit **GLCE**: Describe some characteristics of a market economy (4.E1.0.2)	Does not correctly identify the example of revenue (choice i)			Correctly identifies the example of revenue (choice i)

Table 8 (cont'd)

8c. At the end of the day, Mike pays back $10 to his mother and has $10 left to spend. His $10 left is an example of: i. Revenue ii. Cost iii. Profit **GLCE**: Describe some characteristics of a market economy (4.E1.0.2)	Does not correctly identify the example of profit (choice iii)			Correctly identifies the example of profit (choice iii)

Table 9.

Part 2: Short response to scenarios

Question & Standards	**1 Does Not Meet Expectations**	**2 Beginning to Meet Expectations**	**3 Approaching Meeting Expectations**	**4 Fully Meets Expectations**
1a. How was Magda/Oscar successful with her/his business? **GLCE:** Describe how positive and negative incentives influence behavior in a market economy (4.E1.0.3)	I don't know. Tangential response Does not answer	Accurately states from the story the specific products/service each entrepreneur sold, without mention of how their business was successful. (Magda-clothing, Oscar-removing trees) OR Gives a general response indicating how the entrepreneurs were successful that may or may not be specifically gleaned from the story, e.g. "They made a lot of money", "They were happy" Student 15: By getting a loan from an entrepreneur Student 5: Oscar was successful with his business cause ACCION USA gave him a loan to buy a stump grinding machine	Accurately states from the story the specific products/service each entrepreneur sold Magda-clothing, Oscar-removing trees) **AND** Gives a general response indicating how the entrepreneurs where successful that may or may not be specifically mentioned in the story, e.g. "They made a lot of money", "They were happy"	Accurately states in their own words how the entrepreneurs were successful with their business. Indicates both of the following: (1) The specific products/service each entrepreneur sold (Magda-clothing, Oscar-removing trees) (2) The evidence from the story of what the entrepreneurs accomplished with their business (Magda-paying for children's education, Oscar-purchasing a home, both-growing their business)

Table 9 (cont'd)

1b. Why do you think she/he was successful? **GLCE:** Describe how positive and negative incentives influence behavior in a market economy (4.E1.0.3)	I don't know. Tangential response Does not answer	Gives a general response that does not mention growing the business or getting help with a microfinance loan. Response may repeat responses from question 1a. Student 12: I think she was successful because she's trying to get $ for her family	Accurately states, in their own words, either specifically or generally, that the entrepreneurs were successful due to the loan they received to help grow their business. Indicates one of the following: (1) That the business owners grew their businesses by buying more materials, which led to more profits (2) That the microfinance loans they received allowed them to purchase what they needed to grow their business	Accurately states, in their own words, either specifically or generally, that the entrepreneurs were successful due to the loan they received to help grow their business. Indicates both of the following: (1) That the business owners grew their businesses by buying more materials, which led to more profits (2) That the microfinance loans they received allowed them to purchase what they needed to grow their business

Table 9 (cont'd)

2. What risks did Magda/Oscar take as an entrepreneur starting her/his own business?	I don't know. Tangential response Does not answer Student 12: She set the goal she wanted to do	Gives a general response about the difficulties of starting a business that does not specifically mention risks, loans, or profits, e.g. "Starting a business is difficult", "He/She may not be successful"	Accurately states, in their own words, specifically or generally, that the entrepreneurs took risks by asking for a loan that they might not have been able to pay back if their business was not successful. Indicates one of the following: (1) That Magda/Oscar took a risk by asking for a loan (2) That starting a business is a risk due to the fact that some entrepreneurs do not make a profit	Accurately states, in their own words, specifically or generally, that the entrepreneurs took risks by asking for a loan that they might not have been able to pay back if their business was not successful. Indicates both of the following: (1) That Magda/Oscar took a risk by asking for a loan (2) That starting a business is a risk due to the fact that some entrepreneurs do not make a profit

Table 9 (cont'd)

3. How did Magda's business help others in her community/How does ACCION USA provide loans to help others? **GLCE:** Develop an action plan and know how, when, and where to address or inform others about a public issue (5.P4.2.1)	I don't know. Tangential response Does not answer	Accurately states: (1) The specific need the businesses address (Magda- women need nice clothes, ACCION- entrepreneurs need loans) **OR** 1 of the following: (2) How the business helps address this need (Magda- rents clothes to women, ACCION- lends money so others can start businesses) (3) Mentions a possible long-term impact of these businesses on the community (Magda- women can look nice for job interviews & events they need to attend, ACCION- business owners can make business to help others) Student 5: They pay people the loan they get back from people	Accurately states: (1) The specific need the businesses address (Magda- women need nice clothes, ACCION- entrepreneurs need loans) And 1 of the following: (2) How the business helps address this need (Magda- rents clothes to women, ACCION- lends money so others can start businesses) (3) Mentions a possible long-term impact of these businesses on the community (Magda- women can look nice for job interviews & events they need to attend, ACCION- business owners can make business to help others)	Accurately states all of the following: (1) The specific need the businesses address (Magda- women need nice clothes, ACCION- entrepreneurs need loans) (2) How the business helps address this need (Magda- rents clothes to women, ACCION- lends money so others can start businesses) (3) Mentions a possible long-term impact of these businesses on the community (Magda- women can look nice for job interviews & events they need to attend, ACCION- business owners can make business to help others)

Table 9 (cont'd)

4. What steps would you need to take to start your own business? **GLCE:** Develop an action plan and know how, when, and where to address or inform others about a public issue (5.P4.2.1)	I don't know. Tangential response Does not answer	Accurately states, in their own words, either specifically or generally, some of the steps required to start their own business. Indicates 1 of the following: (1) That a business needs to start with an idea of a product or service (2) That a business needs to start with money which could be obtained via a loan (3) That a business needs materials, e.g. materials needed for products, workers, store fronts, advertising, et al. (4) To determine a community need that a business could address Student 12: The thing you need to build or sew	Accurately states, in their own words, either specifically or generally, some of the steps required to start their own business. Indicates 2-3 of the following: (1) That a business needs to start with an idea of a product or service (2) That a business needs to start with money which could be obtained via a loan (3) That a business needs materials, e.g. materials needed for products, workers, store fronts, advertising, et al. (4) To determine a community need that a business could address Student 9: I would need to get a loan to buy the product materials and make that product	Accurately states, in their own words, either specifically or generally, some of the steps required to start their own business. Indicates all of the following: (1) That a business needs to start with an idea of a product or service (2) That a business needs to start with money which could be obtained via a loan (3) That a business needs materials, e.g. materials needed for products, workers, store fronts, advertising, et al. (4) To determine a community need that a business could address

REFERENCES

REFERENCES

Alleman, J., & Brophy, J. (1993). Is curriculum integration a boon or a threat to social studies? *Social Education, 57*(6), 289-291.

Alleman, J., & Brophy, J. (2010). Effective integration of social studies and literacy. In M. E. McGuire & B. Cole (Eds.). *Making a difference: Revitalizing elementary social studies* (pp. 51-66). Silver Spring, MD: National Council for Social Studies.

Altoff, P., & Golston, S. (2012). *Teaching reading with the social studies standards: Elementary units that integrate great books, social studies, and the Common Core Standards*. Silver Spring, MD: National Council for Social Studies.

Barab, S. A., & Landa, A. (1997). Designing effective interdisciplinary anchors. *Educational Leadership*, *54*(6), 52-55.

Barron, B. J. S., Schwartz, D. L., Vye, N. J., Moore, A., Petrosino, A., Zech, L., & Bransford, J. D. (1998). Doing with understanding: Lessons from research on problem- and project based learning. *The Journal of Learning Science, 7*(3/4), 271-311.

Barton, K. C., & Smith, L. A. (2000). Themes or motifs? Aiming for coherence through interdisciplinary outlines. *The Reading Teacher, 54*(1), 54-63.

Beane, J. A. (1995). Curriculum integration and the disciplines of knowledge. *The Phi Delta Kappan, 76*(8), 616-622.

Beane, J. A. (1997). *Curriculum integration: Designing the core of democratic education*. New York: Teachers College Press.

Berman, S. (1997). *Children's social consciousness and the development of social responsibility*. Albany, NY: State University of New York Press.

Bergstrom, K. L. (1998). Are we missing the point about curriculum integration? *Middle School Journal, 29*(4), 28-37.

Bickmore, K. (2008). Social justice and the social studies. In L. S. Levstik & C. A. Tyson (Eds.). *Handbook of Research in Social Studies Education* (pp. 155-171). New York, NY: Routledge.

Billig, S. H. (2010). Why service learning is such a good idea. *Grand Valley State University Colleagues, 5*(1), 9-11.

Billig, S. H., Jesse, D., & Grimley, M. (2008). Using service learning to promote character development in a large urban district. *Journal of Research in Character Education, 6*(1), 21-34.

Boykin, A. W., & Noguera, P. (2011). *Creating the opportunity to learn: Moving from research to practice to close the achievement gap*. Alexandria, VA: ASCD.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.

Broome, J. P., & Preston-Grimes, P. (2011). Open for business: Learning economics through social interaction in a student-operated store. *The Journal of Social Studies Research, 35*(1), 35-59.

Brophy, J. (1999). Teaching (Educational Practice Series No. 1). Geneva: International Bureau of Education.

Brophy, J., & Alleman, J. (1991). A caveat: Curriculum integration isn't always a good idea. *Educational Leadership, 49*(2), 66.

Brophy, J., & Alleman, J. (2002). Primary-grade students' knowledge and thinking about the economics of meeting families' shelter needs. *American Educational Research Journal, 39*(2), 423-468.

Brophy, J., & Alleman, J. (2006). *Children's thinking about cultural universals*. Mahwah, NJ: Lawrence Erlbaum.

Brophy, J., & Alleman, J. (2008). Early elementary social studies. In L. S. Levstik & C. A. Tyson (Eds.). *Handbook of Research in Social Studies Education* (pp. 33-45). New York, NY: Routledge.

Brophy, J., Alleman, J., & Halvorsen, A. (2012). *Powerful social studies for elementary students* (3rd ed.). Belmont, CA: Thomson Wadsworth.

Buffam, A., Mattos, M., & Weber, C. (2009). *Pyramid response to intervention: RTI, professional learning communities, and how to respond when kids don't learn*. Bloomington, IN: Solution Tree Press.

Camburn, E. M., & Han, S. W. (2011). Two decades of generalizable evidence on U.S. instruction from national surveys. *Teachers College Record, 113*, 561-610.

Checkley, K. (2008). *The essentials of social studies, grades K-8: Effective curriculum, instruction, and assessment*. Alexandria, VA: ASCD.

Cochran-Smith, M. (2012). Composing a research life. *Action in Teacher Education, 34*, 99-110.

Cochran-Smith, M., Friedman, A., Barnatt, J., & Pine, G. (2009). Inquiry on inquiry: Practitioner research and student learning. *Action in Teacher Education, 31*(2), 17-32.

Cochran-Smith, M., & Lytle, S. (2009). *Inquiry as stance: Practitioner research for the next generation*. New York: Teachers College Press.

Combs, D., & White, R. (2000). There's madness in these methods: Teaching secondary methods students to develop interdisciplinary units. *The Clearing House, 73*(5), 282-286.

Dewey, J. (1902/1990) *The school and society & the child and the curriculum*. Chicago: The University of Chicago

Dewey, J. (1926). Individuality and experience. In *The Later Works of John Dewey, 1925-1953* (pp.55-61). Carbondale, IL: Southern Illinois University Press.

Dewey, J. (1938). *Experience in education.* New York: Collier Books.

Ehman, L. H., & Gillespie, J. A. (1974, November). *Political life in the hidden curriculum: Does it make a difference?* Paper presented at the annual meeting of the National Council for the Social Studies, Chicago, IL.

Ehman, L. H. (1980). The American school in the political socialization process. *Review of Educational Research, 50*(1), 99-119.

Evans, R. W. (2004). *The social studies wars: What should we teach the children?* New York: Teachers College Press.

Fitchett, P. G., & Heafner, T. L. (2010). A national perspective on the effects of high-stakes testing and standardization on elementary social studies marginalization. *Theory and Research in Social Education, 38*(1), 114-130.

Finkel, E. (2010). *A bull market for financial literacy*. Retrieved from www.districtadministration.com.

Foner, E. (1998). *The story of American freedom.* New York: W. W. Norton & Company.

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

Gatewood, T. (1998). How valid is integrated curriculum in today's middle schools? *Middle School Journal, 29*(4), 38-41.

Glass, J. (2000). *A dollar for Penny*. New York: Random House.

Halvorsen, A. (2013). *A history of elementary social studies: Romance and reality*. New York: Peter Lang Publishing.

Halvorsen, A., Duke, N. K., Brugar, K., Block, M. K., Strachan, S. L., Berka, M. B., & Brown, J. M. (2012). Narrowing the achievement gap in second-grade social studies and content area literacy: The promise of a project-based approach. *Theory & Research in Social Education, 40*(3), 198-229.

Hargreaves, A., & Moore, S. (2000). Curriculum integration and classroom relevance: A study of teachers' practice. *Journal of Curriculum and Supervision, 15*(2), 89-112.

Hernandez-Ramos, P., & DeLaPaz, S. (2009). Learning history in middle school by designing multimedia in a project based learning experience. *Journal of Research on Technology in Education, 42*(2) 151-173.

Hertzog, N. B. (2007). Transporting pedagogy: Implementing the project approach in two first grade classrooms. *Journal of Advanced Academics, 18*(4), 530-564.

Himmele, P., & Himmele, W. (2011). *Total participation techniques: Making every student an active learner*. Alexandria, VA: ASCD.

Houser, N. O. (1995). Social studies on the back burner: Views from the field. *Theory and Research in Social Education, 23*(2), 147-168.

Hunter, M. C. (1994). *Enhancing teaching*. Alpha Books.

Jimerson, S. R., Campos, E., & Greif, J. L. (2003). Toward an understanding of definitions and measures of school engagement and related terms. *California School Psychologists, 8*, 7-27.

Kahne, J., & Middaugh, E. (2010) High quality civic education: What is it and who gets it. In W. C. Parker (Ed.). *Social studies today: Research and practice* (pp. 141-150). New York, NY: Routledge.

Katz, L., & Chard, S. C. (Eds.). (2000). *Engaging children's minds: The project approach*. Stamford, CT: Ablex Publishing Corporation.

Kerekes, J. (1987). The interdisciplinary unit…it's here to stay! *Middle School Journal, 16*(4), 12-14.

Kerr, D. (2002). Citizenship education: An international comparison across sixteen countries. *International Journal of Social Education, 17*(1), 1-15.

Kilpatrick, W. H. (1918). The project method. *Teacher's College Record, 19*, 319-334.

Knoll, M. (2010). "A marriage on the rocks": An unknown letter by William H. Kilpatrick about his project method. Retrieved from http://www.eric.ed.gov. ERIC Online document 511129.

Kourilsky, M., & Ballard-Campbell, M. (1984). Mini-Society: An individualized social studies program for children of low, middle, and high ability. *The Social Studies, 75*(5), 224-228.

Kourilsky, M. (1977). The Kinder-Economy: A case study of Kindergarten pupils' acquisition of economic concepts. *The Elementary School Journal, 77*(3), 182-191.

Krajcik, J., Blumenfeld, P. C., Marx, R. W., Bass, K. M., Fredricks, J., Soloway, E. (1998). Inquiry in project based science classrooms initial attempts by middle school students. *The Journal of the Learning Sciences, 7*(3/4), 313-350.

Krull, K. (2001). *Supermarket*. New York: Holiday House.

Ladd, G. W., & Dinella, L. M. (2009). Continuity and change in early school engagement: Predictive of children's achievement trajectories from first to eighth grade? *Journal of Educational Psychology, 101*(1), 190-206.

Larmer, J., & Mergendoller, J. R. (2010). 7 essentials for project-based learning. *Educational*

Leadership, *68*(1), 34-37.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation.* Cambridge, England: Cambridge University Press.

Lee, V. E., & Burkam, D. T. (2002). *Inequality at the starting gate: Social background differences in achievement as children begin school*. Washington, D. C.: Economic Policy Institute.

Levinson, M. (2012). *No citizen left behind*. Cambridge, MA: Harvard University Press.

Levstik, L. S., & Tyson, C. A. (2008). Introduction. In L. S. Levstik & C. A. Tyson (Eds.). *Handbook of Research in Social Studies Education* (pp. 1-12). New York, NY: Routledge.

Meszaros, B., & Evans, S. (2010). It's never too early: Why economics education in the elementary classroom. *Social Studies and the Young Learner, 22*(3), 4-7.

Michigan Department of Education (2007). *Grade level content expectations: Social studies*. Lansing, MI: Author. Retrieved from http://michigan.gov/mde

Miles, M., & Huberman, M. (1994). *An expanded sourcebook: Qualitative data analysis.* Thousand Oaks, CA: Sage Publications.

Miller, S. L., & VanFossen, P. J. (1994). Assessing expertise in economic problem solving: A model. *Theory and Research in Social Education, 22*(3), 380-412.

Miller, S. L., & VanFossen, P. J. (2008). Recent research on the teaching and learning of pre collegiate economics. In L. S. Levstik & C. A. Tyson (Eds.). *Handbook of Research in Social Studies Education* (pp. 284-306). New York, NY: Routledge.

Milson, A. J., & King, K. P. (2001). Investigating science-technology-society issues with prospective elementary school teachers. *The International Social Studies Forum, 1*(2), 77-87.

National Center for Educational Statistics. (2011). School search. Retrieved from http://nces.ed.gov.

National Council for Social Studies. (2008). A vision of powerful teaching and learning in the social studies: Building effective citizens. *Social Education, 72*(5), 277-280.

National Council for Social Studies. (1994/2010). *National curriculum standards for social studies: A framework for teaching, learning, and assessment*. Silver Spring, MD: Author.

National Council on Economics Education. (2000/2010). *Voluntary national content standards in economics* (2nd ed.). New York, NY: Author.

National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010). *Common core state standards*. Washington, D. C.: Author.

Nystrand, M., & Gamoran, A. (1991). Instructional discourse, student engagement, and literature achievement. *Research in the Teaching of English, 25*(3), 261-290.

Otoshi, K. (2008). *One*. San Rafael, CA: KO KidsBooks.

Oliver, D. W., & Shaver, J. P. (1966). *Teaching public issues in the high school*. Boston: Houghton Mifflin.

Palacio, R. J. (2012). *Wonder*. New York: Alfred A. Knopf.

Parker, W. (2011). *Social studies in elementary education* (14th ed.). Boston: Allyn & Bacon.

Paulsen, G. (2007). *Lawn boy*. New York: Random House.

Pink, D. H. (2006). *A whole new mind: Why right-brainers will rule the future*. New York: Riverhead Books.

Purcell-Gates, V., Duke, N. K., & Martineau, J. A. (2007). Learning to read and write genre specific text: Roles of authentic experience and explicit teaching. *Reading Research Quarterly, 42*, 8-45.

Ross, E. W. (2004). Negotiating the politics of citizenship education. *PS: Political Science and Politics, 37*(2), 249-251.

Rugg, H. O. (1931). *An introduction to problems of American culture*. Boston: Ginn & Company.

Savery, J. R. (2006). Overview of problem-based learning: Definitions and distinctions. *Interdisciplinary Journal of Problem-based Learning, 1*(1), 9-20.

Schlesinger, A. M. Jr. (1998). *The disuniting of America: Reflections on a multicultural society*. New York: W. W. Norton & Company.

Schug, M., & Lopus, J. (2008). Economic and financial education for the 21st century. *Social Education, 72*(7), 359-362.

Schug, M., & Walstad, W. (1991). Teaching and learning economics. In J. Shaver (Ed.). *Handbook of Research on Social Studies Teaching and Learning*. New York: MacMillan Reference Books.

Serriere, S., Mitra, D., & Cody, J. (2010). Young citizens take action for better school lunches. *Social Studies and the Young Learner, 23*(2), 4-8.

Shanahan, T., Robinson, B., Schneider, M. (1995). Integrating curriculum. *The Reading Teacher, 48*(8), 718-719.

Smith, D. J. (2011). *If the world were a village: A book about the world's people* (2nd ed.). Toronto, Canada: CitizenKid.

Smith-Millway, K. (2008). *One hen: How one small loan made a big difference*. Toronto, Canada: Kids Can Press.

Snow, C. E., Burns, M. S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, D. C.: National Academy Press.

Stanley, W. B., & Longwell, H. (2004). Ideology, power, and control in social studies teacher education. In S. Adler (Ed.). *Critical Issues in Social Studies Teacher Education* (pp. 189-229). Greenwich, CT: Information Age Publishing.

Strubbe, M. A. (1990). Are interdisciplinary units worthwhile? Ask students! *Middle School Journal, 21*(3), 36-28.

Sylvester, P. S. (1994). Elementary school curricula and urban transformation. *Harvard Education Review, 64*(3), 309-332.

Thomas, J. W. (2000). *A review of research on project-based learning.* San Rafael, CA: The Autodesk Foundation.

Turner, J., & Paris, S. G. (1995). How literacy tasks influence children's motivation for literacy. *The Reading Teacher, 48*(8), 662-673.

United Nations. (1948). *The Universal Declaration of Human Rights*. Retrieved from: www.un.org/en/documents/udhr/index.shtml.

VanSledright, B. A. (2002) Fifth graders investigating history in the classroom: Results from a researcher-practitioner design experiment. *The Elementary School Journal, 103*(2), 131 160.

Vars, G. F. (1991). Integrated curriculum in historical perspective. *Educational Leadership, 49*(2), 14-15.

Wade, R. (2007). *Social studies for social justice: Teaching strategies for the elementary classroom*. New York: Teachers College Press.

Wade, R. (2008). Service-learning. In L. S. Levstik & C. A. Tyson (Eds.). *Handbook of Research in Social Studies Education* (pp. 109-123). New York, NY: Routledge.

Westheimer, J., & Kahne, J. (2004). Educating the "good" citizen: Political choices and pedagogical goals. *PS: Political Science and Politics, 37*(2), 241-247.

Wittingham, J. L. (2008). Economics is for everyone: A FETCHing graphic organizer. *Social Studies and the Young Learner, 21*(2), 1-4.

Youniss, J., & Yates, M. (1997). *Community service and social responsibility in youth.* Chicago, IL: University of Chicago Press.

Yunus, M. (2010). *Building social business: The new kind of capitalism that serves humanity's most pressing needs*. New York: Public Affairs.