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Service Learning and the Experiential Learning Cycle in Elementary School

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SERVICE LEARNING AND THE EXPERIENTIAL LEARNING CYCLE IN

ELEMENTARY SCHOOL

by

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A Dissertation Submitted to the Faculty of Old Dominion University in Partial Fulfillment of the Requirements for the Degree of

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Approved by:

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ABSTRACT

SERVICE LEARNING AND THE EXPERIENTIAL LEARNING CYCLE IN ELEMENTARY SCHOOL

Brittney D. Rose
Old Dominion University, 2020
Director: Dr. Angela Eckhoff

There has been an increase in interest in service learning in the past decade (Kuh et al., 2017). However, there has been less attention given to service learning in elementary school, particularly to service learning that does not focus on academic outcomes for the students (Scott & Graham, 2015). This qualitative instrumental case study utilized focus groups with fifth grade students, interviews with educators, education specialists and a nonprofit representative, and observational notes to explore students’ and educators’ experiences as they participated in a service learning project in conjunction with a nonprofit organization. Findings indicate that specific collaborative practices, such as a teamwork model and the sharing of resources, were important to enable the teachers to conduct service learning projects with their students. The service learning project aligned with the four stages of Kolb’s Experiential Learning Cycle—abstract conceptualization, active experimentation, concrete experience, reflective observation—although there was a general lack of critical self-reflection opportunities for the students. Additionally, fifth grade students exhibited an interest in future service learning projects as a result of the project. Findings indicate that empathy played an important role in the project, with empathy presented more as sympathy in some instances. Implications from the study suggest the need for more collaborative supports for teachers to enable them to plan in-depth service learning projects for their students, while incorporating content standards, more support for teachers to understand the stages of the Experiential Learning Cycle and how to plan service learning
activities that include the four stages, and opportunities for students to build their capacity for empathy as “perspective taking” rather than as sympathy (Davis, 1994; Warren, 2018).
This dissertation is dedicated to my friends and family who never stopped believing in me, even if they often didn’t understand the dissertation process or my research. This dissertation is also dedicated to my mom, Dr. Donna Rose, for forging the path with her own dissertation and showing me that no excuse is excuse enough to not reach your personal and professional goals.
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CHAPTER 1
INTRODUCTION

In the current educational culture of high-stakes testing, educators can be stretched to find time to help students develop into thoughtful, caring, and committed citizens. There is much content to cover in short periods of time to prepare students for high-stakes assessments, and helping students develop personally can take a backseat (Hunter & Botchwey, 2017). Dewey (1916) argued the following about the role of education in a democracy:

A democracy is more than a form of government; it is primarily a mode of associated living, of conjoint communicated experience. The extension in space of the number of individuals who participate in an interest so that each has to refer his own action to that of others, and to consider the action of others to give point and direction to his own, is equivalent to the breaking down of those barriers of class, race, and national territory which kept men from perceiving the full import of their activity. (p. 224)

Education as a means to prepare future citizens for a democracy necessitates that, in addition to learning content information, students are given the opportunity to think about ideas that are relevant to the real world, requiring thoughtful action (Dewey, 1916).

There has been an interest on the part of communities and schools in incorporating service learning, during which students explore real-world challenges and problems with projects, activities or assessments that are linked to content standards and which also meet community or global needs (National Service Learning Clearinghouse [NSLC], n.d.). Kuh and colleagues (2017) have indicated service learning as a High Impact Practice (HIP), indicating that, for postsecondary students, involvement in service learning has been linked to, “academic achievement, engagement in educationally purposeful activities, satisfaction, persistence,
attainment of educational objectives, and acquisition of desired learning outcomes that prepare
one to live an economically self-sufficient, civically responsible, and rewarding life” (p. 9).

Connecting learning to real-world problems can be achieved through collaborations with
community organizations, but more information about these potential collaborations is needed.
There is also a need for more research on service learning in elementary school. Research is
needed to explore the experiences of elementary students and teachers throughout a service
learning project, as well on the use of an experiential learning model to frame service learning in
elementary school.

The research problem and problem statement for the present study are presented next.
This chapter will also include an explanation of the fifth grade Capstone project, a description of
Operation Smile (OS), the nonprofit collaborating on this service learning project, and the
theoretical and conceptual framework, research questions, operational definitions, significance of
the study, delimitations, and assumptions of the present study. These topics are presented as they
relate to the experiences of elementary students and teachers in a service learning project and the
alignment of a service learning project with Kolb’s Experiential Learning Cycle (ELC).

Research Problem

There has been an increase in research on service learning in the past decade. However,
using data from the National Survey of Student Engagement, Kuh and colleagues (2017)
indicated that much of the research has involved postsecondary students. In a review of 62
studies on service learning, Celio and colleagues (2011) found that only 5% of the studies
included elementary students and that most involved high school students. In a comprehensive
review of service learning literature, Scott and Graham (2015) further cited that research on
service learning with elementary students has overwhelmingly focused on the effect of service
learning from an academic standpoint and has not addressed the social and emotional
development of young students. Service learning projects implemented as undergraduate
preservice teacher courses are also common, but the research focus is typically on the effect of
the project for the preservice teachers and not the elementary students involved (Wilson et al.,
2015; Yudt & Columba, 2017). There is a need for both research on service learning with
elementary students and on the application of Kolb’s ELC to service learning in elementary
school. Additionally, nonprofits can benefit from information on collaborations with school
systems as they strive to increase familiarity in the community of their nonprofit mission and, in
some cases, raise funds.

**Purpose statement**

The purpose of this study was to explore the experiences of elementary students and
teachers as they participated in a service learning project conducted in collaboration with a local
nonprofit organization. This study also examined the employment of the four stages of the ELC
in the service learning project and explored the role of the nonprofit organization in such a
collaboration. Additionally, empathy emerged as an important topic in the service learning
project and was further explored.

**Research Questions**

1. What supports, if any, do elementary educators, support specialists, and nonprofit
   representatives find most collaborative in implementing a service learning project?
2. In what way, if any, does participation in a service learning project influence elementary
   students’ interests in community or global engagement?
3. How are the four stages of the ELC actualized in a joint venture service learning project
   between an elementary school and a nonprofit organization?
1. How can educators be assisted in better meeting the four stages of the ELC, in order to plan effective service learning projects?

**Capstone Project**

The Capstone Project has been a consistent component of the school system’s middle and high school curriculum. However, the school system is currently piloting the project in select elementary schools throughout the division. The Capstone Project requires that students solve real world problems and that activities and products are aligned with the curriculum.

The fifth grade teachers at the school in this study chose to partner with OS for the Capstone Project. In addition to the classroom teachers, one gifted education teacher, two special education teachers, a technology integration specialist, an elementary school librarian, a guidance counselor, one teaching assistant, one high school teacher, and 15 high school students were also present for at least a portion of the Capstone Project. Students worked with OS and the high school students to solve real world problems faced by OS and the families they serve.

**Operation Smile**

The purpose of this study was to explore a service learning project carried out in collaboration with an elementary school and a nonprofit organization. OS is an international nonprofit that provides cleft palate surgeries for children in developing countries. The surgeries are staffed primarily by volunteers and funded by donations (Operation Smile, 2018). OS’s Student Programs focus on the four pillars of Advocacy, Leadership, Education, and Service. Examples of fundraising efforts involving students include the Shamrock Final Mile, in which elementary students run the equivalent of a marathon through physical education classes or school running clubs and come together to run the final mile together at the Virginia Beach
oceanfront, a yearly dodgeball tournament for middle school students, and peace missions for rising high school students (Operation Smile Student Programs, 2018). Recently, the Associate Vice President of Student Programs has begun to work with local elementary schools to design projects for fifth grade students. These projects have been in collaboration with local high schools and are relatively new. This research provides insight into this comprehensive service learning project for elementary students, aimed at furthering the mission of OS and providing engaging opportunities for the project participants.

For this project, OS worked closely with the fifth grade teachers to develop lessons and activities that introduced the students to OS, taught students about empathy, and created multiple content connections. This project also provided an introduction to the field trip experience currently being developed by OS, during which students will have the opportunity to “walk through” a simulation of a medical mission site in India. Through OS’s student programs, students also learn about the hardships faced by children and their families in these other countries as part of their daily lives and as the parents strive to obtain access to medical care for their children, as well as about the psychological stress of bullying or ostracization that children with cleft palates can experience. Students are also exposed to other cultures, learning how families in other countries experience daily life and also gaining an appreciation for the comforts of life in the United States. (Operation Smile Student Programs, 2018).

**Theoretical and Conceptual Framework**

As this research explores an elementary service learning project in collaboration with a nonprofit organization, a framework is needed that captures the essence of service learning. This study was informed by the work of John Dewey and a model of experiential learning that is based on Dewey’s work. Dewey wrote about the role of experiential learning in preventing
formal schooling from becoming isolated from students’ everyday lives (Dewey, 1916, 1938). Dewey also argued for the importance of reflection in education and specifically in experiential learning, to help individuals grow and apply new understandings (Dewey, 1916). Dewey (1938) described education as a six-step process: encountering a problem; formulating the problem as a question to be answered; gathering information to answer the posed question; developing a hypothesis; testing the hypothesis; and making warranted assertions.

The four stages of Kolb’s ELC condense and reflect Dewey’s six-step educational process. The four stages consist of: concrete experience, in which an individual actively experiences an activity that is related to an abstract idea of concept; reflective observation, in which an individual reflects back on the concrete experience; abstract conceptualization, in which an individual attempts to conceptualize a theory of what is observed; and active experimentation, in which an individual tests out the theory they have conceptualized based on their experiences and reflections (Kolb, 1984). Kolb’s ELC, reflecting Dewey’s ideas of experiential learning, framed the present study.

**Significance of the Study**

This study provides insight to a Capstone service learning project conducted in collaboration with an elementary school and a nonprofit organization. This study can provide support for teachers who want to provide opportunities for learning that are connected to the real world and that also engage students with their communities.

Currently, there is not a concise program for elementary students in which they can learn about the mission of OS and gain other skills related to service learning. OS also has no data on the effect of their student programs for the elementary students who participate in them (Operation Smile, 2018). This study explored one possible collaborative project between OS and
local elementary students. This will be useful for OS as they work with donors to identify programmatic needs and funding priorities, and could also be useful for other nonprofits as they search for ways to grow their community outreach to spread information about their missions and build partnerships with local school systems.

The service learning project included in this study was part of a fifth grade Capstone Project in a local school system. The elementary school was serving as a pilot site for the Capstone Project, as it had previously only been a component of middle and high school curricula. The Capstone Projects at each school level are part of the division’s plans to meet the goals in their Five-Year Teaching and Learning Framework. According to the school division’s website, the overarching goal is to prepare all students to be: knowledgeable, problems solvers and value creators, resilient learners, cross-culturally competent, personally and socially responsible, thinkers and inquirers, balanced, and communicators and contributors (Virginia Beach City Public Schools [VBCPS], 2019). While this study did not measure the specific goals of the framework, it provided information about the experiences of the students and teachers throughout the service learning project and could inform future planning to meet the division’s goals.

**Delimitations**

This case study took place from March 2019 to June 2019 in a public elementary school in urban southeastern Virginia. Operation Smile, an international nonprofit based in southeastern Virginia, conducted the service learning project in collaboration with the fifth grade team. The service learning project consisted of a Capstone Kickoff, various activities related to the service learning project, and a Service Learning Day to bring the Capstone to a close. Interviews and focus groups took place in May and June 2019. Participants included fifth grade students, four
fifth grade teachers, one gifted resource teacher, one technology integration specialist, one teaching assistant, one librarian, and a representative from the collaborating nonprofit.

This study focused on the experiences of elementary students in a service learning project, rather than on academic impact, as is common in the research literature. Additionally, this study included students’ perceptions of the service learning project, as collected through focus groups, rather than only teacher and parent perceptions or student-completed surveys. Surveys were not included due to the age of the students and the decision to include active student voice in the data.

Assumptions

An assumption in this study is that all participants responded to focus group or interview questions honestly and to the best of their ability. Additionally, an assumption was made that I spent enough time in the classroom for the students to not view me as an outsider, and to help the participants feel comfortable in speaking with me during focus groups and interviews.

Organization of the Remaining Chapters

The remainder of this study is organized into four additional chapters, references, and an appendix. Chapter 2 includes a review of the literature surrounding experiential education and service learning in the context of elementary students and nonprofit organizations. Chapter 3 includes detailed information about the methodology and design of the study. Chapter 4 includes the findings from the study, and Chapter 5 provides an analysis and discussion of the findings as well as implications for future research and practice. The study concludes with references and an appendix.
Summary of Key Points

Literature suggests that the use of service learning in schools can benefit students academically, socially, and emotionally. However, there is a lack of research on service learning in elementary school and the possibilities for collaboration between schools and community organizations. This research study explored elementary students’ and teachers’ experiences in a service learning project and examined the alignment of a service learning project with Kolb’s ELC. The findings of this study provide a basis for nonprofit involvement in service learning in elementary school.
CHAPTER II
LITERATURE REVIEW

The purpose of this study was to explore the experiences of elementary students in a service learning project in collaboration with a nonprofit organization and to explore a service learning project’s alignment with an experiential learning theory. Further, while not an original intent of the study, student use of empathy emerged as an important consideration of this work. This chapter will explore John Dewey’s conceptions of education, which inform Kolb’s Experiential Learning Cycle (ELC). The ELC guided the development of a service learning project in an elementary school, during which students were exposed to the mission and work of an international nonprofit organization, completed projects related to the nonprofit’s mission, and met various grade level content standards. This study provides impetus for nonprofit organizations to build relationships with schools and communities to promote positive and engaging educational opportunities for students.

This study addressed the following questions:

1. What supports, if any, do elementary educators, support specialists, and nonprofit representatives find most collaborative in implementing a service learning project?
2. In what way, if any, does participation in a service learning project influence elementary students’ interests in community or global engagement?
3. How are the four stages of the ELC actualized in a joint venture service learning project between an elementary school and a nonprofit organization?
   a. How can educators be assisted in better meeting the four stages of the ELC, in order to plan effective service learning projects?
Theoretical Framework

This study was informed by the work of John Dewey. Dewey wrote about the importance of education in preparing students for participatory democracy. Dewey (1938) noted that education was a six-step process: encountering a problem; formulating the problem as a question to be answered; gathering information to answer the posed question; developing a hypothesis; testing the hypothesis; and making warranted assertions. Dewey (1916) also noted that, while formal education may be necessary to transmit the resources of a complex society, formal instruction runs the risk of becoming remote and dead. In order to prevent the material covered in formal schooling from becoming isolated from the subject-matter of real-life, Dewey wrote adamantly about the role of experience in education (Dewey, 1938).

Central to Dewey’s educational theory and role of experience in education is the plasticity of individuals. Individuals grow and change because they learn from their experiences, and these experiences can lead to the formation of habits (Dewey, 1916). Through thought, invention, and initiative, individuals can apply what they learn from their experiences to new endeavors (Dewey, 1916). In order to grow and apply new understandings, Dewey argued that individuals also have to reflect upon those experiences. Dewey (1916) wrote that, “No experience having a meaning is possible without some element of thought,” (p. 369). Dewey’s central ideas on education and experience inform Kolb’s ELC.

Conceptual Framework

Kolb’s ELC condenses Dewey’s six-step educational process into four stages: concrete experience (CE), reflective observation (RO), formation of abstract concepts (AC), and active experimentation (AE) (Kolb, 1984). The first stage, CE, refers to an individual actively experiencing an activity. The second stage, RO, refers to the individual reflecting back on the
CE. The third stage, AC, refers to the individual attempting to conceptualize a theory or model of what is observed. The fourth stage, AE, is when the individual plans to test out or tests out the model or theory they have conceptualized based on their experiences. The ELC is illustrated in Figure 1.

**Figure 1**

*The Experiential Learning Cycle*

![Experiential Learning Cycle Diagram]

*Note.* Individuals can begin at any stage, but the stages must be attended to in sequence. (Kolb, 1984)

Once learners are exposed to an abstract idea or concept (AC), they learn more about that idea through meaningful and concrete experiences (CE). Concrete experiences are vital in experiential learning, as a central tenet is that students learn best by engaging in concrete experiences. These experiences should be relevant to students’ own lives and experiences (Wehbi, 2011). Examples of concrete experiences include field experiences, in-class exercises, and speaker panels. While books and films may also be used in some instances, they should be relevant to the students and include real people when possible (Pugh, 2014). Pugh (2014) cautions that, when planning concrete experiences, care must be given when putting other individuals or groups of people on display.
Learners must reflect upon the ideas and their experiences (RO) before experimenting with what they have taken from the three previous stages of the cycle (their ideas, experiences, and reflections) (Kolb, 1984; Pugh, 2014). Kolb expounded on Dewey’s idea of thoughtful reflection in experiential learning. Varying forms of reflection are useful at each stage of the cycle. It is suggested that reflection questions focus on the, “What? So What? Now What?” with “what?” questions addressing description, “so what?” questions requiring interpretation and emotion, and “now what?” questions requiring students to think about future action (Eyler et al., 1996).

AE completes the experiential learning cycle (Kolb, 1984). In this stage, learners are given the chance to test their newly acquired ideas or experiences (Kolb, 1984; Pugh, 2014). Important in Kolb’s conception is that experiential learning is cyclical— an individual can begin at any stage. Kolb and Kolb (2005) insisted that the ELC should not be viewed as consisting of distinct steps, but as a, “learning cycle or spiral where the learner ‘touches all the bases’—experiencing, reflecting, thinking and acting—in a recursive process that is responsive to the learning situation and what is being learned” (p. 194).

**Service Learning**

One way that students can undertake experiential learning is through service learning. Service learning is a curricular approach in which students engage with and solve real-world problems and community issues. Service learning allows for real-world engagement while also covering content standards (National Service Learning Clearinghouse [NSLC], n.d.). Service learning integrates learning goals with action goals and provides an opportunity for students to make decisions that impact themselves and the community, and also provides an opportunity for students to reflect on this impact. As students engage in projects, they learn academic skills as
well as make connections with their communities and develop the mindset that they are able to make a difference (Scott & Graham, 2015). Service learning has been indicated as one of ten high-impact practices shown to foster student success for undergraduate students, indicating that service learning has been found to lead to, “academic achievement, engagement in educationally purposeful activities, satisfaction, persistence, attainment of educational objectives, and acquisition of desired learning outcomes that prepare one to live an economically self-sufficient, civically responsible, and rewarding life” (Kuh et al., 2017, p.9).

Service learning literature highlights experiential learning, reflection, and reciprocal learning (Dewey, 1938). In a service learning project, students are given the opportunity to engage with the community while also reaching authentic learning goals. Service learning projects can teach community engagement and enrich learning for students, while also strengthening communities (Scott & Graham, 2015). Additionally, students are engaged in activities that support social causes and expose them to issues of social justice (Billig, 2000). By giving students the opportunity to make decisions in a service learning project, they are also able to recognize and build on their strengths and students from various backgrounds can see that they can make a positive impact (Olnes, 2008). In addition to helping children learn they have the ability to change their communities, service learning also provides them with the skills and materials they need to create change (Shiller, 2013).

Reflection is a critical component of service learning and reflection has been identified as the key difference between service learning and volunteer work (Becker, 2000; Dewey, 1938). Through critical reflection, students are challenged to think critically about the community they live in or the larger world and the impact their service can have. Additionally, students can make connections to previous learning and apply their experiences and new knowledge to other
situations (Schmidt & Brown, 2015). Reflection is often a component left out of service learning projects, for a variety of possible reasons. In some cases, the reflection component is not as valued by educators as the other components of the experiential learning, or there may be misconceptions and misunderstandings of how to incorporate and appropriately assess reflection (Schmidt & Brown, 2015).

Reciprocal learning is the third main component, in addition to experiential learning and reflection, distinguishing service learning from other educational endeavors (Dewey, 1938). Jacoby (2015) defines reciprocity as adherence to, “principles of respect, trust, genuine commitment, balancing power, sharing resources, and clear communication” (p. 247). A reciprocal relationship between students and the community they are working with in a service learning project helps prevent the exploitation of the individuals in that community, and decreases the likelihood of “othering” (Schmidt & Brown, 2015).

There has been an increase in research on service learning in the past decade. Studies on service learning tend to measure empathy, community engagement, and academic engagement (Scott & Graham, 2015). However, most research on service learning involves high school or college students. There has also been an interest in studying the impact of service learning on preservice teachers. Eppler and colleagues (2011) found that freshman honors students who tutored at-risk elementary students in reading showed increased social attitudes and motivation for volunteering. Similarly, DeJarnette and Sudeck (2016) found that preservice elementary teacher candidates who planned and implemented service learning projects in elementary schools exhibited a greater understanding of service learning and an interest in increased civic engagement. These findings support other literature on service learning for older students indicating that students who engage in service learning report greater interest in interacting with
culturally different and diverse groups of people, as well as an increased interest in issues surrounding diversity (Simons & Cleary, 2006).

Other benefits for preservice teachers in participating in service learning projects with elementary students include the development of general professional educator skills (Macknish, et al., 2018; Williams, 2016), as well as enhanced efficacy in working with English language learners (Garver et al., 2018) and with using technology in instruction (Jia et al., 2018; Song, 2018). Additionally, service learning projects have been shown to level out prior personal experiences for preservice teachers from different backgrounds (Garver et al., 2018) and even help reinforce the decision to pursue a career in teaching, for some students (Williams, 2018). Service learning projects have been used to provide interactive, realistic experiences for preservice teachers in classroom management and interpersonal skills, as well (Chien, 2017).

Research on service learning in elementary schools that has focused on elementary students themselves has mostly looked at the effect from an academic standpoint and has not addressed the social or emotional development of the young students (Scott & Graham, 2015). Further, many studies have examined service learning projects conducted by university students and with elementary students as the more passive “recipients.” Hsiu-Lien and colleagues (2018) and Lindo and colleagues (2018) both found that elementary students experienced positive academic outcomes as a result of participating in service learning projects conducted by university students. Frazier (2018) indicated that the school system under study received a literacy curriculum they had been lacking before, as well as a new partnership with a university, as a result of a service learning collaboration between a university and the school.

Despite a focus on service learning projects where preservice teachers or other university students are the individuals engaging in service learning and elementary students are receiving
additional instruction or enrichment, there are limited examples of service learning projects that elementary students themselves engage in. In examining the role of elementary school counselors in citizenship and early career development, Steen and colleagues (2012) implemented a service learning project with third, fourth, and fifth grade students. The students learned about citizenship and responsibility, while completing service learning projects at the more immediate and broader community levels. As the students created and implemented their service learning projects, including creating hospital kits with art supplies and toys for children who may have long wait times before seeing a doctor, they also discussed the roles that different jobs would play in meeting the community needs. Pre- and post-surveys revealed that students improved in their ability to define citizenship and service learning throughout the duration of the project. Additionally, written reflections at the conclusion of the project indicated enhanced career development, heightened care for others, and a stronger sense of citizenship (Steen et al., 2012). This is similar to previous research that has also supported increases in civic engagement and responsibility for elementary and middle school students engaged in service learning compared to control groups, and an increase in awareness of community needs and the belief that they can make a difference in the community (Billig, 2000).

Lubchenko (2016) designed and evaluated a service learning project for elementary students in grades K-5 that explored character traits, focused on empathy building, and directly correlated to content standards. Using the theme of “water,” students in grades K-2 studied countries with water scarcity or safety problems, while students in grades 3-5 created persuasive presentations to convince the rest of the school to participate in raising awareness and collecting money to support an international clean-water mission. The project also included a “Build Your Dreams Day,” or career day, and a “Water Day,” where students participated in various activities
to learn about topics such as the water cycle and water conservation. Through student surveys, Lubchenko (2016) found an increase in students who felt heard and supported by their teachers and who felt engaged at school. Several students also sought out their own projects as a result of their experiences. The importance of modeling and building relationships and designing grade-level appropriate experiences were themes from the study (Lubchenko, 2016).

In a collaborative service learning project with undergraduate urban planning students and gifted third and fourth grade students, Hunter and Botchwey (2017) provided an example of a project that incorporated service learning on the part of both the university students and the elementary students. The undergraduate students were tasked with planning an engaging and interactive curriculum about healthy neighborhoods, while the elementary students were responsible for researching healthy living in their own neighborhood, and creating a presentation for city officials about their findings and recommendations for improvement. While direct outcomes of the project were not assessed, the project focused on civic engagement, collaboration, communication, and authenticity. The elementary students were assessed using observations during work periods and the presentations at city council, artifacts of work samples, and conversational reflections about their thoughts on the project (Hunter & Botchwey, 2017).

Service learning has not been framed in the research literature as a potentially high-impact practice for elementary students, but interest in service learning in elementary schools is increasing. As this interest increases, researchers caution that service learning may not be effective if students are not involved in at least 40 hours of related work (Billig et al., 2006). Additionally, the service learning literature emphasizes the importance of making a direct connection between the community engagement and specific subjects or course content (Eyler & Giles, 1999). According to DeJarnette and Sudeck (2016), “Service learning that is connected
with academic study and deep reflection result in the greatest impact on student learning and dispositions regarding community engagement” (p. 143). Burnett and colleagues’ (2005) definition of service learning served as the operational definition of service learning for this study. They (2005) defined service learning as, “a structured learning experience that facilitates the acquisition of awareness, knowledge, and skills while promoting a commitment to personal, social, civic, and professional responsibility” (p. 158).

**Empathy**

Service learning lends itself to the idea of developing empathy in young children. Various operational definitions of empathy are present in the literature. Wiggins and McTighe (2005) operationalized empathy as, “the ability to walk in another’s shoes, to escape one’s own responses and reactions so as to grasp another’s” (p. 98). This study used Bang’s (2013) operational definition of empathy as, “the ability and spontaneous arousal to feel others’ emotions and thoughts and the cognitive and emotional ability to understand others’ views, situations, and roles” (p. 2). Further distinguishing can be made between perspective taking and empathic concern. Davis (1994) defined perspective taking as, “the tendency to spontaneously adopt the psychological point of view of others in everyday life,” and empathic concern as, “the tendency to experience feelings of sympathy and compassion for unfortunate others” (p. 57). In writing of culturally responsive pedagogy for preservice teachers, Warren and Hotchkins (2015) cautioned against false empathy, when an individual thinks they are more empathic than they really are based on the perspective of the beneficiary of the empathetic act. In addition to Bang’s (2013) operational definition of empathy, this study also incorporated Davis’ (1994) definitions of perspective taking and empathic concern, as well as Warren and Hotchkin’s cautions of false empathy as a springboard for separating acts and ideas of empathy from those of sympathy.
Perspective taking can be furthered divided into two types: Imagine Self (IS) and Imagine Other (IO) (Batson et al., 1997). Warren (2018) defines IS as, “when an observer responds to a target’s situation or condition based on personal experience/preference, or a vision/construction of the observer’s own self in the target’s shoes,” whereas IO is defined as, “when an observer responds to a target’s situation based on the knowledge of the target’s personal experience/preference in the moment, if the target were in a position to respond to their own circumstance” (p. 174). In other words, IS includes reacting to someone else’s situation as though you yourself were in that situation, whereas IO is reaction to someone else’s situation based on how you think that person would react.

An understanding of the differences between perspective taking and empathic concern as well as the types of perspective taking in service learning and experiential learning is critical to minimize the risk of othering (hooks, 1989), when individuals or groups of people are seemingly put on display for students. Through othering, vulnerable and marginalized populations may become objectified, and the context, intersectionality, and complexity of individuals’ lives and situations may be dismissed (VanderPyl, 2018). In designing any service learning project, it is critical for educators to assist students in prioritizing the experiences of the individuals whose stories they are hearing and to not set themselves apart or retell stories through their own voices (hooks, 1989; VanderPyl, 2018).

Research supports that children have the ability to express empathy and act prosocially (Hoffman, 2000) especially when appropriate scaffolds are provided (Vygotsky, 1978). Research suggests that empathy is associated with decreases in antisocial behavior, delinquent attitudes, and anger (Eisenberg et al., 2013; Robert & Strayer, 2004). Bang (2013) described a positive relationship between empathy and prosocial behavior and a negative relationship between
empathy and aggressive behavior for upper elementary students after engaging in video viewings and reflective discussions on issues of children’s rights, including poverty, war, child labor, environment, and disease. Research on empathy in young children is mixed. Past research has indicated that younger elementary children do not exhibit empathy, while more recent research suggests that children exhibit empathy as early as age 2 (Hastings et al., 2000). Bang (2013) posited that, in order to develop empathy, young children need to be aware of the issues, have an internalized responsibility to help, and express confidence that their actions will lead to change. Scott and Graham (2015) specifically studied empathy and community engagement in first, second and fifth grade students in the frame of service learning. They found an overall change in empathy and community engagement for all grade levels. However, only fifth grade students exhibited a significant increase in cognitive empathy and civic efficacy. Warren (2018) suggests field experiences, critical classroom discourse, relevant literature, and critical self-reflection as ways to build empathy. Each of these suggestions has an application to service learning.

Integration of Kolb’s Experiential Learning Cycle and Service Learning

The research on service learning framed within Kolb’s ELC is limited and focuses mostly on post-secondary service learning projects. Burns and Danyluk (2017) conducted a study to examine preservice teachers’ emergent professionalism throughout their university experiences, and framed the experiences within the stages of the ELC. Additionally, Chan (2012) used the ELC to examine graduate engineering students’ experiences as they participated in a service learning project in China.

The CE and RO stages of the ELC are directly reflected in service learning’s inclusion of experiential learning and reflection. More research is needed on the experiences of elementary students and teachers as they participate in service learning projects, as well as on the
employment of all four stages of the ELC throughout a service learning project. Further understandings of the relationship between service learning and the ELC could assist educators in planning service learning projects that effectively meet students’ and community needs.

**Implications for the Present Study**

This study used Kolb’s ELC in exploring a service learning project undertaken as a collaboration between a nonprofit organization and an elementary school. The ELC and the current literature on service learning in elementary school were pertinent in framing the study. Further, the study utilized present understandings of empathy

**Conclusion**

Kolb’s ELC includes four stages: concrete experience, reflective observation, formation of abstract concepts, and active experimentation (Kolb, 1984). The Cycle provides a framework for engaging students in meaningful learning that is connected to the world around them, thereby fulfilling John Dewey’s (1938) goal of education as an experience.

In today’s fast-paced classrooms, educators are turning to service learning projects in order to help students develop important skills outside of the content areas. Service learning is composed of three main components: experiential learning, reflection, and reciprocal learning (Dewey, 1938), and provides an opportunity for students to work toward solving real-world problems that impact their communities or society at large, while ideally also creating relationships with communities in which the schools are located (NSLC, n.d.).

This study informed existing gaps in the literature by exploring the experiences of elementary students and teachers during a service learning project and also by exploring the ways this particular service learning project employed the four stages of the ELC. Further, this
The study may provide impetus for other organizations to foster relationships with schools. Research on service learning in elementary school can promote small-scale projects that may have the potential to be inspiring and engaging. The remaining chapters will provide a detailed description of the methodology for the study, followed by detailed results of the data collection and an analysis of the findings.
CHAPTER III

METHODOLOGY

In the past decade, there has been an increase in service learning research. However, little of this research has focused on service learning in elementary school (Kuh et al., 2017). The purpose of this study was to explore elementary students’ and teachers’ experiences in a service learning project. This study examined the ways in which the teachers collaborated with each other and with the nonprofit to implement the project, and also examined the alignment of the service learning project with Kolb’s Experiential Learning Cycle (ELC). I operationalized service learning using Burnette and colleagues’ (2005) definition of, “a structured learning experience that facilitates the acquisition of awareness, knowledge and skills while promoting a commitment to personal, social, civic, and professional responsibility” (p. 158). Further, with the intertwining of the literature on service learning with that of empathy, I defined empathy as, “the ability and spontaneous arousal to feel others’ emotions and thoughts and the cognitive and emotional ability to understand others’ views, situations and roles” (Bang, 2014, p. 2). Further distinction was made in this study between empathy as perspective taking versus empathic concern, or sympathy, as well as the idea of empathy versus false empathy (Davis, 1994; Warren, 2018).

The research questions for this study included:

1. What supports, if any, do elementary educators, support specialists, and nonprofit representatives find most collaborative in implementing a service learning project?

2. In what way, if any, does participation in a service learning project influence elementary students’ interests in community or global engagement?
3. How are the four stages of the ELC actualized in a joint venture service learning project between an elementary school and a nonprofit organization?

   a. How can educators be assisted in better meeting the four stages of the ELC, in order to plan effective service learning projects?

**Research Design**

To respond to the research questions, the research design necessitated that the experiences of the participants, including the students, teachers, and educational specialists, were captured throughout the service learning project. Therefore, I conducted a qualitative instrumental bounded case study (Creswell & Poth, 2018; Stake, 1995). A qualitative instrumental bounded case study is a study that explores a phenomenon in depth within its context, generates knowledge that is specific to that particular context, but which may be generalizable, and is bound to a specific case. The qualitative case study approach allowed for an understanding of the context of the experience of service learning for fifth grade students bounded within the context of one elementary school and one nonprofit organization. Case study design also allowed for convenience sampling, thick descriptions, and an interactive, flexible research design. It required awareness of subjectivities that may have arisen and required that I was considerate of the voice and representation of the participants in the study (Creswell & Poth, 2018; Stake, 1995).

This study was an instrumental case study (Stake, 1995). Stake’s (1995) approach to case study is constructivist and interpretivist, with meaning and understanding discovered through experiences in context. While analytic generalizations can be made to larger populations, the knowledge generated is relative to the context of the particular study (Yin, 2010). This research was bound to one service learning project conducted in collaboration between a specific
elementary school and a specific nonprofit organization. An instrumental case study provides insight into a particular issue, with the case examined in depth. An instrumental case study may or may not be seen as typical of other cases of similar issues, but some analytic generalizations of findings to larger populations can be made. The case can then assist in the understanding of something else, beyond that specific context (Baxter & Jack, 2008; Stake, 1995; Yin, 2010). Stake recommends interviews and observations as data methods for instrumental case studies, and direct interpretation along with thematic or categorial grouping of findings (1995). In this research, the service learning project can serve to inform other elementary school service learning projects conducted in collaboration with nonprofit organizations. Some details of the service learning project in this study are specific to the study and would likely differ at other schools and when working with other nonprofits, including the previously existing relationship between the school and the nonprofit and the collaborative structure of the school. However, knowledge generated regarding other components of the service learning project, such as the application of Kolb’s ELC and the inclusion of reflection at various stages of the project, can inform future research on projects at other schools and with other nonprofits.

The use of an instrumental case study design was important in the data collection and analysis stages of the research. Following Stake’s (1995) recommendation, data included observations throughout the duration of the service learning project, including the Capstone Kickoff, the Hackathon, and the Service Learning Day. Data also included interviews with the teachers and focus groups with the students at the conclusion of the service learning project. There was a continuous reflection on the importance of the reflexive role of the researcher and the interaction between the researcher and study participants. Additionally, following the first round of provisional coding, data analysis consisted of direct interpretation of observational
notes and a thematic grouping of findings, consistent with Stake’s instrumental case study approach (Harrison et al., 2017; Stake, 1995).

**Analytic Generalizability**

Qualitative case study research lends itself to analytic generalizability, or the application of results of a case study to a previously developed theory (Yin, 2010). In this way, analytic generalizability generalizes from specifics of a case study to broader constructs or theories (Polit & Beck, 2010). Yin (2010) further explains analytic generalizability by signifying that an argument derived from a case study can be grounded in the research literature rather than specific to the case study, and that findings can demonstrate how a theory or argument was challenged or how it supported the results. Further, when findings support the theory, the researcher can demonstrate how the findings from the case study can be generalized to other studies with similar situations (Yin, 2010). In this research, analytic generalizability served to connect the present study’s findings to the field and to provide connections and implications for other research on service learning.

**Population and Sample**

This study used convenience sampling (Creswell & Poth, 2018). Participants in the service learning project were male and female fifth grade students, between the ages of 10 and 12, from one public elementary school, located in an urban city in Virginia. The school is a Title I school, with 470 students in grades prekindergarten through fifth grade. One hundred percent of the students at the school qualify for free and reduced price lunch. This elementary school had a prior relationship with Operation Smile (OS) from previous years and contacted OS about working with them again on this Capstone Project. Because I had been in contact with OS about a potential research partnership, I was invited to participate in this project that was already being
conducted. The entire fifth grade, consisting of 65 students, participated in a pilot of a Capstone project and students who returned their assent and informed consent forms and participated in each of the events participated in the focus groups. Students were between 10 and 12 years old. Only students who were present for each of the events (the Capstone Kickoff, Dollar Street activity, Hackathon, and Service Learning Day) took part in focus groups. This was to ensure that only students with a view of the entire service learning project were included in the study. In total, 16 students returned consent and assent forms and each of these students had participated in each of the components of the service learning project. Forty-nine fifth grade students did not return consent or assent forms and therefore were unable to participate in focus groups, regardless of how much of the service learning project they had completed. The amount of student participation in the study was a limitation, as only about 25% of the students who participated in the service learning project also participated in the study related component, the focus group. However, students in each focus group continually discussed the same activities and projects and provided similar general insights into the project, with limited new information presented in each subsequent focus group. Therefore, saturation was reached (Glaser & Strauss, 1967) and the small percentage of student participation was valid. It is important to note that student actions observed and recorded during the activities, such as the Hackathon or Service Learning Day, were not limited to the 16 students who participated in focus groups.

Study participants also included four fifth grade teachers, one teaching assistant, the technology integration specialist at the school, the school librarian, one gifted resource teacher, and one representative from the nonprofit. School specialty personnel other than the classroom teachers were included because the capstone project is a collaborative project and multiple teachers would be working with the students. Besides the librarian, who was new to the school
the semester the study took place, each of the other school staff members had been at the school for at least 4 years and each had participated in at least one service learning project with OS, as well as other service learning projects. The teaching experience of these staff members ranged from 4 years to 30 years. The OS representative was in her fourth year at OS, having previously spent 16 years as a classroom teacher and administrator in the same school system as the school included in the study. As the Associate Vice President of Student Programs, her role was to build relationships with schools and communities in order to plan and implement service learning or other related opportunities for students of all ages. The focus of her role was on increasing knowledge of OS’s mission amongst students on and generating interest in volunteering with the organization in various capacities.

**Instrumentation**

Primary data were collected in the form of interviews and focus groups. I conducted nine interviews, including eight in person and one over the phone. Each of the eight in person interviews took place at the school in an empty classroom. These interviews lasted between 6 and 15 minutes. The phone interview lasted 15 minutes. I conducted four focus groups, all in person at the school. Each focus group included four students. Focus groups took place during lunch, and the classes began lunch at slightly different times. Therefore, the students were grouped by class to participate in the focus groups.

For all activities involving the elementary students, I took on the role of participant-observer in order to engage with the classroom setting and the participants. The role of participant-observer allowed for greater relationship building, which was useful in other aspects of data collection (Creswell & Poth, 2018). As a participant observer, I collected secondary data sources in the form of observational field notes. I also engaged with the groups of students
during their activities. This included answering questions about the activity if necessary or circulating to work with groups on the different projects. The observation instrument for each event or activity included a space to record the date and time, location, activity, total time of the activity, the individuals present for the activity, observations of events and behaviors, and any additional comments or thoughts I had as I observed. The observation instrument is included in Appendix A. The observational notes were coded using the provisional codes derived from an integration of the literature on service learning and the ELC, with additional codes added as they arose. The provisional codes from the literature on service learning and the ELC included reflection, connection, engagement, collaboration, support, and future involvement, as well as the four stages of the ELC (abstract conceptualization, abstract experimentation, concrete experimentation, reflective observation). The provisional and new codes were analyzed using direct interpretation and a thematic grouping of findings (Stake, 1995).

**Student Focus Groups**

Focus groups were conducted with fifth grade students who signed the assent form to participate and whose parents signed the consent form for their children to participate in the study. The assent form was written in age-appropriate language and students were given the opportunity to ask questions. I explained that all students in the fifth grade would be able to participate in the service learning project, and that the assent form and parental consent form were related to students discussing the project with me. Deciding to not participate in focus groups would not affect the child’s right to participate in the service learning project. One week after initial contact with the students, the researcher followed up with the teacher to collect consent and assent forms. The researcher sent home follow-up information and consent forms with students who had not yet returned their forms at that time.
Eder and Fingerson (2003) suggest that, in some contexts, focus groups can be a more useful form of data collection than interviews when working with young children because young children construct knowledge through social interactions. Additionally, a focus group can alleviate some issues of power between a researcher and young child (Eder & Fingerson, 2003). However, a focus group can also provide an opportunity for more verbose participants to share more than others who may not feel as comfortable sharing their thoughts (Eder & Fingerson, 2003). To account for potential power issues that could have still existed, I began each focus group by sitting down at eye level with the students, reintroducing myself, clearly explaining my goals and how the focus group would work, and allowing ample time for student questions. I also continually reminded students that they were free to share any thoughts they had, and that there were no right or wrong answers. To be sure that all students felt welcome in the group and as though they had just as much an opportunity to share as other participants, I also paid attention to gestures and body language to identify students who seemed eager to share but unsure of how to join the conversation. Focus groups were conducted with small groups of four students each. Focus groups were between 15 and 20 minutes long, and occurred on school grounds but away from the classroom to minimize distraction. Focus group questions were semi-structured and addressed the ELC, understandings of OS, and interest in future community or global engagement. I left time for additional information provided by the students. Focus group questions are presented in Appendix B.

**Interviews**

Individual interviews were conducted with the four fifth grade teachers, one teaching assistant, the school librarian, one gifted resource teacher, the school technology integration specialist, and the nonprofit representative. These interviews were between 6 and 15 minutes
long. I conducted the interviews with the teachers and education specialists in person, at the school. I interviewed the nonprofit representative over the phone. The interviews were semi-structured to allow an opportunity for the interview participants to share details beyond those that may have answered the interview questions. Creswell and Poth (2018) recommend the use of semi-structured versus structured interviews to include more participant voice and to provide a richer picture of the service learning experience. Interviewees were asked about their experiences with the service learning project, their personal experiences with OS, and about potential future community or global engagement. Questions also addressed the interest of the teacher in implementing future service learning projects in the classroom and possible advantages or disadvantages of this. Due to the use of semi-structured interviews, I left time for additional information provided by the teacher. Individual interview questions for the classroom teachers and other education specialists are presented in Appendix C. Individual interview questions for the nonprofit representative are presented in Appendix D. I requested permission to record each interview. Overall, the interviews were short in duration. I attributed this to having a limited amount of time in which the teachers were available to meet, and to the teachers having hectic schedules due to end of year testing.

Prior to focus group and interview implementation, questions were reviewed by two researchers who are familiar with service learning and the ELC and question structure was discussed to determine alignment of the focus group and interview questions with the research problem and research questions. Table 1 lists the data that were used to answer each research question in this study.
Table 1

Data Used to Answer Each Research Question

<table>
<thead>
<tr>
<th>Question 1</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
<td>Interviews, observational notes</td>
</tr>
<tr>
<td>Question 2</td>
<td>Interviews, focus groups</td>
</tr>
<tr>
<td>Question 3</td>
<td>Interviews, focus groups, observational notes</td>
</tr>
</tbody>
</table>

Data Collection Procedures

Table 2 details each step of the Capstone Project, including who was involved in each stage, and the role of the elementary students, if applicable.

First, in late fall, the classroom teachers, technology integration specialist, special education teachers, and the high school guidance counselor met with the OS representative to discuss the project and its implementation. In early winter, prior to the Capstone Kickoff, the OS representative also met with the high school teacher and high school students to begin planning their part in the project. I was present for each of these meetings. I explained the study and offered insight when it was requested. The Capstone Kickoff took place in February. For the Kickoff, the OS representative introduced OS and the Capstone project and discussed the concept of empathy with the elementary students. Students watched an informational video about OS, learned about a couple of the previous OS patients and their medical journeys, and also learned about the challenges faced by individuals with cleft palates. I was also present for the Kickoff as an observer.

In the weeks after the Capstone Kickoff, students prepared for and completed a Dollar Street activity in the library. I was not present for this. Because information and understandings gathered from the Dollar Street activity may have influenced students at later stages of the
project, I find a description of the activity warranted. For this hour-long activity, students completed an interest inventory of the countries in which OS performs surgeries. With guidance from the librarian, students researched the countries they had selected on the Dollar Street website. The Dollar Street website provides snapshots of what life is like in any country of the world. For the country selected, you can see pictures and read about a spotlight family, including what their home is like, their most loved items, and things they dream of having. The site also provides information about what typical toys, furniture, bathrooms, books, and other household items look like in each country (Dollar Street, 2019). Students filled out information sheets on their countries of interest, with the goal of getting them to start thinking about what life is like for many of OS’s patients.

The following month, I met with the fifth grade students to discuss the study and hand out the consent and assent forms. At this time, students also participated in the Hackathon portion of the project. Each class was assigned a time to come to the school lab, and students worked in teams of four or five students to solve problems related to the OS mission. The students were assigned to their group by the classroom teacher, and each team was presented with a patient and the patient’s home country. The goal was to figure out a plan to inform the patient’s family, and other families near them, that OS was coming to the region to perform free surgeries. The students had to think about problems such as limited resources, remote locations, and weak telephone or television infrastructure as they brainstormed plans. The students had an hour to work on their plan, and each group also had an adult, such as the TIS, librarian, teaching assistant, or classroom teacher, helping them brainstorm at their table. The adults acted as facilitators, with the students doing most of the work and recording their answers on the poster. Each class initially started with students brainstorming less realistic plans, such as sending
private jets to pick up the patients and their families. As time went on, students were able to reflect on the Dollar Street activity and their other understandings to brainstorm more realistic solutions. I was present for this and acted as a participant-observer, collecting data using the observational instrument in Appendix A.

For the conclusion of the project, students participated in a Service Learning Day with local high school students. The high school students led the event by reviewing OS’s mission with students and sharing their own volunteer experiences with Operation Smile, for those who had previous experience with OS. Under the direction of the high school students, the fifth graders created blankets, hand puppets, cards, and videos about OS. I acted as a participant-observer, collecting data using the observational instrument in Appendix A.

At the conclusion of the Capstone project, in late spring, I conducted interviews and focus groups. A timeline of the components of the study is included in Table 2 and a timeline of the components specific to the study is included in Table 3. The teachers began planning earlier in the school year, and students also began reading *Wonder* (Palacio, 2012) earlier in the school year. However, I did not begin planning this project until December 2019.
<table>
<thead>
<tr>
<th>Event (In Order of Occurrence)</th>
<th>Individuals Involved</th>
<th>Elementary Student Involvement/Time</th>
<th>Role of the Researcher/Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Meeting</td>
<td>Operation Smile representative ❖ Elementary classroom teachers ❖ Instructional specialist ❖ Special education teachers</td>
<td>N/A</td>
<td>Role: I provided input in the planning of the Capstone project and provided guidance for the service learning component. Data Collected: None</td>
</tr>
<tr>
<td>~1 hour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capstone Kickoff</td>
<td>Operation Smile representatives ❖ Elementary classroom teachers ❖ Instructional specialist ❖ Special education teachers ❖ Elementary students</td>
<td>Students given opportunity to reflect on reading of the book, <em>Wonder</em>, and ask questions/discuss the work of Operation Smile. (~1 hour per class)</td>
<td>Role: Observer Data Collected: Observational notes (Secondary)</td>
</tr>
<tr>
<td>~2 hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dollar Street Activity</td>
<td>Elementary classroom teachers ❖ Special education teachers ❖ Instructional specialist ❖ Elementary students ❖ Librarian</td>
<td>Students assigned countries and used the online platform of Dollar Street to research what life is like for the families and their children in these countries. (~45 minutes)</td>
<td>Role: N/A Data Collected: N/A</td>
</tr>
<tr>
<td>~45 minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School Planning Meeting</td>
<td>Operation Smile representative ❖ High School teacher ❖ Guidance counselor ❖ High School IB students</td>
<td>N/A</td>
<td>Role: Observer Data Collected: None</td>
</tr>
<tr>
<td>~2 hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Event (In Order of Occurrence)</td>
<td>Individuals Involved</td>
<td>Elementary Student Involvement</td>
<td>Role of the Researcher/Data Collection</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Hackathon ~5 hours</td>
<td>❖ Operation Smile representatives ❖ Elementary classroom teachers ❖ Instructional specialist ❖ Special education teachers ❖ High School teacher ❖ High School IB students ❖ Guidance counselor ❖ Elementary students</td>
<td>Students assigned hypothetical patients and countries. They will work together to figure out communication and transportation plans for their patients to reach the medical mission sites, as well as troubleshoot other problems that may be faced. (~2.5 hours)</td>
<td>Role: Participant-observer Data Collected: Observational notes; Artifacts (Secondary)</td>
</tr>
<tr>
<td>Service Learning Day ~2 hours</td>
<td>❖ Operation Smile representative ❖ High school teacher ❖ Guidance teacher ❖ High School IB students ❖ Elementary teachers ❖ Special education teachers ❖ Technology Integration specialist ❖ Elementary students</td>
<td>Students worked on various projects, including creating cards for patients, creating speech sock puppets, and quilting together fabric squares to make blankets. (~2 hours)</td>
<td>Role: Participant-Observer Data Collected: Observational notes; Artifacts (Secondary)</td>
</tr>
<tr>
<td>Focus Groups ~30 minutes each</td>
<td>❖ Elementary students</td>
<td>Students participated in focus groups, in groups of 4 students at a time. (~30 minutes)</td>
<td>Role: Focus group facilitator Data Collected: Focus group transcriptions (Primary)</td>
</tr>
<tr>
<td>Interviews ~30 minutes each</td>
<td>❖ Elementary classroom teachers ❖ Technology integration specialist ❖ Special education teachers</td>
<td>N/A</td>
<td>Role: Interviewer Data Collected: Interview transcriptions (Primary)</td>
</tr>
</tbody>
</table>
Table 3
Timeline of the Capstone Project and Research Study

<table>
<thead>
<tr>
<th>Month</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>October</td>
<td>Teachers began planning the Capstone Project</td>
</tr>
<tr>
<td>December</td>
<td>Students began reading <em>Wonder</em> and discussing empathy. Planning meeting with Operation Smile</td>
</tr>
<tr>
<td>February</td>
<td>Operation Smile Capstone Kickoff Dollar Street activity</td>
</tr>
<tr>
<td>March</td>
<td>High school planning meeting Hackathon Service Learning Day</td>
</tr>
<tr>
<td>May</td>
<td>Interviews Focus groups</td>
</tr>
</tbody>
</table>

Data Analysis

As I sought to develop a descriptive account of a service learning project in elementary school, data were collected using classroom observations, student focus groups, and adult interviews. It was necessary to organize, code and interpret the data. The interviews and focus groups were recorded and transcribed. Due to the exploratory nature of the study, interviews, focus groups and observational notes were analyzed using provisional coding (Saldana, 2016).

Provisional coding allowed for the creation of codes at the beginning of data analysis, with the ability to add or adjust codes throughout data analysis (Saldana, 2016). In my research, provisional coding was most appropriate because the study was exploratory in nature. Provisional coding provided a method for organizing data in an area without much previous research, service learning in elementary school. I developed the provisional codes through the
integration of the literature on service learning and the ELC. Dewey’s (1938) writing on service learning highlights experiential learning, reflection, and reciprocal learning. Reflection is a critical component of more recent service learning literature as well (Becker, 2000; Schmidt & Brown, 2015), and therefore was included as a code. Experiential learning and reciprocal learning were both reflected within the active experimentation and concrete experience codes under the stages of the ELC (Kolb, 1984). As an exploration of the ELC as a framework for service learning was one purpose of the research study, active experimentation and concrete experience were used as codes in place of experiential learning and reciprocal learning. Service learning literature has also shown increased community engagement and increased interest in future engagement or involvement as a result of participation in service learning projects (Billig, 2000; Scott & Graham, 2015), as well as the potential for students to make connections between service learning work and their own lives or academic content (Scott & Graham, 2016). Connection, engagement, and future involvement were thus included as provisional codes. Collaboration and support were chosen as provisional codes due to the literature indicating that educators can be pressed for time to spend on extracurricular activities such as service learning, which can lead to leaving out important reflective opportunities due to lack of time (Schmidt & Brown, 2015). Therefore, the following codes arose through a synthesis of the literature: reflection, connection, engagement, collaboration, support, future involvement, and the stages of the ELC (abstract concepts, active experimentation, concrete experience, reflective observation). These codes served as a guide to create the research questions and begin preliminary data analysis through a critical lens.

To ensure the trustworthiness of the provisional coding, consensus coding (Creswell & Poth, 2018) was reached by eliciting a coding partner to code three transcripts, one focus group
and two interviews, as well as one set of observational notes. These transcripts and notes were chosen to include each of the data types and to provide sufficient material for initial coding, reaching coding consensus, and recoding. The coding partner was an advanced doctoral candidate with four years’ experience in qualitative research. First, I met with my coding partner to review the research questions and the literature on service learning and the ELC. We discussed examples that we thought we would possibly find in the data, to create provisional operational definitions of the codes. Next, my coding partner and I each coded one interview and one set of observational notes. After this, we met for the second time to discuss other codes that emerged in our first round of coding. Once we had agreed upon additional codes, we each independently coded one more interview and one focus group. Our third meeting consisted of comparing our coding for each of the new data sets. For each round, we coded the same interviews and observational notes, to achieve coding consensus. The operational definitions we decided upon went into the code book to ensure consistency.

The level of agreement was calculated by looking at the total number of codes created in each of the four data sets, and calculating the percentage of matching codes between the researcher and me. This is detailed in Table 4. For instance, in coding Interview 1, I identified 10 codes and my coding partner identified 11. With six codes in agreement, we had reached 55% agreement. In coding the first round of observational notes, I identified 15 codes and my coding partner identified 13. With 9 codes in agreement, we had reached 60% agreement. Over time, with more discussion of operational definitions of the codes, we reached a higher level of agreement. In round 2 of coding, I identified 10 codes each for the interview and the focus group, and my coding partner identified 9 codes for each. With 8 codes in agreement for both the
interview and the focus group, we reached 80% agreement, which is consistent with Miles and colleagues’ (2014) recommendations.

Table 4

Coding Consensus

<table>
<thead>
<tr>
<th>Data Set</th>
<th>Number of Codes Principal Investigator</th>
<th>Number of Codes Outside Researcher</th>
<th>Number of Codes in Agreement</th>
<th>% Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview 1</td>
<td>10</td>
<td>11</td>
<td>6</td>
<td>55</td>
</tr>
<tr>
<td>(Round 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observational Notes</td>
<td>15</td>
<td>13</td>
<td>9</td>
<td>60</td>
</tr>
<tr>
<td>(Round 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interview 2</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>(Round 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus Group</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>(Round 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These codes were then thematically grouped using direct interpretation of the data and the codes and three themes emerged. These themes included the ELC, collaboration and personal significance. While the stages of the ELC showed overlap with other codes, the stages were kept separate under the ELC theme for clarity purposes. Collaboration was chosen as the overarching theme for the codes of teamwork, support, resources, time constraints and pressure because data coded for each of the codes related to a collaborative relationship between the classroom teachers, other teachers in the school, and the nonprofit. For instance, a couple teachers indicated time constraints and pressure to teach certain standards as obstacles to implementing the service learning project. However, the support from other teachers in the building and provision of support and resources from Operation Smile helped alleviate these concerns. Personal Significance was chosen as the overarching theme for the codes of reflection, empathy,
connection, engagement, and future involvement because each of these codes explored ways in which students may have been personally affected by the service learning project. For instance, students were given some opportunities to reflect upon the novel and the project, which helped them make connections with their own lives, and students were also influenced by being able to identify other global or community needs and ways they wanted to help. The provisional codes, codes from the first round of coding, and themes are presented in Table 5.
Table 5

Progression of Codes

<table>
<thead>
<tr>
<th>Research question</th>
<th>Provisional codes</th>
<th>Sample of coded text</th>
<th>Additional codes from first round of coding</th>
<th>Sample of coded text</th>
<th>Overarching theme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Active Experimentation (AE)</td>
<td>Students participated in the Hackathon to solve problems faced by Operation Smile and the families it serves.</td>
<td></td>
<td></td>
<td>Active Experimentation (AE)</td>
</tr>
<tr>
<td></td>
<td>Concrete Experience (CE)</td>
<td>Students participated in a Service Learning Day where they made products for Operation Smile patients.</td>
<td></td>
<td></td>
<td>Concrete Experience (CE)</td>
</tr>
<tr>
<td></td>
<td>Reflective Observation (RO)</td>
<td>Students participated in morning meetings and other group discussions about empathy.</td>
<td></td>
<td></td>
<td>Reflective Observation (RO)</td>
</tr>
<tr>
<td>2</td>
<td>Support</td>
<td>Classroom teachers had support from guidance counselors, the librarian and the TIS to implement the project.</td>
<td>Resources</td>
<td>The nonprofit provided access to information and supplies for activities.</td>
<td>Collaboration</td>
</tr>
<tr>
<td>Research question</td>
<td>Provisional codes</td>
<td>Sample of coded text</td>
<td>Additional codes from first round of coding</td>
<td>Sample of coded text</td>
<td>Overarching theme</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------</td>
<td>----------------------</td>
<td>---------------------------------------------</td>
<td>----------------------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>Collaboration</strong></td>
<td></td>
<td>The nonprofit is flexible in meeting the needs of the school and leaves it up to the school and teachers to reach out and discuss needs.</td>
<td><strong>Time Constraints/Pressure</strong></td>
<td>Teachers at the school have standards they have to address and it can be difficult to meet those standards and incorporate additional opportunities, such as service learning.</td>
<td></td>
</tr>
<tr>
<td>3 <strong>Reflection</strong></td>
<td></td>
<td>The project gave students a chance to put themselves into roles they hadn’t taken on before and think about situations other than their own.</td>
<td><strong>Empathy</strong></td>
<td>Students indicated that you never know what someone is dealing with, and you shouldn’t judge them without knowing.</td>
<td><strong>Personal Significance</strong></td>
</tr>
<tr>
<td><strong>Connection</strong></td>
<td></td>
<td>Students made connections between what they learned through the service learning project and their own daily lives.</td>
<td><strong>Interest</strong></td>
<td>The project is a great opportunity to open students’ eyes to the different opportunities outside the classroom walls and helps them understand their lives as well.</td>
<td></td>
</tr>
<tr>
<td><strong>Engagement</strong></td>
<td></td>
<td>Students were able to solve real-world problems.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Future Involvement</strong></td>
<td></td>
<td>Teachers have ideas to involve students further, by visiting the Operation Smile headquarters or by working to serve others in the community, such as the homeless population.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Researcher’s Role and Identity

In the initial stages of planning this study, I made contact with OS and intended to plan and implement my own service learning project at a school that was interested in working with OS. While brainstorming project ideas and making contacts, the school included in this study reached out to OS and asked to collaborate on a service learning project that had been completed by previous years’ students but that also would meet the new Capstone Project requirement being piloted by some fifth grade teams.

I was not the one responsible for implementing any of the lessons or activities, as initially hoped, but was present for them and interacted with the students and teachers, rather than simply taking observational notes. I also asked the students questions and acted more as another teacher in the room than an outside researcher. The most difficult part of being treated as more of an outsider than an active participant in the project was when scheduling interviews and focus groups. Through no fault of the teachers, the school was busy with end-of-the-year testing and data collection was not on anyone else’s priority list. It required persistence, patience, and flexibility to complete the data collection.

Limitations

To ensure access to a school, I agreed to collect data on a service learning project that was for the most part a replica of projects completed in past years by OS and the fifth grade team. This arrangement unarguably simplified the planning process on my part. However, this arrangement also stifled the range of data collection and exploration that I could plan to undertake for the study. This arrangement also created a different relationship between me and the teachers at the school than a project I had designed myself would have presumably created. I
was warmly welcomed by the fifth grade team from the beginning, but I was consistently
approached as more of an outsider than I had initially hoped.

Only 25% of the fifth grade students returned consent forms to participate in focus
groups, which limited the amount of data I was able to collect about the service learning project.
Further, the time constraints for both the teachers and the students also presented a limitation for
this research. The teachers in this study had hectic schedules due to state testing and other
commitments. It was difficult to find a time to meet with them for their interviews, and so most
of the interviews took place during short planning periods, and totaled between only 6 and 15
minutes. The short duration of the interviews affected the depth of the discussion in each
interview and the depth of data collected. Student focus groups had to take place during lunch,
which did not leave students with as much time as they may have wanted for discussion, also
affecting the depth of the discussion in each focus group and the depth of data collected.

Summary

A qualitative intrinsic case study design was used to explore the experiences of
elementary students and teachers during a service learning project. This study also examined the
engagement of the four stages of the ELC and the role of empathy throughout the project. Data
were analyzed using provisional coding and codes were chunked into overarching themes to
relate back to the research questions. The following chapters will provide in detail the results of
the data collection and an analysis of the findings.
CHAPTER IV
DATA ANALYSIS

Despite an increase in research on service learning in the past decade, service learning in elementary grades has received little attention (Kuh et al., 2017). This study explored the experiences of elementary students and teachers as they participated in a service learning project conducted in collaboration with Operation Smile (OS). This study also examined the alignment of the service learning project with Kolb’s Experiential Learning Cycle (ELC), in an effort to better understand service learning in elementary school.

As service learning and empathy are central terms in this research, it was necessary to delineate my use of these terms to situate the present study within the field. For the purposes of this study, I operationalized service learning using Burnette and colleagues’ (2005) definition of, “a structured learning experience that facilitates the acquisition of awareness, knowledge and skills while promoting a commitment to personal, social, civic, and professional responsibility” (p.158). Consistent with previous literature on service learning, I defined empathy as, “the ability and spontaneous arousal to feel others’ emotions and thoughts and the cognitive and emotional ability to understand others’ views, situations and roles” (Bang, 2014, p.2). I also critically distinguished between two types of empathy: perspective taking and empathic concern, or sympathy, with careful consideration of the idea of false empathy (Davis, 1994; Warren, 2018).

I collected data in the form of observational notes, interviews, and focus groups. I collected typed observational notes during the Capstone Kickoff, Hackathon, and Service Learning Day. At the conclusion of the service learning project, I conducted individual interviews with eight teachers and educational specialists and one nonprofit representative. I conducted focus groups with 16 students, in groups of four, during the fifth grade lunch block. I
coded the data using provisional coding, and added new codes as they arose throughout data collection (Saldana, 2016). In this chapter, I will present the research questions and a detailed description of the research findings.

Research Questions

The following research questions guided the present study:

1. What supports, if any, do elementary educators, support specialists, and nonprofit representatives find most collaborative in implementing a service learning project?

2. In what way, if any, does participation in a service learning project influence elementary students’ interests in community or global engagement?

3. How are the four stages of the ELC actualized in a joint venture service learning project between an elementary school and a nonprofit organization?
   a. How can educators be assisted in better meeting the four stages of the ELC, in order to plan effective service learning projects?

The remainder of this chapter is organized by the themes that arose throughout the data analysis, which assisted in addressing the research questions.

Coding

Initially, the outside researcher and I identified the following provisional codes from an integration of the literature on service learning and the ELC: abstract concepts, active experimentation, concrete experience, reflective observation, support, collaboration, reflection, connection, engagement, and future involvement. Throughout data analysis, additional codes were created as they arose. These additional codes included: resources, time constraints and pressure, empathy, and interest. As detailed in Table 3 of Chapter 3, an outside researcher was
consulted to ensure coding consensus, reaching 80% agreement. This is consistent with Miles and colleagues’ (2014) recommendations for coding consensus. Ultimately, the provisional and emerging codes were grouped into the following themes: collaboration, personal significance, and the ELC. Below I present a discussion of each of the primary themes using student and teacher voice, as well as data from observational notes, to illustrate. In the description that follows, I will refer to the OS representative as, “the OS representative,” and I will refer to the fifth grade teachers and other education specialists by participant number (Participant 1-8). Students will be referred to by the focus group in which they participated (Focus Group 1-4).

Description of Major Findings

Collaboration

The theme of collaboration included the codes of teamwork, support, resources, and time constraints and pressure. When describing the process of implementing the service learning project, the interview participants identified support from other educators as they worked as a team, the resources provided by the nonprofit organization, and assistance with time constraints and pressures as major elements of the project, which led to collaborative practices. The codes of support and resources were ultimately combined because the interviewees tended to discuss the two jointly. For example, Participant 1, a classroom teacher, described the resources that OS provided about the nonprofit and its mission and the ideas OS provided for the project as helpful for busy teachers and as a way that she felt supported by others throughout the project.

Collaborative practices were central to this team of teachers and educational specialists planning a service learning project of such magnitude, providing opportunities for each member of the team to use their specific role and skills, such as the librarian conducting the research component of the project and the technology integration specialist assisting with the green screen
commercials and other technology-related aspects of the project. Without the presence of collaborative practices, the challenges discussed by teacher and educational specialists interviewed could have been greater.

Teamwork

I specifically asked the OS representative about collaboration between the school and OS. She discussed that the relationship between OS and any school it has worked with has been organic and has arisen based on the school’s and teachers’ needs, saying, “instead of kind of forcing them into a partnership, really just kind of look for that organic growth, um, which has been such a great project.” I did not specifically ask the teachers about collaboration with OS. However, in discussing their individual role in the project, each of the 8 teachers interviewed discussed that the team worked together to contribute to the success of the service learning project. For instance, Participant 8, a classroom teacher, stated that he was one of the co-planners of the project and then added, “we pretty much work as a team.” Participant 4, the Technology Integration Specialist, stated his specific role in fostering collaboration for the project as, “kind of like a liaison between OS and the teachers and instruction.” In the planning meeting for the Capstone project, the teachers and educational specialists discussed the roles that each would play in planning and implementing the project, and discussed action items for each role. For example, the guidance counselor indicated that she would be in contact with the high school teacher and her students, while the technology integration specialist (TIS) indicated that he would be reviewing the technology to be sure that it was ready for the upcoming activities.

Participant 7, a classroom teacher, discussed part of her role on the team for implementing the service learning project as that of a facilitator, explaining, “So, our role in general, um, pretty much to promote the community and talk about it, morning meeting and
make sure we’re showing the videos and, and encouraging their participation basically.” Three additional teacher and educational specialists also used the term “facilitator” in describing their roles in the service learning project, suggesting that the prominent role of OS in providing material about the nonprofit and patients served was important to the project.

The educators and the nonprofit representative viewed the collaboration between the school and the nonprofit organization and even the teamwork within the school as critical to implementing a service learning project. The teamwork element and the understanding on everyone’s part of their role for different components of the project was consistent throughout the interviews.

Support and Resources

The OS representative and three of the teachers discussed support of OS, the school system, and the school in making the service learning project successful. The initial code resources was collapsed into the code support because the two were discussed together by interviewees. In keeping with the creation of an organic partnership, the OS representative discussed that part of her role is to tailor each project to the needs of the school:

I really leave it up to the schools and the teachers to reach out when they’re ready which, with this partnership, is how it’s happened every year, and we just kind of meet with teach other, talk about what the needs are…. What the needs of the school are, how much, you know dedicated the teachers are, what they are able to put onto their plates and manage.

Two of the teachers discussed support for the project and for each other. Participant 5, the librarian, described the individual roles that some of the teachers had taken on during the project.
She and the TIS had personally been in charge of the Dollar Street research activity, and took on the role of assistant for the Hackathon, stating:

    We would each take a group and Operation Smile operated it. We kind of sat with the kids and worked with them, so that’s kind of the general model of it would be like they would oversee the whole thing and we would be with our separate groups, facilitating.

Participant 5, the librarian, was able to express the different roles that representatives from OS and the various education specialists had held for the different components of the service learning project. Her explanation showcased that the roles were clear and that the individuals involved in implementing this service learning project both understood their roles and what they were expected to bring to the table.

    When asked about obstacles in planning for the service learning project, Participant 2, a classroom teacher, stated that she viewed the resources and support from Operation Smile as important in the success of the project:

    A lot of us work together, like the guidance counselor spoke with Operation Smile. She spoke a lot to the [high school] for us. Things that we didn’t necessarily have, you know, the hour or time to email back and forth, so definitely, if your, if your school or organization wasn’t as helpful that could definitely be a big challenge.

Participant 2, a classroom teacher, correlated time constraints and collaboration, and even discussed individuals who helped in the background of the service learning project, but with whom the fifth graders didn’t have any contact during the project. Her statement indicated that the collaboration went below the surface of what was visible to outsiders to the project, and also made use of existing professional relationships between the school and nonprofit organization.
Participant 1, a classroom teacher, discussed the importance of support at the school and from a partnering organization by explaining:

> Just having the resources and ideals thrown out there I think is the hardest. Operation Smile, they love working with us and they really enjoy it but sometimes people get so busy or you don’t have the ideas and you don’t really, you’re so busy like teaching.

For this teacher, both abstract support in the form of ideas as well as concrete support in the form of taking the time to plan activities were important.

Interviews also revealed a consideration of resources for a successful service learning project. Participant 5, the librarian, discussed the instructional team at the school, which was comprised of the librarian, the TIS, a teaching assistant, special education teachers, the gifted education teacher, and the classroom teachers. The creation of this team and the provision of planning time for this team enabled the teachers to collaboratively plan. Additionally, the TIS discussed the planning guidelines provided by the school division, which assisted the TILT team in meeting the requirements for the Capstone project and provided guidance in implementing a service learning project.

**Time Constraints and Pressure**

Each of the 9 adult participants interviewed discussed time constraints and pressures on the parts of the teachers. Participant 5, the librarian, specifically mentioned wishing she had been able to give the students more time to complete the Dollar Street activity, “Give them a little bit extra time to do the research, because they enjoyed it, and they were upset when we got to the end, they wanted to keep learning more.” The students had come to the library at assigned times with their individual classes, and each class had forty-five minutes for the activity. She did not
specify how much time would have been ideal for the activity, but Participants 1, 3, 4, and 7 (a classroom teacher, classroom teacher, TIS, and classroom teacher, respectively), all indicated that they would have preferred more time in general to spend on the service learning project, to enable the students to dig deeper and to incorporate more components. When asked about any obstacles to planning or implementing the service learning project, Participant 7, a classroom teacher, answered, “No, not really, just time-wise making sure we get everything in. That is always a challenge or obstacle.” This teacher had ideas for other projects or ways to extend the current service learning project with OS, but reiterated a couple times throughout the interview that the fifth grade curriculum moves quickly and preparing students for state tests becomes paramount as the year progresses.

Participant 2, a classroom teacher, lamented that the biggest obstacle for her in planning for the service learning project was figuring out how to devote sufficient time to reading the novel *Wonder* (Palacio, 2012) and keep the discussion authentic, while also meeting objectives:

The biggest obstacle is the impact of, *Wonder*, cause it is such a big book, fitting it in while still getting all the objectives in. And everyone is like, yeah well we can teach fiction objectives through *Wonder*, but you still have your nonfiction base. And then you have writing, and then small group. So that’s probably the biggest challenge is just getting through the book and making it authentic. And as well as keeping to the curriculum.

Each of the 8 interview participants mentioned time constraints or time management as a concern or obstacle in implementing a service learning project. Participant 4, the TIS, displayed frustration at not having more time to devote to the engaging material such as service learning activities:
I wish that there was more that we could do. But it’s really hard like with the pressure of performing at a high level as far as a school, covering all the content that we have to cover, versus this really important kind of service learning of the kids… There’s never enough time you know. We always want to do extra or more. But there’s only so many hours in the school day and like I said, we have to balance both this really awesome project versus this kid needs to know the parts of the flower, so he can pass this exam, you know.

Participant 4’s statement highlighted the difficulty in addressing all required content standards and incorporating projects such as service learning projects. This school was in a unique situation, in that the school system was requiring them to complete a service learning project as part of a pilot study, and that the school had a history of collaboration amongst classroom teachers and education specialists. Despite each of these things, each interview participant still discussed time constraints and pressures.

**Personal Significance**

Personal significance included the codes of empathy, reflection and connection, future involvement, and interest. Personal significance was chosen as the theme for these codes because it is an overarching term to encompass different ways that the service learning project could affect students. Reflection and connection were ultimately consolidated into one code because much of the reflection on the part of teachers and the students involved connections to their everyday lives. Each of the teachers interviewed, the OS representative, and each of the student focus groups discussed ways that the project had personally influenced themselves and others involved. The codes under the theme of personal significance were present in the interviews with the teachers and OS representative, and in the focus groups with the fifth grade students.
Empathy

Four teachers specifically mentioned empathy when asked if they felt that the service learning project had influenced students in any way. Participant 7, a classroom teacher, described the tie in between the book *Wonder* (Palacio, 2012) and empathy:

So, um, we really worked on empathy, and we started morning meetings, we talked about empathy. We watched several videos, um, trying to get to those visual learners, with, um, in regards to empathy, and how to, you know, relationships with other people and how to act positively and be successful.

Participant 2, a classroom teacher, likened the challenges faced by her students to those faced by OS patients:

As an inclusion teacher, working with special needs kids, they’re already at a disadvantage, and I think them seeing that there are others who faced challenges and learning empathy and wanting empathy themselves, has absolutely influenced them, absolutely, and I have a big group of kids, and very outspoken kids. It’s kind of, they all have each other’s backs.

The statements from Participant 7 and Participant 2, both classroom teachers, indicated that students were given the opportunity to reflect, albeit in whole group settings, on the work of OS, the meaning of empathy, and the connection of the two to their own lives.

When asked about what they had learned through about empathy from reading *Wonder* (Palacio, 2012) and participating in the service learning project, three of the four focus groups specifically cited examples of what they had learned about empathy. A couple students in Focus Group 4 were reminded by other students in the group about the meaning of the term *empathy*. 
One student described his feelings for the people helped by OS, “Oh. I feel bad for them too because if they have like, besides the cleft palate and stuff, if they have something else wrong they might not have a doctor to help them…so always appreciate what you have.” In this discussion, the student exhibited sympathy by feeling sadness for people who have less than he has, although he identified it as empathy.

Another student in the same focus group added to this student’s statement, “And don’t judge nobody else that’s not like you.” A student in Focus Group 3 began a discussion with his classmates about what empathy had taught them about dealing with other people who may live differently than them, “That you shouldn’t judge people based on how they look.” This was followed by another student, who stated, “You don’t know what someone is dealing with. They could be sad or something and you shouldn’t judge them without knowing. Or they might not have as much as we have. They may live differently.” These students brought the discussion away from sympathy, or feeling sorry for someone else, and toward perspective taking as empathy. While one student did state that someone may not have as much as someone else, he also explained that people deal with different problems and have different situations that affect them.

Similarly, a student in Focus Group 2 described empathy by saying it means you are, “Not mean to people because you don’t know what they have going on.” The discussion of empathy ended in this particular focus group with a student who discussed judging others based on their looks, “We learned to not judge people based on what they look like, so we can be nice to people and remember how the kid in the book felt.” This student’s comment did not clearly exhibit perspective taking as empathy, but instead indicated that he felt sympathy toward the
main character of the book when he was teased and also felt bad for classmates if they were mistreated.

These statements from students in each of the four focus groups indicated that students had been able to make connections to Auggie, the main character in *Wonder* (Palacio, 2012), and situations they saw or experienced in their own lives. In the book, Auggie has a facial deformity and is ostracized by peers. Students paid attention to the internal struggles that Auggie dealt with in the book and saw them play out as classmates at their own school were teased. Many of the students at the school in this study were low-income students, receiving free breakfast and lunch. Nonetheless, activities such as the Dollar Street activity and the Hackathon had exposed them to the challenges faced by individuals in other countries and even for individuals in our own country. However, in identifying and understanding empathy, the students generally interchanged sympathy with perspective taking.

**Reflection and Connection**

The OS representative and each of the seven teachers interviewed discussed helping students dig deeper into what they were learning in the service learning project, to think through the implications of what they were learning and what it meant for the people whose lives they were learning about and their own lives. Each of the four focus groups also revealed that students had made connections between what they learned through the service learning project and their own daily lives. Reflection and connection were jointly coded because most of the reflection appeared to be in making connections to students’ lives.

After stating that she had plans to continue coordinating service learning projects in conjunction with local school systems, the OS representative reasoned that:
I just think it’s, uh, a great opportunity to open students’ eyes, to, to just the different opportunity outside, outside of the classroom walls, whether it’s bringing it into the school or having students, you know explore outside of the school. It just opens their eyes to uh giving back and really being able to, um, understand their lives as well. In helping other people, of course you’re helping that person, but you’re also in return gaining valuable, um, gratification of helping others.

Participant 5, the librarian, discussed that she did not have access to much information on students’ academics, but that she thought the project had influenced students in other ways that would be long-lasting:

They were able to really connect and realize that they were impacting and helping another person in the world. Like when were again, when we were doing the research, they were like, well can we help them?......It’s something that they remember. Like, for a long time. Even after they’ve left here. So I think it’s truly profound.

Participant 6, a teaching assistant, discussed the value he saw in service learning projects as well:

I like to see our students kind of take off their hat, of, you know these tough kids that we normally see. And they were really putting themselves into roles, um, that I hadn’t seen them take on before. Um, so really just kind of thinking about other situations and other circumstances other than themselves.

These statements by the OS representative and Participant 5 and 6, the librarian and a teaching assistant, indicated that the interviewees saw ways that the service learning project effected students, even in simply changing their perspective. Each of the interview participants described benefits for students in terms of things that are nonquantifiable, such as changing their
perspective and helping them think about things beyond themselves. However, in terms of empathy, The OS representative and Participant 5, the librarian, also seemed to interchange sympathy and perspective taking as empathy. Participant 6, a teaching assistant, discussed students “putting themselves into roles,” and taking the perspectives of others, which moves from sympathy to empathy. These statements could also be tied back to the challenges with time constraints. Unquantifiable measures can be more difficult for teachers to justify.

The students were specifically asked about connections they could make between their own lives and what they had learned about OS or empathy. In Focus Group 3, the conversation had drifted and I brought it back the students’ discussion of Wonder and not judging others, but helping them instead. One student, in response to being asked if she had used anything she had learned in her own life, stated:

Yes, ‘cause these kids are rude. See, myself, I will tell them, I’m not really afraid of saying anything to anybody. I will tell them they are rude and it’s not right to say that.

Another student in Focus Group 3 reflected that he could be empathetic by “being nice to people at school,” and followed his statement by adding, “Someone could have a bad day and we can help them.” While the students were specifically asked about connections between what they had learned about OS, empathy and their own lives, these statements indicated that they had given prior thought and reflection to this. It is unknown if any of the examples shared by the students were also situations discussed in morning meetings or during other teachable moments throughout the school day.
**Future Involvement and Interest**

The OS representative and four of the teachers interviewed each discussed how they saw the service learning project leading to their own or students’ interest in future service learning projects or other civic engagement. Interviewees also discussed ideas they had for future involvement. The OS representative noted that OS’s involvement in service learning projects at the elementary level could have an effect on students’ interest in working with OS later:

So it’s kind of planting a seed, um, at a young age, when we’re talking about elementary students and how they can get involved, whether it’s projects at their school or running the Finale Mile, it just opens up another avenue for us to connect with them, and then, you know, stay connected with them, at an older age as they go through middle school and then high school.

When asked about involvement in future service learning, Participant 7, a classroom teacher, expressed a desire to tour the OS facility with students. Participant 7 also explained that she herself was interested in environmental concerns and would like to travel to other countries and help build structures to help others:

I think some students have done it before, but I didn’t get to go with my class. But maybe going actually to the Operation Smile facility. I think it’s down the street, right?....I’ve thought about going to a different country and helping build different things.

Participant 4, the TIS, expressed a desire to extend the service learning project by helping the elementary students make connections with older students who had worked with OS:

I’d love it if we could bring in some kids that [sic] went on mission trips with Operation Smile… I’d love to bring those kids in, so that they could present to our kids, and kind of
like be a peer-to-peer kind of thing. Even though they are older kids, but I think that
would be a really nice addition.

While building students’ understanding of empathy and making content connections
while reading Wonder (Palacio, 2012) were noted by participants as important goals of the
service learning project, the students were ultimately exposed to one specific nonprofit. The
above statements indicated that the OS representative and the other interview participants hoped
that the students would be interested in learning more about and continuing their work with OS.
One classroom teacher, Participant 7, even expressed interest in working with related
organizations herself.

Focus groups also revealed that students had an interest in future service learning
projects. At the time of the focus groups, the entire fifth grade was working on a project about
ocean pollution. When specifically asked if they had an interest in pursuing any other service
learning, a student in each of the four focus groups mentioned this project. Students in Focus
Group 4 stated they could, “do things to keep plastic out of the ocean,” and, “save animals.”
Students in Focus Group 3 shared a story their teacher had told them about finding a sea lion
with a plastic bag stuck around its neck. The bag had become so intertwined on the sea lion that
the rescuers were unable to remove the bag, lest it kill the sea lion by causing an incision too
large to treat.

Students in Focus Group 3 shared ideas for a service learning project involving ocean
pollution, including, “we could tell people to stop throwing plastic in the ocean,” and, “show
them pictures and tell them that what they’re doing is wrong.” The work of OS provided the
framework for the service learning project and the connections between Wonder (Palacio, 2010)
and empathy. However, these statements indicated that the school was working to expose
students to other societal issues and that the students had ideas of their own on how to stay involved in the future. Ultimately, the service learning projects and activities focused on helping others, and students’ interests for future involvement revolved around groups of people or animals that could be helped or saved. Students’ interest in future involvement therefore focused on sympathy, rather than perspective taking as empathy.

**Experiential Learning Cycle**

This research included a secondary aim of exploring the alignment of a service learning project in elementary school with the ELC. Research on service learning and the ELC has mostly focused on post-secondary students (Burns & Dany luk, 2017; Chan, 2012) and there is little research exploring the relationship of the model in elementary service learning. However, an understanding of the relationship between elementary service learning projects and the ELC could support teachers in creating effective and influential projects for their elementary students. Due to limited research on the ELC and elementary service learning, my observational notes and the interviews were coded for the provisional codes of abstract concepts, active experimentation, concrete experience, and reflective observation.

**Abstract Concept**

The abstract concept (AC) stage of the ELC is when students conceptualize a theory or model that they have observed (Kolb, 1984). Observational notes indicated that students discussed the concept of empathy throughout the OS kickoff. Additionally, each event related to the project, including the Hackathon and the Service Learning Day, included a brief review of the concept of empathy and its application to *Wonder* (Palacio, 2012) and the service learning project.
Teacher interviews revealed additional tie ins of empathy to the project. Three of the teachers interviewed referenced the grade-level wide reading of *Wonder* (Palacio, 2012). Participant 3, a classroom teacher, provided a rationale for introducing the novel and the term of empathy to students, stating:

So we read the book, *Wonder*, and then we discussed that, building in the idea of empathy towards others, which went along with Operation Smile, their program for others, trying just to get the kids to realize there’s a whole big world out there besides just them. So we used *Wonder* as that, as that vehicle to do that.

Another classroom teacher, Participant 7, described more specifically how she connected the themes of *Wonder* (Palacio, 2012), including empathy, into her everyday classroom routine:

So, we really worked on empathy, and we started morning meetings, we talked about empathy. We watched several videos, um, trying to get to those visual learners, with, in regards to empathy, and how to, you know, relationships with other people and how to act positively and be successful…We tried to integrate a lot into our, um, morning meetings and empathy and positive thoughts and things like that. How we can help others.

Participant 3, also a classroom teacher, discussed how she constantly tried to reiterate the idea of empathy with her students, “like when we saw behaviors in the hallway, you know, how is that an example of showing empathy to others?” This teacher’s comment indicates that the morning meeting time and spontaneous teachable moments throughout the day may have provided for the authentic application of empathy, by helping students think about situations from other students’ perspectives. These statements from interview participants also revealed that the teachers were
aware of a need to connect the abstract concept of empathy not only to the work of OS, but also to the students’ everyday lives, and that they saw the novel *Wonder* as an appropriate vehicle with which to introduce the project and concepts.

**Active Experimentation**

The active experimentation (AE) stage of the ELC is when students plan to test out the model or theory they have conceptualized based on their experiences, in this instance empathy (Kolb, 1984). Observational notes indicated that students were given an opportunity at the Capstone Kickoff, when they learned about OS and held a grade-level discussion of Wonder, to brainstorm problems faced by the patients helped by OS and ways they could help. Additionally, the Hackathon provided an opportunity for students to once again think of obstacles, such as lack of access to adequate transportation, and discuss possible solutions to the obstacles or problems.

Each teacher listed the Capstone Kickoff and the Hackathon as activities students participated in for the service learning project. Further, three of the teachers interviewed described using class meetings and discussions to help students brainstorm ways they could show empathy in their everyday lives. When discussing her role in implementing the service learning project and in helping students learn about empathy, Participant 3, a classroom teacher, as mentioned above, stated, “We tied into Operation Smile constantly within the classroom, really, like, when we saw behaviors in the hallway, you know, how is that an example of showing empathy to others?” Through making these connections, the teachers helped the students experiment with the concept of empathy not only in problem solving or creating products for OS, but also in interacting with their peers and going about their daily lives.
**Concrete Experience**

The Concrete Experience (CE) stage of the ELC is when students actively experience an activity or event (Kolb, 1984). Observational notes indicated that concrete experiences from the service learning project included the Hackathon and the Service Learning Day. For each of these events, students were able to use what they had learned about OS and empathy to solve problems. For the Hackathon, students worked in groups to come up with solutions to help patients in the same countries they had researched in the Dollar Street activity to reach the OS surgical sites or access other resources. During the Service Learning Day, the fifth grade students worked with local high school students to complete various projects, such as creating news commercials to advertise and educate others about OS’s work, and created blankets and sock puppets to be given to children after their surgeries.

Interviews also indicated concrete experiences. Teachers were specifically asked to describe the service learning project as part of the interview. Each of the 8 teachers and the OS representative was able to describe in detail the activities of the service learning project, including the grade-level wide reading of *Wonder*, the Capstone Kickoff, the Dollar Street activity, the Hackathon, and the Service Learning Day.

**Reflective Observation**

The Reflective Observation (RO) stage of the ELC is when students actively reflect on what they have done or observed. Observational notes, interviews, and focus groups indicated that the students participated in RO through classroom discussions of empathy and the book *Wonder* (Palacio, 2012). Participant 6 noted how the service learning project gave students the opportunity to think, “about other situations and other circumstances other than themselves.”
During the Service Learning Day, a teacher was heard asking a group of students, “What do you think it would be like if people who spoke a different language from you were taking you away from your parents to perform surgery on you and you didn’t really know what was happening?” In an attempt at perspective taking as empathy, the students discussed the importance of the sock puppets as both comfort and instructional items and a few stated they would want to learn basic words in the language of the country they were visiting if they were traveling with OS. While the reflective opportunities were overwhelmingly whole group, the teachers had included these opportunities to help students make connections to their own lives.

**Conclusion**

This instrumental bounded case study explored a service learning project in an elementary school. Using observational notes, interviews, and focus groups, I explored the experiences of the students and teachers as they participated in the service learning project. The themes that arose through provisional coding included collaboration, personal significance, and the ELC. Each of the stages of the ELC, including abstract concepts, active experimentation, concrete experience, and reflective observation, were present in the data, at varying magnitudes. A discussion of the findings and recommendations for future research and practice follow in Chapter V.
CHAPTER V

DISCUSSION AND IMPLICATIONS

The purpose of this study was to explore the experiences of fifth grade students and teachers in a service learning project conducted jointly by the school and a nonprofit organization. Additionally, this study examined the application of Kolb’s Experiential Learning Cycle (ELC) to service learning in upper elementary school, in an effort to extend understandings of service learning in upper elementary school. In an effort to evaluate one method of connecting students’ educations to their daily lives, there has been a recent increase in interest in service learning research (Kuh et al., 2017). Examples of service learning projects for secondary and postsecondary students include projects where preservice teachers interacted with elementary students from different backgrounds (Macknish et al., 2018; Williams, 2016) and a joint project between undergraduate urban planning students and third and fourth graders on healthy living and healthy neighborhoods (Hunter & Botchwey, 2017). Research on the benefits of service learning for high school and college students has found increases in empathy, community engagement and civic responsibility as a result of participation (Kuh et al., 2017; National Commission on Service Learning [NCSL], 2002).

However, service learning in upper elementary school has received relatively little attention, and research on upper elementary service learning typically focuses on the academic benefits for elementary students or benefits for the secondary or post-secondary students who work with the elementary students (Scott & Graham, 2015). More research is needed on the experiences of upper elementary students in service learning projects and on the application of Kolb’s ELC to service learning in upper elementary school, to support teachers’ pedagogical and content decisions when designing and implementing service learning projects. This research could
provide impetus for future service learning projects in elementary school, and specifically service learning projects that align with the stages of Kolb’s ELC. Further, this research could enable teachers to better plan service learning projects to benefit students and communities.

The service learning project at the heart of this research investigation can best be described as a collaborative, jointly implemented project. This project was implemented by the fifth grade teachers and support specialists at an elementary school and representatives from Operation Smile (OS), an international nonprofit focused on providing free surgeries for individuals around the world with craniofacial abnormalities. Students read the book Wonder (Palacio, 2012) to learn about cranio-facial abnormalities and as a springboard for a discussion on empathy, and also completed various activities related to OS over the course of 5 months. This study employed a qualitative instrumental bounded case study design to explore the experiences of these students and teachers as they participated in the service learning project in collaboration with OS. The study also examined the alignment of the service learning project with Kolb’s ELC.

The research questions that guided this study were as follows:

1. What supports, if any, do elementary educators, support specialists, and nonprofit representatives find most collaborative in implementing a service learning project?
2. In what way, if any, does participation in a service learning project influence elementary students’ interests in community or global engagement?
3. How are the four stages of the ELC actualized in a joint venture service learning project between an elementary school and a nonprofit organization?
   a. How can educators be assisted in better meeting the four stages of the ELC, in order to plan effective service learning projects?
In order to situate this study’s findings, it was necessary to operationalize important terms. I operationalized service learning as, “a structured learning experience that facilitates the acquisition of awareness, knowledge and skills while promoting a commitment to personal, social, civic, and professional responsibility” (Burnette et al., 2005, p. 158). Findings also revealed empathy as an important concept for students, with a blurring of the concepts of empathy and sympathy. Therefore, for the purposes of this study, empathy was defined as, “the ability and spontaneous arousal to feel others’ emotions and thoughts and the cognitive and emotional ability to understand others’ views, situations and roles” (Bang, 2014, p. 2). Findings also revealed a necessary distinction between empathy as perspective taking, and sympathy, or empathic concern (Davis, 1994; Warren, 2018).

As this research sought to develop a descriptive account of service learning in elementary school, I collected data in the form of observational notes, focus groups, and interviews. I recorded observational notes during the Capstone Kickoff, Hackathon, and Service Learning Day. Individual interviews were conducted with eight teachers and educational specialists and one nonprofit representative, at the conclusion of the service learning project. I conducted focus groups with 16 fifth grade students, in groups of four. I coded observational notes using attribute coding to capture descriptive data of the study participants. I also coded observation notes, focus groups and interview using provisional coding (Saldana, 2016) to capture the experiences of the participants. I selected the provisional codes based on a synthesis of the research questions and Kolb’s ELC, with additional codes added as new ideas or concepts emerged (Creswell & Poth, 2018).

This process resulted in 15 codes, which I further condensed into 3 themes: collaboration, personal significance, and the ELC. In this chapter, I present implications for theoretical
understandings of service learning and implications for educators interested in implementing service learning projects. I also describe the limitations of this study and provide suggestions for future research.

**Implications**

Given the relatively sparse research on the nonacademic benefits of service learning in upper elementary school, this study provides an initial, descriptive account of fifth grade students and their teachers in one school, as they participated in a service learning project with a nonprofit organization. The analytic generalizability of qualitative research implies that the findings from this study can provide guidance and implications for future service learning projects. Further, the findings can provide impetus for future research on service learning in upper elementary school and on service learning within the framework of Kolb’s ELC (Kolb, 1984), as well as future research on building the capacity for empathy in young students as *Imagine Other* (IO) perspective taking (Batson et al., 1997; Warren, 2018).

The relative lack of research on service learning in elementary school does not necessarily mean that service learning projects are not happening. However, the lack of research leaves administrators, teachers, and nonprofits without guidance on planning and implementing effective service learning projects that engage students in content and service and provide a benefit for other stakeholders, including the nonprofit organization. The findings of the current study suggest implications for the research field of service learning and for educators planning to implement service learning in elementary schools. Addressing both the theoretical and practical sides of service learning could positively impact elementary students’ experiences with service learning.
Relationship Between the Research Questions and Findings

Research Question 1

Research Question 1 explored supports that elementary educators, support specialists, and nonprofit representatives found most collaborative in implementing the service learning project. Service learning literature indicates that time constraints and resource constraints can be important considerations in planning service learning projects, potentially leading to service learning projects that do not include important components such as reflection (Schmidt & Brown, 2015). Findings from the present study indicate that while the teachers and educational specialists felt pressure in planning a service learning project in combination with their other responsibilities and standards to teach, collaborative practices eased some of the burden and facilitated a smooth experience. The evident collaborative practices, such as a delegation of responsibility for different aspects of the project and educational specialists helping to forge relationships with the nonprofit and high school, indicate a clear teamwork model with each member knowledgeable about their personal role, as well as support for one another in the form of providing resources for the project or assisting with communication between the school and the nonprofit. The collaborative practices in this study enabled the educators and educational specialists to create the field experiences and incorporate relevant literature. Additionally, the collaborative practices between the nonprofit organization and the school provided for reciprocity, with both the students at the school and the nonprofit organization benefiting. The collaborative practices of sharing resources and clear communication ensured this reciprocity (Jacoby, 2015), with students learning about empathy and the organization teaching more members of the community about its mission. Pugh (2014) cautioned against putting others on display in service learning projects. Further collaboration between the nonprofit organization and
the school could alleviate any such concerns by allowing the nonprofit representatives to share their expertise regarding the rich cultures in OS’s host countries. These findings contribute to the research base on the role of collaboration in service learning, and can further understandings of the important role of collaboration in elementary service learning. These findings can also provide impetus for changes in future collaboration between schools and nonprofit organizations.

**Research Question 2**

Research Question 2 explored ways in which participation in the service learning project could have influenced students’ interest in community or global engagement. Service learning literature has indicated that participation in service learning projects can lead to increased community engagement and increased interest in future engagement and involvement (Billig, 2000; Scott & Graham, 2015). Scott and Graham’s (2015) study of a service learning project involving first, second and fifth graders found consistent increases in community engagement for all grade levels of students, but increases in cognitive empathy and civic efficacy only for the fifth grade students. Findings from the present study are mixed in support of the assertion that fifth grade can be an ideal grade level at which to expose students to the abstract concept of empathy. Findings indicate that students were interested in learning about empathy, but that they needed additional scaffolding to shift from an understanding of empathy as sympathy and toward one of empathy as perspective taking. One interviewee described the OS service learning projects as, “planting a seed,” for future service learning or involvement. Another teacher described a desire to further students’ learning and understanding by taking them to the OS headquarters or to other community partners. Consistent with research by Lubchenko (2016) showing that elementary students who participated in a service learning project sought out additional service learning projects as a result, focus groups with students revealed that the
students were in fact already working on other projects, such as one on ocean pollution and its effect on animals, and students were able to describe projects they may be interested in in the future, such as other projects on the environment or helping animals. The school in this study could be unique in that the teachers complete multiple service learning or otherwise community-oriented projects each year with the fifth grade students, thereby exposing them to a multitude of community, societal, or environmental issues. There is no way to know if the students would have been able to brainstorm as many future projects without their additional experiences at the school.

In addition to gaining an interest in future service learning engagement, the fifth grade students in this study also explicitly learned about empathy and were able to apply what they had learned about empathy in the context of reading the book *Wonder* (Palacio, 2012) and about Operation Smile to their own lives. This is in line with Bang’s (2013) findings of a relationship between empathy and exposure to issues involving children and children’s rights, such as poverty. Consistent with the service learning research, focus groups in this study revealed that students were aware of the issues faced by the OS patients and their families, and displayed confidence that they were able to create change (Bang, 2013). However, because the students’ and teachers’ comments often expressed sympathy, or false empathy (Warren & Hotchkins, 2015) rather than perspective taking, it is unclear if the students understood their position as outsiders and were able to take the perspective of the patients and their families.

**Research Question 3**

Research Question 3 explored how the four stages of the ELC were actualized in the service learning project, and how educators could be supported in better meeting the four stages of the ELC, in order to plan effective service learning projects. I found a relationship between the
ELC and service learning projects being implemented by teachers at this elementary school. Students engaged in learning about abstract concepts such as empathy (abstract conceptualization), experimented with the ideas through daily applications and during discussions related to OS (active experimentation), and applied understandings to problem solving opportunities during activities such as the Hackathon and Service Learning Day (concrete experiences). Kolb and Kolb (2005) described the ELC as cyclical and spiral, with students experiencing, reflecting, thinking, and acting in a recursive process. Findings from the study revealed that students ventured between the stages throughout the project, for instance, continually learning about the abstract concept of empathy as they participated in various related activities and reflected on these activities. Further, Webhi (2011) argued that concrete experiences should be relevant to students’ own lives and experiences. The fifth grade students were able to connect with Auggie, the main character of Wonder (Palacio, 2012), as he began middle school, and were also able to frame their own lives in relation to the lives of OS’s patients through the Dollar Street activity.

The students in this study were able to explore different aspects of the work of OS in order to help them frame the nonprofit’s mission and the tasks with which they were presented. In this study, findings indicated that students understood the mission of OS and applied that understanding to expressions of empathy in their own lives. The service learning project consisted of activities that enabled students to learn about the families served by OS and how the organization’s mission comes to fruition. Future opportunities for students to visit OS headquarters and participate in virtual simulations of surgical and mission sites would further enhance experiential learning for students, as would additional service learning projects on various related topics that would extend students’ experiences in new directions. In addition, OS
and the school in the study demonstrated a reciprocal relationship (Jacoby, 2015), with OS benefiting from disseminating information about its mission into the community via the elementary students and through students’ creation of green screen commercials that could be used to educate others on the mission of the nonprofit.

Dewey’s (1938) third component of service learning, reflection, has been cited in literature as the most critical component in separating service learning, and that which separates service learning from volunteer work. Becker (2000) found reflection to be a critical component in helping students make personal connections and benefit from service learning projects. The reflective observation stage of the ELC was not addressed as thoroughly as the remaining three stages of the cycle, with personal reflection on the part of students was notably lacking. Reflection took place in the form of brief classroom morning meetings or reviews before beginning the project-related activities, but students were not given the chance to personally reflect at various points throughout the project. This is consistent with research showing that reflection is oftentimes a forgotten component of service learning, due to either lack of time or a lack of understanding of the importance of reflection on the part of teachers (Schmidt & Brown, 2015). Further, Billig and colleagues (2006) posited that students require at least 40 hours of engagement in a service learning project in order to gain benefits. For the present study, as indicated in Table 2 and not including time spent reading Wonder (Palacio, 2012), students spent approximately 7 hours on service learning activities with the OS representatives. This was a critical deficiency of the implementation of the service learning project and may account for the students’ limited responses during focus groups.

The findings of this study extend the existing knowledge base of service learning based on the ELC, by providing an understanding of the alignment of components of service learning
projects with the stages of the ELC. Enriched understandings of the ELC as a framework for service learning in elementary school could enhance elementary service learning projects by providing guidelines and research-based support for educators, ensuring that all four stages of the cycle are thoroughly addressed.

**Support for Teachers.** Literature on service learning indicates that service learning projects are happening at the elementary level (Scott & Graham, 2015). Findings of this study indicate that while service learning is indeed happening, educators lack appropriate support from researchers, administrators, and nonprofits in thoroughly implementing all stages of service learning. The teachers and educational specialists in this study had experience implementing various service learning projects with their students. A framework integrating theoretical and pedagogical understandings such as the ELC could be used to enhance service learning projects and provide maximum experiences for the students. An understanding of the ELC would also highlight for teachers the importance of reflection in a service learning project (Becker, 2000) and could assist in lengthening the amount of time spent on service learning projects throughout the school year. This study provides initial insight into service learning in upper elementary school. Further research is needed on the concept of empathy in upper elementary school service learning and on methods for incorporating content and reflection into service learning projects.

Eyler and Giles’ (1999) seminal work on service learning found that students’ benefits from service learning are enhanced when direct connections are made between the community engagement sought and specific subjects or course content. Findings from this present study indicate that the teachers and educational specialists worked to make content connections for students, but mostly from the perspective of meeting time constraints. Findings did not indicate that the teachers and educational specialists set out with specific content objectives in mind when
planning the service learning project. However, the novel *Wonder* (Palacio, 2012) was used as a springboard for the discussions on empathy and OS’s work with craniofacial abnormalities, and more direct connections could have been made for students through the literature. Future research could also explore ways to provide support to teachers in making direct content connections in service learning projects.

**The Role of Empathy in the Service Learning Project**

Students’ use of empathy emerged as an unexpected finding of this work. Previous research findings demonstrate that elementary students can experience growth in their understanding of empathy as a result of being made aware of societal issues, feeling an internalized responsibility to help others, and expressing confidence that their actions will lead to change (Bang, 2013). Findings from the present study indicate that one objective of the service learning project was for students to learn about empathy and its application in their daily lives through reading the novel *Wonder* (Palacio, 2012), and through discussions connecting the novel and the work of OS.

The service learning project attempted to help students build their capacity for empathy by learning about Auggie’s struggles and the struggles of OS patients. At times, the project waivered uneasily between empathic perspective taking and empathic concern, or sympathy (Davis, 1994; Warren, 2018). For instance, in the Dollar Street activity, students were able to explore daily life for families in other countries. The search results on the website can be sorted by income, and students can view the belongings of a family living in a country such as the Philippines, learn how much money they live off a month, and learn about their consumer goals, such as to purchase bedsheets or pots and pans (Dollar Street, 2019). Without proper guidance and reflection, this activity could veer easily into the empathic concern domain, with students left
feeling sorry for families in other countries who do not have the material belongings we have in the United States, or even lead to the faulty connection that facial abnormalities are a direct result of family income. In fact, focus groups revealed that some students “felt sorry” for the people living in other countries who didn’t have doctors to take care of them if they got sick.

The Hackathon, during which students brainstormed ways to inform families in the host countries about OS surgical missions, also ran the risk of placing empathic concern over empathic perspective taking (Davis, 1994; Warren, 2018). Students were instructed to solve problems in spite of deficits of the host countries and the patients’ families. However, despite the initial deficit perspective, there were examples of students thinking outside the box and attempting to understand the patients and their families, rather than fix shortcomings. For example, during one Hackathon session, students in one group discussed the importance of futbol for families in the host country and decided that OS could advertise in the futbol stadiums to reach potential patients. The students in this group were excited to discuss futbol and its role in the lives of individuals in the host country as a positive part of their culture and not as a deficit that anyone needed to fix. In this example, the students exhibited perspective taking as Imagine Other (IO), by basing their actions on how they thought the patients and their families would act, based on what they knew about them (Batson et al., 1997).

OS’s intention never seemed to be to separate the lives of patients in other countries from the lives of the students participating in the service learning project. In fact, the nonprofit representative discussed using Dollar Street as a way for students to see ways they were similar and different from patients served by OS, to think about what it would be like to be a kid living in another country with the resources, for better or worse, of that country. In the future, OS plans to create a virtual field trip experience for students at the International Headquarters. In this
experience, students will walk through a simulation of a surgical site and pretend that they are the medical or support volunteer assigned to that patient. An opportunity to walk through the simulation as an actual patient rather than a volunteer could extend the learning even further. This could be an opportunity for OS’s reach to extend beyond sympathy to the perspective taking that characterizes authentic empathy (Davis, 1994; Warren, 2018) and prevents othering (hooks, 1989).

**Implications for Educators and Nonprofit Organizations**

The understandings illuminated by the present study should be woven into teacher preparation programs to provide preservice teachers with practical information needed to plan engaging and effective service learning projects. The findings from this study can inform work at the level of the nonprofit organization and elementary school, providing recommendations for planning for and enhancing existing service learning projects. The findings of this study indicate several recommendations for school systems, administrators, instructional staff, and nonprofits. These recommendations are summarized below:

- **Collaboration**
  - **Support and Resources**
    - School administration and instructional staff must work together to identify student and community needs, and to sustain relationships with community organizations
    - Careful planning should take place before the start of a service learning project, including identifying the specific roles of all involved (administration, instructional staff, community organization)
  - **Time Pressures**
- Administration should ensure that instructional staff are allocated an appropriate amount of time to implement a service learning project, and ensure that time is balanced to provide adequate attention to all aspects of the service learning project.
- During the planning stages of the project, relevant standards should be identified and integrated in meaningful ways. These standards should also be made explicit throughout the project, to instructional staff and students.

**Personal Significance**

- **Empathy**
  - For upper elementary students, children’s literature can be integrated into the project to support students’ understandings of abstract concepts.
  - Careful consideration should be given to helping students understand the difference between imagining how another person feels in a situation and how the students themselves would feel in that situation (empathic perspective taking versus empathic concern).

- **Reflection and Connection**
  - Students should be provided with more frequent opportunities for reflection throughout service learning projects and these reflections must be tied directly with students’ experiences.

**Experiential Learning Cycle**
Service learning projects should incorporate each of the four stages of the ELC, with special emphasis on reflection for both instructional staff and students. This reflection could take place in the form of recorded reflections, as originally intended here, or in daily or weekly journals. Student privacy regarding reflections should also be considered. The school system could play a large role in helping teachers understand the critical components of service learning and in helping teachers creatively incorporate each critical component into projects. Providing teachers with the knowledge, resources and support they need to incorporate reflection would help ensure that this critical component of service learning is not left out.

**Analytic Generalizability**

The results of this case study support the literature on empathy, service learning and on the ELC. While future projects and studies will have unique parameters, analytic generalizability allows for implications and recommendations to be drawn nonetheless. The findings of this research can be generalized to other studies on service learning projects with similar situations (Polit & Beck, 2010; Yin, 2010).

**Limitations**

There were limitations in terms of my influence and input on the service learning project and time constraints on my involvement at the beginning of the project due to the research approval process for the school system. I came into the school to explore a project that was already mostly designed and had already begun. Additionally, I was also unable to begin interviews and focus groups until much later than anticipated due to the testing schedule and other commitments on the part of the fifth grade teachers. The amount of time between when the fifth grade students
completed the project and when they were given the opportunity to reflect on the project with me could have played a role in the amount of information and reflection that students were able to share, especially since they had not had much opportunity for personal reflection throughout the rest of the project. In addition to a larger gap than expected between the end of the service learning project and interviews and focus groups, the teachers and students also had hectic schedules and limited time to meet with me. Each of the interviews and focus groups was much shorter than anticipated, lasting between 6 and 15 minutes.

These time limitations could be assuaged in future service learning projects by ensuring that teachers and other team members have adequate time to build a collaborative, reflective project that accounts for incorporating the critical components of service learning (Schmidt & Brown, 2015). Researchers with existing relationships in schools could also assist in service learning project design prior to gaining access to actual data.

**Future Research**

There is relatively limited research on service learning at the elementary level (Celio et al., 2011; Kuh et al., 2017). The research that is available tends to focus on academic achievement (Scott & Graham, 2015), rather than on components such as empathy or engagement. Each service learning project is unique and takes place in a unique context. For this reason, research on specific service learning projects should be understood in the context of the generalizations that can be made about service learning and elementary students in general. However, future research could explore how to best assist teachers in better understanding the components of service learning and in supporting them in implementing effective service learning projects that include the core components of service learning (experiential learning, reflection, reciprocal learning), in face of logistical challenges and time pressures. There is also a lack of research
tying service learning, and more specifically elementary service learning, to the ELC. Research that supports the use of this conceptual framework in service learning can provide further support for the importance of the core components of service learning.

**Conclusion**

This study was a qualitative case study that explored the experiences of fifth grade students and teachers as they participated in a service learning project implemented in conjunction with OS. The teachers at the school in this study had an existing relationship with OS, having completed service learning projects with them in the past. The service learning project in this particular study was also completed to meet school division requirements for a fifth grade Capstone Project.

Major themes were derived from qualitative data—observational notes, focus groups, and interviews—which resulted in three themes. The theme of collaboration included teamwork, support, resources and time constraints and pressure. The theme of personal significance included empathy, reflection, connection, future involvement, and interest. The theme of the ELC included the four stages: abstract conceptualization, concrete experience, reflective observation, and active experimentation. Findings revealed various ways in which the teachers at the school collaborated with other staff at the school and with nonprofit representatives. Findings also indicated ways in which the service learning project applied the stages of the ELC and ways in which students were influenced through participation in the project.

While findings from this study were specific to one service learning project at one school, suggestions for future research and practice can be ascertained. In order to better align future service learning projects with current research on important aspects of service learning, such as the amount of time students should spend on service learning projects (Billig et al., 2006) and
content connections (Eyler & Giles, 1999), service learning projects of greater intensity and depth could be beneficial, as could service learning projects that provide more clear connections between service and academic standards and more opportunity for teacher and student reflection. Attention should also be paid to helping students develop authentic empathy, or empathy as perspective taking rather than empathic concern (Davis, 1994; Warren, 2018). School systems should encourage schools and teachers to pursue their own and students’ interests in forging collaborative relationships with nonprofit organizations and provide support to teachers in understanding what comprises service learning and incorporating all components of service-learning, in order to enhance the service learning experience for students. This study also shed light on the importance of a supportive school system and school in providing the structure for an effective service learning project. Additionally, teachers can encourage students to share their thoughts in open dialogue more frequently to help them become accustomed to reflective conversation, provide more opportunities for engagement with the service learning project, and provide clearer connections between the service learning project and academic standards. As service learning experiences serve to connect students’ learning to real world experiences and provide other benefits for students’ social and emotional development, projects such as the project included in this study can be highly valued.
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APPENDICES

APPENDIX A. OBSERVATIONAL INSTRUMENT

Elementary Service-Learning Project

Date and Time: ___________________________
Location: _______________________________
Activity: _______________________________
Total Time: _____________________________
Individuals Present: _____________________

Observations of events and behaviors:

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Additional Comments:

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APPENDIX B. FOCUS GROUP PROTOCOL

1. You recently participated in a project with Operation Smile. Tell me about the different activities that you did for this project.
   a. What did you think of the activities?
   b. Was there anything you particularly liked or didn’t like?

2. What did you learn about Operation Smile?

3. Is this the first time you have participated in a project where you learn about children living in other parts of the world?
   a. How has it made you feel to learn about children who live differently than you?

4. Do you think that you have learned anything from participating in this project?
   a. If yes, what have you learned?
   b. If no, why do you think that is?

5. Have you used the things you have learned about in this project at other times in school or at home?

6. Do you think that this service-learning project has changed the way you feel about your ability to make a difference for others? Why or why not?
   a. If yes, can you give me an example of how you feel that you could make a difference for others?

7. Is there anything you would like to do or learn about for a future service-learning project?
APPENDIX C. INSTRUCTIONAL STAFF INTERVIEW PROTOCOL

1. How familiar were you with Operation Smile before completing this service-learning project with your class?
   a. Has your participation in this service-learning project increased your understanding of Operation Smile’s work?

2. How familiar were you with service-learning in general before completing this project with your class or classes?

3. Please describe components of the Capstone project that took place in the classroom, for which Operation Smile was not present?

4. What was your role in implementing this Capstone service-learning project?

5. What did you think of the activities in this service-learning project?
   a. Were there aspects of this project that you liked?
   b. Were there aspects of this project that you didn’t like?

6. What changes would you make if you completed a similar service-learning project as part of a Capstone project in the future?

7. Has this service-learning project impacted your students in any way?
   a. If yes, in what ways?
   b. If not, why do you think that may be?

8. How likely are you to complete a future service-learning project with your current class or with future students?
   a. If likely, do you have ideas about future service-learning projects?

9. Did you face any obstacles or disadvantages when implementing this Capstone service-learning project? What were those?
10. Is there anything else you would like to share regarding your experience completing a Capstone service-learning project with your classes and Operation Smile?
APPENDIX D. NONPROFIT REPRESENTATIVE INTERVIEW PROTOCOL

1. How familiar were you with service-learning in general before completing this project?

2. How likely are you to complete a service-learning project with a local school in the future?

3. What things would you keep the same for this project in the future?

4. Is there anything you would do differently? Why or why not?

5. Has this service-project impacted the groups you serve in any way? If yes, how so? If no, why do you think that is?

6. Is there anything else you would like to share regarding your experience with this service-learning project?
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