Kennesaw State University

DigitalCommons@Kennesaw State University

Doctor of Education in Teacher Leadership Dissertations

Department of Educational Leadership

Winter 12-15-2022

Service Learning- It's Elementary! Teacher initiated service learning at an independent school

Kate Burton

Follow this and additional works at: https://digitalcommons.kennesaw.edu/teachleaddoc_etd Part of the Teacher Education and Professional Development Commons

Recommended Citation

Burton, Kate, "Service Learning- It's Elementary! Teacher initiated service learning at an independent school" (2022). *Doctor of Education in Teacher Leadership Dissertations*. 58. https://digitalcommons.kennesaw.edu/teachleaddoc_etd/58

This Dissertation is brought to you for free and open access by the Department of Educational Leadership at DigitalCommons@Kennesaw State University. It has been accepted for inclusion in Doctor of Education in Teacher Leadership Dissertations by an authorized administrator of DigitalCommons@Kennesaw State University. For more information, please contact digitalcommons@kennesaw.edu.

Service Learning- It's Elementary!

Teacher initiated service learning at an independent school

Kate Burton

Kennesaw State University

A Dissertation Presented in Partial Fulfilment

of Requirements for the Degree of Doctor of Education in the

Bagwell College of Education

ACKNOWLEDGEMENTS

I would like to first acknowledge my parents for the strong educational foundation they gave me. The mantra, "school is your job," became so deeply ingrained in me that school became my career, and it's a career I love. "All those years of private school education," are finally paying off.

I am deeply grateful for my grandmother, Charlotte Young Ferguson, and my aunt, Dr. Patricia Humbertson, for being role models of intelligent women who pursue education. While I know I'm not nearly as intelligent as they were, the roads they paved in higher education made me believe that it was something possible for me, as well.

Dr. Erin Adams, my steadfast committee chair, dedicated far too many Sunday mornings coaching me through the writing of this dissertation. I will be ever-grateful for her gentle guidance and for the excellent questions she asked to help me clarify my thinking.

Finally, I would have given up many times without the support of my husband, Kyle Burton. He patiently listened to my innumerable rants and ramblings, pumped me up when I doubted myself, dried my frustrated tears, and told me to "get moving" when I needed to hear it. He hasn't seen the dining room table in the years it's been my "grad school work area." He reorganized weekend plans around what I felt I needed to do for KSU. And he never groused when I insisted I needed to sit in some Starbucks in Arizona for hours of road-side WiFi when we should have been out hiking in some National Park. I absolutely could not have done this without him.

1

ABSTRACT

Service learning involves specific and intentional academic and learning goals that are achieved through service to a community and reflection. Often the responsibility for ensuring that service learning in schools is meaningful and successful falls to teacher leaders with little specific training on organizing such efforts. This research inquiry examined the experiences of nontraditional teacher leaders and the choices they made while designing and implementing service learning projects for their elementary students. This research also examined the setting and structures that were in place to facilitate these service learning initiatives. Data analysis found the themes of ties to the curriculum, ownership and connection, and students "shouldering the weight" to be instrumental.

Keywords: service learning, elementary students, independent schools, teacher leadership

Table of Contents

ACKNOWLEDGEMENTS	1
ABSTRACT	2
CHAPTER 1: INTRODUCTION	6
INTRODUCTION	6
Issue and Background	8
PURPOSE OF STUDY	10
RESEARCH QUESTION	12
JOURNEY TO THE RESEARCH TOPIC	11
SIGNIFICANCE OF THE STUDY	12
GLOSSARY OF TERMS	13
SITES OF INQUIRY	13
INDEPENDENT SCHOOLS	13
ELEMENTARY SCHOOLS	14
LIMITATIONS AND ASSUMPTIONS	17
CONCLUSION	17
ORGANIZATION OF THE STUDY	17
CHAPTER 2: LITERATURE REVIEW	19
INTRODUCTION	19
THEORETICAL FRAMEWORK	19
Social Constructivism	19
PROGRESSIVE EDUCATION	20
REVIEW OF LITERATURE	21
Service Learning	21
COMMUNITY SERVICE AND PHILANTHROPY	21
Service Learning Benefits	22
Service Learning in Education	23
Service Learning Studies	24
SOCIAL JUSTICE PEDAGOGY AND THE BENEFITS OF PAIRING IT WITH SERVICE LEARNING	25
SERVICE LEARNING, SOCIAL JUSTICE, AND AFFLUENT SCHOOLS	28
SCIENCE K-12, SCIENCE ED, AND SERVICE LEARNING	30
SCIENCE BACKGROUND FOR ELEMENTARY TEACHERS OF SCIENCE	31
INSTRUCTIONAL CORE	32
CITIZEN SCIENCE	33
TEACHER LEADERSHIP	34
Change- Facilitated and Hindered	37
LIMITATIONS IN THE LITERATURE	38

CHAPTER 3: METHODOLOGY

<u>39</u>

INTRODUCTION	39
RESEARCH DESIGN AND PURPOSE	39
Phenomenology Texts within Teacher Experience Research Question Setting and Population Independent Schools Williams Academy Participants Positionality Data Collection	40
	41
	42
	42
	42
	46
	47
	47
	48
Analysis	49
CONCLUSION	50
CHAPTER 4: FINDINGS	51
INTRODUCTION	51
THE SERVICE LEARNING PROJECTS	51
FRESHWATER FAIR	51
PANTRY PALS	55
FINDINGS	56
Freshwater Fair	56
PANTRY PALS	60
THEMES IDENTIFIED	65
Theme 1: Ties to curriculum- explicit and hidden	65
Theme 2: Connection and ownership	69
Connection	69
Ownership	72
Buy-in.	73
THEME 3: STUDENTS "SHOULDERING THE WEIGHT"	73
Service Learning or Community Service?	75
CONCLUSION	75
CHAPTER 5: DISCUSSION	78
INTRODUCTION	78
DISSERTATION SUMMARY	78
FINDINGS SUMMARY	79
LESSONS LEARNED	79
BUY-IN	80
Ownership	81
STUDENTS "DOING"	82
CITIZENS NOW	83
Discussion	84
STUDENT AGE	84
"Pics or It Didn't Happen"	85

SUGGESTIONS FOR FURTHER INVESTIGATION	87
FINAL CONCLUSION	88
REFERENCES	90
APPENDIX A	100

Chapter 1: Introduction

Introduction

Walking toward the school's science hallway, the noise of happy chaos grows. At the entrance to the hall, a Fifth Grade teacher, Mrs. G, greets my sixth grade homeroom and shows them where to place their five "entrance" coins. As her peers walk by dropping their fistfuls and Ziplocs with coins into the orange five-gallon bucket, one of my students peers into the bucket and comments, "I don't know Mrs. G, do you think this class of Fifth Graders will raise as much as we did last year?" Mrs. G smiles and jokingly responds, "I don't know about the money, but I do know that the game on the Irrawaddy dolphin is much better than the one you made me play last year!" The sixth grader goes into a pretend pout, crosses her arms across her chest, and says, "Where's that game? I've got to see my competition!"

As my students drop their five coins into the bucket, they enter the hallway under pennants that spell out, "FRESHWATER FAIR" and immediately disperse to find which fifth grader created a game about the threatened or endangered freshwater organism that they had researched and designed a game about last school year.

What is normally a quiet hallway to the school's two science labs has been transformed for the morning. Both sides of the long linoleum stretch have been lined with a variety of freshwater fair games which are manned by their fifth-grade creators. Some games are complex cardboard arcade-styled constructions along the lines of Caine's Arcade, others are handmade board games, and some are complicated feats of physicality requiring PE equipment like scooters and cones. The fifth graders are either guiding students in the rules and strategies of their game, or they are acting like carnival barkers enticing those navigating the crowded hallway to stop and

try their games. Happy shouts erupt from a game called, "Feed the Toad in a Flash" and several first graders who were undecided about which game to try join the line for that one. Further down the hall, I stop to watch one of my students who is using rulers to dig in shoeboxes filled with dried pinto beans to find buried plastic bugs that are the goal of this game and symbolize the mata mata turtle's food. My student is blindfolded to simulate the blind way these fish use their barbs to hunt for their next meal, and the proud fifth grader asks if I knew that "mata mata" means "it kills, it kills," and if I'd like to try being a mata mata turtle next. I decline and move on to watch another fifth grader explain to a Pre-K student how her hopscotch-like game shows all the dangers to diamondback terrapins as they migrate to their nesting grounds.

Upstairs in the school's media center, the same noise, joy, and learning can be found. Fifth graders are showing leadership and their knowledge of threatened or endangered freshwater organisms as they guide other students through the games they designed and built. I lean toward one of my students who is playing a game that many would recognize as being similar to Skee Ball, and ask, "what organism did your game focus on last year?" The young man grins at me and says, "The Gharial crocodile. This one!" I ask him what he thinks of this game, and he responds, "It's so much better than mine!" and the fifth grader blushes.

This annual event at Williams Academy is eagerly anticipated by students and faculty. Younger students are in awe of the games that the fifth graders present. Older students look forward to checking out what the games are like for the organism they had researched the previous year. Teachers and administration beam with pride over how the fifth graders are showcasing their learning and maturity. Fifth graders build leadership while flexing their creative muscles and teaching others about a threatened or endangered organism that depends on a freshwater ecosystem. And, these 10 and 11 year-olds raise awareness and funds to help others gain access to clean water. With this service learning project students showcase months of their learning and research, build a positive self-identity, have a sense of purpose, and carry buckets of hope with each orange five-gallon bucket they fill with coins. None of this would have been possible without one teacher's passion and leadership.

Issue and Background

Defining Service Learning

Berman (2006) defines service learning as "in-context learning that connects specific educational goals with meaningful community service" (p.xxi). Through service learning, students, "learn course content, processes, and skills, strengthening their thinking skills as they develop empathy, personal ethics, and the habit of helping their communities" (p. xxi). For students, embedding service learning within a social justice curriculum provides an opportunity to establish life-long traits of working toward making improvements to society. Young people who are exposed to the world's inequities and injustices are more likely to grow into adults who will continue to serve as community volunteers (Seider, 2008b), become community activists (Cammarota, 2011; Nurenberg, 2011; Seider, 2008b), and feel empathy for those who suffer (Cammarota, 2011). Since these emerging adult years are the period of life that will start career and life tracks that will determine where they go and who they will become in future years (Seider, 2008a). Youniss & Yates (1997) note, "service within the context of the social justice course triggered political awareness and steered the identity process in a useful direction toward political involvement" (p. 82). Additionally, "much is gained from learning processes that allow young people to reflect positively on who they are, where they live and how they might bring changes to the world around them... he or she grows intellectually and acquires the confidence to handle a variety of challenges" (Cammarota, 2011, p. 829). The example above fit the service

learning criteria in the following ways: students were extending their knowledge of course content and skills as they researched freshwater organisms and designed engaging ways to teach others about those organisms, they developed empathy for those who have to travel long distances to have access to freshwater as they experienced a simulated "walk to water," and these students developed agency and efficacy as they saw how they could inspire others to care about freshwater organisms and people's access to freshwater.

With all of these benefits to students who engage in service learning, there must be hurdles in the way of more widespread implementation and implementation early in learners' educational careers. Clearly, service learning is beneficial to students. What may account for its absence from schools? What factors must be in place for service learning success? This dissertation will investigate both the "setting" factors and key decisions that influenced two service learning projects initiated by teachers in an elementary schools. This study is situated in teacher leadership, which is identified by classroom teachers who take on roles that serve the larger school community's growth and improvement.

Teacher Leadership

You may have noticed "Mrs.G's" presence during the Freshwater Fair. Teachers are a vital component in any school's service learning project. For service learning projects to be successful, organizing teachers need to navigate how to be transformational teacher leaders directing learning that is meaningful to individuals and those individuals in their groups. This can be a tall order, but the benefits are great for those willing to undertake the challenge. Fullan (2016) states, "educational change stands or falls on whether educators, students, and other learners find personal meaning in what they are learning and how they are learning" (p. 4).

9

Teacher leaders are defined by Katzenmeyer and Moller (2009) as, "[educators who] lead within and beyond the classroom; identify with and contribute to a community of teacher learners and leaders; influence others toward improved educational practice; and accept responsibility for achieving the outcomes of their leadership" (p. 6). The role of teacher leader is very important in any change initiative in schools because it is this person to whom other educators will look to for guidance, advice, and validation of the movement. While they may not have an official leadership position, the most effect teacher leaders have master transformational leadership because they are, "energetic, enthusiastic, and passionate, and they inspire others to change expectations, perceptions, and motivations so that they can work toward common goals" (Aguilar, 2016, p. 29). These are the teachers within a school who get things done and are able to motivate other teachers to follow them. They are integral to any change movement. The teachers in this study are teacher leaders without official leadership roles. They are educators who believed they saw a way to improve their students' educational experience, were willing to put in the effort to make a change and take responsibility for that change, and lead other educators to do the same with the "energy, enthusiasm, and passion" that Aguilar references.

Purpose of Study

The purpose of this teacher leadership study is to examine how teachers in an independent school think about, design, and implement science-anchored service learning for elementary aged students. It considers the differences between service learning and community service as well as the potential impact on those doing and receiving the service. It investigates how service learning is different from community service and the benefits gained by those providing the service when it is service learning. This study will also probe into the nuances that come with designing and implementing service learning for learners under the age of

thirteen. Because this study took place in an independent school, it will consider the unique challenges and opportunities present in independent schools when designing and implementing service learning. And for the reasons that both projects analyzed were tied to science curricular goals and that this researcher has extensive background teaching science which affects her worldview, there will be conversation focused on how science topics are a fertile ground for service learning. The study takes into consideration how the unique combination of setting, stakeholders and leadership, and curriculum draws on, and contributes to, scholarship in these three areas.

Journey to the Research Topic

My initial interest in service learning in independent schools came through a "bird walk" after reading Ladson-Billing's (1995) "But That's Just Good Teaching." I was taken by the article's presentation of culturally relevant pedagogy, and wondered how culturally relevant, or sustaining, pedagogy would look with the population I taught, who were, at times, just as unfamiliar with middle-classifying curriculum subjected on the urban and indigenous populations the articles on culturally sustaining pedagogy described. I was interested in modifying the tenets of culturally sustaining pedagogy to better fit and benefit the financially privileged youth I was teaching in independent schools, and making a change to how my students approached service in their community seemed like the place where I could affect the most change.

This led me to the work of Seider (2008a, 2008b) and Swalwell (2013) who both researched privileged students conducting service. Seider offered advice on pitfalls to avoid, and Swalwell suggested building ally-ship in students, which was welcome guidance, but both worked with high school aged students. I looked for models of how to establish service learning with elementary students that wouldn't have them becoming protective and ungenerous with their resources and wouldn't entrench them in the "savior" mindset. It appeared I had stumbled into a hole in the research that needed to be filled with my inquiry.

Research Question

The question driving this project was, "how can elementary students take advantage of all of the benefits of service learning while avoiding the potential pitfalls?" Central to this project will be the question, "what should teachers consider and prioritize when designing a service learning project or program for elementary-aged students?" Within social justice pedagogy, many have researched how both marginalized and affluent populations engage in and develop knowledge through experiences in service learning. When looking for research on service learning, it was frustrating to find that most studies and guidebooks on developing a service learning program focused on undergraduates, preservice teachers, or high schoolers and only mentioned elementary students as recipients of service, not as providers. This seems to be an area and age that has not been closely considered, and it is my belief that the elementary school years are when most learners' impressions, interests, and perceived efficacy begin to be solidified. I wanted to know how teachers could orchestrate these complicated projects that were impactful to the students participating in the projects and the communities they were helping with their work. I decided to interview teachers to understand their decision-making process and the nuances in their designs.

Significance of the Study

The project addresses how true service learning and social justice pedagogy can build servant leadership in our youngest students. Lessons learned from this project are valuable for educational leaders, school administrators, and adults who would like to help young people make positive change in society for the future. Optimistically, this project serves as a model that can be adapted for other school communities so that today's students can see a place for themselves as leaders for change and beneficiaries of that change. I found that successful service learning projects take into account factors such as students having the ability to have voice and choice in how they would contribute and honored students abilities and capabilities. It is my hope that this study reveals the nuances of successful projects that might not be obvious from a brief description of the projects' goals.

Glossary of Terms

Independent school. Independent schools are non-profit private schools that operate under their individual management, missions, philosophies and budgets. (NAIS, n.d.)

Service learning. Service learning involves specific and intentional academic and learning goals that are achieved through service to a community and reflection (Berman, 2006; Cress, 2013; National Commission on Service Learning, n.d.).

Community service. Community service occurs during activities to meet community needs for the sake of the beneficiaries (Cress, 2013; Turner, 2012).

Teacher leadership. Teacher leadership concerns teachers, legitimized by other teachers, to lead within and beyond their classrooms, to contribute to a community of learners and leaders, to influence others toward improved educational practice, and who accept responsibility for achieving outcomes (Katzenmeyer & Moller, 2009).

Sites of Inquiry

Independent schools

Independent schools are schools that operate independent of state governance and of one another. Most of the population would know these schools as "private" schools; schools which charge tuition and have application processes for attendance. Because independent schools do not receive funding from state and local taxes, they do not have to follow state or national curriculum standards or guidelines. Many independent schools will follow the same curriculum standards as public schools, some will use the standards as a reference point, and others still have their own curriculum guides.

Each independent school has its own mission statement. The mission statement acts as a guidepost for decisions made by the school's board of trustees and school leadership. And each school is accredited, or re-accredited every five years, by being assessed on how closely it is following its mission statement. Depending on what is included in the mission statement, and depending on how school leadership decides how to fulfill the mission, service learning may or may not be a priority. Like any other choice in schools, without school leadership's support, service learning cannot be sustained.

Additionally, because independent schools charge tuition, there is some necessity for administration and teachers to acknowledge the need for some "customer service" skills. This is not to say that families are making curricular or programmatic decisions; it is the educators and leaders of the school that are doing this. But, successful independent school educators know their population, make decisions that will support the school's mission, and are skillful in educating families about why decisions were made. If families do not like the decisions that are being made, they do not have to enroll their children.

Elementary schools

Elementary schools are schools for students beginning in Kindergarten (age 5- 6) and typically provide education through fifth grade (age 11-12). The curriculum in elementary

schools focus on numeracy and arithmetic, literacy (which covers phonics, reading instruction, reading comprehension, and writing composition), and socialization skills.

Elementary schools are busy places in which many, and varied, curricular goals compete for students' time and attention. Service learning projects for elementary-aged students must fit within the school day and cannot be so in-depth or time consuming that they take away from other realms of the curriculum. For example, a project undertaken in a 2nd Grade classroom that is able to support and extend classroom curricular standards cannot utilize time when the students should be in a "specials" area like art, music, or PE. While it would be superb to design a project that connected to all facets of a student's academic week, doing so would require planning and input from more than just the traditional classroom teacher who does not teach art, music, PE. The unfortunate reality is that every teachers' planning time is stretched thin, and orchestrating the scheduling of multiple teachers while also including teachers who teach multiple grade levels (like art, music, and PE teachers do), would be a tremendous difficulty.

Additionally, students' time outside of the school day is directed by families and caregivers who have their own priorities. Again, this limits service learning projects to taking place within school hours as elementary students cannot decide for themselves to give up a Saturday afternoon and cannot drive themselves to service locations. It also bears mentioning that families might be wary of projects that have elementary-aged students coming into contact with those who are being served or might have a particular political or philosophical leaning. For students under the age of 13, families still have a lot of influence over what those students can be exposed to.

Young people are capable citizens and problem solvers (Payne, 2018; Swalwell & Payne, 2019). As a classroom educator I see this every day. Yet, there are constraints on all children's

ability to act independently, and these are compounded at the elementary level. As much as many educators and this researcher believe that young students are capable of handling complex problem-solving and tackling worldly issues, there is no denying that elementary students' age limits the amount of learning experiences and accumulated background knowledge they can tap into. Young students may understand their own hunger when they've forgotten their lunchbox, and we can ask them to extrapolate out and consider how others might also feel hunger, but we also need to recognize that analyzing how neighborhoods and towns' layouts might create food deserts is a challenging task for adults. And, educators should use caution in how issues are presented to young learners to avoid the protectiveness of their own advantages that Seider (2008b) identified in his research.

Science

Science is a curricular area which has many topics that young people find easy to engage with and the citizen science movement is a fertile ground for service learning activities, but there are still limitations that come when choosing science as a curricular in-road to service learning. Teacher leaders spearheading a service learning project anchored in science need to recognize that other educators might not be as comfortable with the science concepts or the nature of science. Some of this might be due to Lortie's (1975) "apprenticeship of observation" and current teachers' elementary experience not containing a lot of science instruction or experiences. It bears recognizing that preservice teachers' coursework focuses on instruction in literacy and numeracy while in-service elementary teachers will need content knowledge in life, physical, and earth/ space science. For example, at my institution, a B.S. in PreK- 5th education requires only 6 hours in science content courses which cover physical science and life and earth science combined, while there are 18 required hours in numeracy and 15 hours in literacy.

Additionally, teacher leaders need to recognize that many elementary teachers' schedules do not allow for complicated material preparation, lab set-up, clean-up, or the occasionally necessary "Plan B, C, or D when things didn't work right" time that is needed when teaching hands-on or inquiry science. Finally, once a subject area focus is chosen for a service learning focus future options are "pruned." Elementary teachers are generalists who are charged with covering a wide array of topics and skills; too much time in one subject will invariably take time from another.

Limitations and Assumptions

As with any study, the particular elements of setting, choices made, participants included come with limitations. For this study, the nature of how independent schools are led and accredited, the age of the students involved, and the curricular arena established conditions that needed to be navigated. These parameters do not necessarily limit the findings' application in other settings, but they do need to be acknowledged to understand why certain decisions were made.

Conclusion

Some teachers and administrators might look at service learning as an "extra." And in the busy world of elementary schools, service learning is easy to push way down on a priority list because the students are so young and this would put additional responsibility on teachers who are already covering a lot of ground. But, with some focus on what is most important to include and feature, elementary teachers will find that service learning can meet curricular and "soft skills" goals while encouraging servant leadership in their students.

Organization of the Study

This study contains five chapters. Chapter 1 defines the issue, the research question and purpose. It also explains the significance and limitations of the study, includes a glossary of

terms, and defines the organization of the study. Chapter 2 offers a review of the literature that guided the study and will provide a framework for further exploration of service learning, social justice pedagogy, and teacher leadership. Chapter 3 describes the methodology utilized for this investigation and provides details on the setting, population studied, and data collection. The findings of the study are presented in Chapter 4. And Chapter 5 includes a discussion of the findings, lessons learned, and suggestions for further investigation.

Chapter 2: Literature Review

Introduction

This literature review describes the theoretical basis for this study and topical research relating to service learning, social justice pedagogy, and teacher leadership. This will establish the study's importance and build the foundation from which the inquiry developed. This study seeks to add to the body of knowledge on successful service learning projects and how teacher leaders can design these successful projects.

Theoretical Framework

Mertler (2014) states that in qualitative research "One begins with specific observations (data), notes any patterns in those data, formulates one or more tentative hypotheses, and finally develops general conclusions and theories" (p. 8). Further, Cresswell (2013) explains that we use qualitative research because "a problem or issue needs to be explored..., we need a complex, detailed understanding of the issue..., we want to empower individuals to share their stories..., [to] explain the mechanisms or linkages in causal theories or models..., [and finally] to develop theories when partial or inadequate theories exist for certain populations and samples" (p. 47-48), and it is for these reasons that a qualitative approach to this research was taken. By collecting my colleagues' "stories" about the phenomenon of initiating and implementing service learning for elementary-aged students, I hope to develop theories about how others can do the same. Because this inquiry will result in theories being postulated, it is important to first identify which theoretical frameworks anchor it at the onset. The study is informed by social constructivism and Dewey's progressive education.

Social Constructivism

Social constructivism involves individuals who seek to "understand the world in which they live and work" (Creswell, 2013, p. 24) and it utilizes participants' subjective views of the phenomenon or event. Social constructivism also recognizes that researchers' interpretations will be influenced by their own background and observation of the event as knowledge is being constructed. As a researcher whose data was the stories from colleagues about how they developed their service projects, I was relying on what they were willing to share about how their built their knowledge, but also, I came to the inquiry with experiences observing their projects and other projects at the school.

Progressive Education

Progressive education, as described by John Dewey, is identified by "expression and cultivation of individuality... free activity... learning through experience... acquisition of [skills and techniques] as means of attaining ends which make direct vital appeal... making the most of opportunities of present life... [and] acquaintance with a changing world" (1938, p. 36-37). Williams Academy leans toward progressive education in its philosophy on how students should interact with their education, and, as such, the service learning projects were sown in progressive "soil." The school identifies "cherishing childhood," "deepening students" educational experience," and "empowering students in their learning" as some of its program and pedagogy pillars, and these are specifically rooted in progressive education. Most independent school families wouldn't explicitly identify that they are looking for a school with certain philosophical backgrounds or leanings, but the families who choose Williams point to those pillars and how they manifest in the daily lives of the learners as some of the reasons for their choice of this school. As an educator, progressivism is my philosophy of what education should be and guides my decisions. I initially considered employment at Williams because of its progressive roots, and I have stayed at Williams because of how they have encouraged and supported my application of progressive education in my classrooms there.

Review of Literature

In discussing how to best develop and support educators who work with urban youth, Duncan-Andrade (2007) reminds us, "From child psychology to pedagogical theory to cognitive theory, our most basic understanding of the necessary conditions for learning suggest that positive self-identity, a sense of purpose, and hope are critical prerequisites for achievement" (p. 635). Duncan-Andrade's point holds not just for urban youth, but for all learners. Some students find a positive self-identity, have a sense of purpose, and feel hope through traditional studies and curriculum, but in some places, educators use service learning projects and required service hours to facilitate more opportunities to build these prerequisites for achievement.

Service Learning

Berman (2006) defines service learning as "in -context learning that connects specific educational goals with meaningful community service... Students learn course content, processes, and skills, strengthening their thinking skills as they develop empathy, personal ethics, and the habit of helping their communities" (p. xxi). Many people and educational institutions use the term service learning interchangeably with community service or philanthropy, but it is important to note some critical differences between the terms.

Community Service and Philanthropy

In *Learning through Serving*, Cress (2013) explains community service as a project through which "students engage in activities to meet actual community needs as an integrated aspect of the curriculum," while service learning utilizes "community service activities with intentional academic and learning goals and opportunities for reflection that connect to their

21

academic disciplines" (p. 9). Billig (2011) pulls no punches in her explanation of the difference between service learning and community service when she states, "action' is the only component that service-learning and community service typically have in common" (p. 9). Further removed and without any real action other than donation is philanthropy which Oxford Languages defines as "the desire to promote the welfare of others, expressed especially by the generous donation of money to good causes." In a world full of need, community service and philanthropy can begin to bridge gaps, but both are finite solutions. For perpetuating solutions, a different approach should be taken.

Service Learning Benefits

Many causes need monetary donations, and many causes need action to meet a community need, but if precious school time is going to be used for these activities, there should be a connection to the curriculum, learning should be taking place, and there should be benefits for the learners engaged in the activity, all of which makes service to the community service learning. Researchers have concluded that the benefits of service learning include academic gains, social-emotional wellness, greater engagement with civic issue, increased problem-solving ability, improved self-concept, and greater self-efficacy and leadership (Allen, Fosler, & Orange, 2021; Atwell, Bridgeland, Manspile, 2021; Billig, 2017; Billig, Root, & Jesse, 2005; Celio, Durlak, & Dymnicki, 2011; Rimm-Kaufman, Merrit, Lapan, DeCoster, Hunt, & Bowers, 2021; Serriere, Mitra, & Reed, 2011). The National Youth Leadership Council (2009) has set forth standards for "quality" service learning which include service which is meaningful and personally relevant, linked to the curriculum, includes ongoing reflection, promotes diversity and understanding, allows for student voice, and establishes collaborative and mutually beneficial partnerships. For those looking implement service learning, it is important to utilize these

standards in the planning and throughout the project as several studies have found that service learning projects with greater adherence to the standards show more growth in the aforementioned benefits than those participating in projects that do not show evidence of the standards (Allen, Fosler & Orange, 2021; Baumann, 2012; Billig, Root, Jesse, 2005).

Service Learning in Education

Using Kennesaw State Library's SuperSearch with the keywords "service learning" or "service-learning," selecting the discipline of Education, and limiting the search to scholarly/ peer-reviewed journals supplies almost 73,000 results. Filtering those by geography, it becomes apparent that a majority of the research is located in the United States (2,825). The next most frequent location is in Australia with 324 studies. Further filtering the search results by geography within the United States whittles that only 59 studies were located in the southeast, which is the location of this study. By adding the keyword of the level of student (i.e. "college students" or "elementary students") to studies done in the United States, there are 2,561 studies with college-age students, 420 studies with high school students, and a measly 85 with elementary students. A cursory survey of the abstracts of the first 40 results for research located in the United States on service learning with elementary students, only 14 included service learning in the abstracts, and of those, elementary students were the *recipients* of the service in nine of them. Some examples include pre-service Special Ed teachers helping at an afterschool program (Lane, et al., 2011) and urban high school students making song boards and audio tapes for elementary music classes. While the service providers and the elementary students all gained something and benefitted from the interaction, the elementary students were the receivers of the service. There were no examples of elementary students performing the service, but there were two examples of elementary students learning about civic responsibility or social justice. The

former detailed how an elementary teacher used natural disasters like the Indonesian tsunami and Hurricane Katrina to spur historic, geographic, economic, and political discussions (Lintner, 2006), and the latter study explored elementary students' perceptions of homelessness (Chung & Li, 2020) through a printmaking exercise (printmaking is the artistic practice of transferring an image from a surface with ink to another surface as in stamping, woodcut, or screen printing). These projects certainly broadened students' understanding and provided opportunity for critical thinking, but neither of them engaged students in service learning because students were not participating in any service. In searching for service learning research, it appears that many researchers categorize "service learning," "experiential learning" and "community engagement" together, and as a result, searches for "service learning" result in projects like these that do not include any service but instead focus on opportunities for students to apply their learning or raising students' awareness.

Service Learning Studies

This survey of the literature showed that most of the studies on service learning in this country are taking place in colleges and universities with university students being the ones providing the service. I limited the search to include only education resources, and as a result, of the service learning projects that were working with elementary students, it was most often preservice teachers who were providing the service. This lack of studies on elementary students doing the service learning does not mean that these projects aren't happening. It is possible that there are examples of elementary students involved in service learning in the United States, but the adults who are helping to facilitate those projects are not also submitting articles to peer-reviewed scholarly journals about that work. This suggests a need for researchers to go "down" to elementary schools to seek out untapped resources and undiscovered projects of note.

Social Justice Pedagogy and the Benefits of Pairing It with Service Learning

One way to enhance the impact of service learning for students and meet more of the National Youth Leadership Council standards for quality service learning is to anchor it in social justice pedagogy. Social justice pedagogy is described by Chubbuck and Zembylas (2008) as transformed policies and pedagogies that "improve the learning and life opportunities of typically underserved students while equipping and empowering them to work for a more socially just society themselves" (p. 285). Swalwell (2013) further delineates that social justice pedagogy must contain three key elements:

1) a curriculum that includes multiple perspectives (*content mastery/ functional* and *critical literacy*) grounded in an assumption that systemic, institutional oppression exists (*critical analysis tools/ critical literacy*)

2) a democratic classroom where students' voices are valued and lives reflected (*awareness of multicultural dynamics/ democratic literacy*) with opportunities to engage in individual critical self-reflection (*awareness of multicultural dynamics/ self-reflection tools/ relational literacy*)

3) practice participating in collective action at the micro and macro levels (*social change tools/ democratic and relational literacy*) in order to build a less oppressive society (*social change tools/ visionary literacy*) (p. 19)

Embedding service learning within a social justice curriculum provides an opportunity to establish life-long traits of working toward making improvements to society in our students. Researchers believe that young people who are exposed to the world's inequities and injustices are more likely to grow into adults who will continue to serve as community volunteers (Seider, 2008b), become community activists (Nurenberg, 2011; Seider, 2008b), and feel empathy for those who suffer (Cammarota, 2011) since these emerging adult years are the period of life that will start career and life tracks that will determine where they go and who they will become in future years (Seider, 2008a). As noted in Seider, (2008b), "Service within the context of the social justice course triggered political awareness and steered the identity process in a useful direction toward political involvement (Youniss & Yates, 1997, p. 82)." Additionally, "much is gained from learning processes that allow young people to reflect positively on who they are, where they live and how they might bring changes to the world around them... he or she grows intellectually and acquires the confidence to handle a variety of challenges" (Cammarota, 2011, p. 829). Service learning embedded in social justice pedagogy doesn't just meet immediate needs, it can set young people on a path of life-long problem-solving and involvement.

For non-marginalized student populations, another benefit of exposure to social justice pedagogy is that these young people become aware of the fact that not everyone lives the way they do and that there are benefits to growing up as part of a community that does not struggle to meet daily needs and can spend extra income toward educational ends (Seider, 2008b). Freire (1970/2000) argues that these privileged youth will have humanity restored to them through social justice pedagogy when, as members of the oppressor class, they lose their power to dominate and suppress (Nurenberg, 2011; Swalwell, 2013). There is liberation in discovering where they hold the power because then they can decide if they do want to hold the power.

As beneficial as it is for non-marginalized and affluent youth to recognize the educational advantages that they are receiving, Seider (2008b) noted an increase in protectiveness of those advantages. Goodman (2000) points out that "people are less likely to experience empathy if their own needs feel more pressing than those of other, if the victims are seen as accountable or

deserving of their fate, if the others are seen as too different from themselves, or if the situation feels too psychologically threatening," (p. 1065) all of which are possible when exposing adolescents in the mainstream population to examples of injustice. Even urban youth, like those studied by Camangian (2015), "were selective in developing their social consciousness, motivated to reflect on the intersection of oppression that they identified with more than considering other systems of subjugation that they had the privilege to overlook" (p. 442). Educators exposing young people to the differences in advantages bestowed upon different groups need to tread carefully to avoid widening the divide.

For mainstream or affluent populations, social justice pedagogy is frequently wrapped in multicultural content. Gibson (2014) found that when affluent populations learn about privilege and oppression, students have been found to withdraw from class participation, experience feelings of powerlessness and guilt, and anxieties about being viewed as a perpetrator (p. 207). These responses indicate "identity threat" as Dolly Chugh describes in *The Person You Mean to Be* (2018) as, "we each have identities we claim. We look to others to grant those identities. When we don't get that affirmation, we feel threatened, which is stressful, and we do things we would not normally do" (p. 5). Students who see themselves as "good" people feel threatened and withdraw when they see that others may see them or their privilege as part of the oppression. Seider (2008b) also found that exposure to the fact that millions of Americans live below the poverty line or are homeless caused many students to worry about one day experiencing financial difficulties themselves.

Because there is some risk that exposing students to injustices of the world will cause the affluent students to perceive a greater divide between themselves and those who suffer, educators need to take precautions against alienation and paralysis. Goodman (2000) found that "after

people recognize a moral injustice, the next step is motivating them to take some action to remedy the situation" (p. 1070). It can be helpful to tap into moral and spiritual values of individuals and groups as a motivator (Goodman, 2000). And confidence in the belief that individuals can affect change is necessary for students to identify opportunities to be compassionate to others who might be suffering (Cammarota, 2011). Educators should tap into students' agency and reassure them that they can make a difference. The following section discusses how researchers have dealt with these issues in affluent schools.

Service Learning, Social Justice, and Affluent Schools

Affluent student populations should be developed into activist allies (Gibson, 2014 & Swalwell, 2013) to benefit the individuals and society as a whole. Defined by Broido (2000), allies are "members of dominant social groups (e.g. me, Whites, heterosexuals) working to end the system of oppression that gives them greater privilege and power based upon their social group membership" (p. 3). The strength of the ally model lies in that individuals can work to end oppression through the power bestowed upon them based on their group membership. And in a classroom, students with more power can be "'de-centered' and asked to be better listeners to each other, as well as to take responsibility for inequalities that happened within their classroom" (Swalwell, 2013, p. 117). The ally model provides an approach to social justice "built on social identity. It maintains that all have a role to play in promoting social justice, regardless of their social identities in oppressed and oppressor groups" (Gibson, p. 199). Seider further recommends that teachers "take advantage of students' fears through formal exercises in perspective-taking (Selman, 1980)" (2009, p. 56).

Swalwell (2013) offers the advice that "activities emphasizing personal connections to injustice, critical self-reflection, listening, and relationship-building over times with people from

marginalized groups" were more effective than "those activities that emphasized abstract knowledge, emotional disconnection, intellectual opining, and unidirectional service projects or short-term field trips" (p. 111). Like many topics in education, building ally-ship in young people is more effective if educators make the learning personal and personally important. Goodman (2000) emphasizes the importance for students to be "given the opportunity to get to know actual people and experience their situations firsthand" (p. 1067). Swalwell (2013) suggests, "expose students to multiple perspectives, explicitly connect facts and figures of social justice issues to students' daily lives, engage students' emotions and intellects, and contextualize injustices within individual acts and structural forces that reproduce injustice" (p. 123) to help avoid common pitfalls when engaging non-marginalized students in service learning and social justice issues.

Most importantly, educators should build classroom communities that are supportive and encourage deeper understanding of self and others through dialogue. Cammangian (2015) suggests that teachers "foster classroom cultures that critically nurture the ability for teachers and students to confront the painful parts of our lives and the struggles facing the oppressed people" (p. 436). Further, "to arouse students' critical intellectualism, teachers must connect learning to students' experiential knowledge and encourage them to study in the interests of their communities" (p. 437). It is within these supportive classroom communities that students can tackle these weighty issues with a critical lens.

One way to arouse students' interests and engage them in critical discourse about social injustices is through the thoughtful selection of reading material. "Engaging readings that help students demystify their oppression is important for students to have concrete historical ways to explain their current condition as oppressed people" (Camangian, 2015, p. 441). Nurenberg

found that with privileged populations it was important to select "texts and materials that explicitly feature white, privileged characters who recognize (and who themselves are harmed by) their privilege and pairing these texts with those multicultural authors" (2011, p.61). Seider, whose work focuses on privileged students who he found often became disengaged with social justice issues, recommends that rather than only exposing students to radical or provocative perspectives in their literature selections, "educators might consider offering students more balanced perspectives that recognize and attempt to reconcile the many competing viewpoints on a particular social issue" (2009, p. 57). By considering literature choices as "windows, mirrors, and sliding glass doors" (Sims Bishop, 1990) educators can buttress and launch student understanding

Science K-12, Science Ed, and Service Learning

The Science Council (n.d.) defines science as, "the pursuit and application of knowledge and understanding of the natural and social world following a systematic methodology based on evidence." In *A Framework for K-12 Science Education* (2012), the National Academies of Science, Engineering and Medicine state, "In the K-12 context, science is generally taken to mean the traditional natural sciences: physics, chemistry, biology, and (more recently) earth, space, and environmental sciences" (p.11), but most K-12 students in the U.S. would describe science as" the study of the world around us." Because of *A Framework…* and its successor, the Next Generation Science Standards, modern K-12 science classrooms not only include the science "facts," found in the Disciplinary Core Ideas, but students are also explicitly taught how to do scientists and engineers do with Science and Engineering Practices like conducting an inquiry and making observations, and they are exposed to Crosscutting Concepts like cause and effect, finding patterns and diversity, and stability and change.

Because I became a science teacher through a non-traditional path, I conducted an exploration of the courses in Science Ed at Kennesaw State University to better understand how much science content background teachers entering the profession might have. Kennesaw State offers B.S.es in Secondary Education with specializations in Broad Field Education (Biology Emphasis), Chemistry Education, and Physics Education. For Broad Field Education, students have 16 hours in biology courses which include genetics, microbiology, ecology, and an anatomy or physiology course. Additionally, they have four hours in earth science (geology, meteorology, and oceanography) and eight hours in physics (mechanics, thermodynamics, waves, electromagnetism, and optics). The Chemistry Education specialization requires 28 hours all in chemistry and includes physical, inorganic, organic, biochemistry, environmental, and eight hours in quantitative classes based on chemistry lab exercises. Finally, the B.S. in Physics Education requires 30 hours in physics courses. These courses cover mechanics, electromagnetism, modern physics (structure of matter), quantum physics, computational physics, differential equations, and calculus based on lab experiments.

Science Background for Elementary Teachers of Science

At Kennesaw State University preservice teachers planning to teach middle or high school science are required to take at least 28 hours in science content courses. By contrast, preservice teachers preparing to teach at the elementary level, which will require them to teach literacy, numeracy, social studies, *and* science only requires three hours of science teaching methods and eight hours of introductory science content, the same science content an English or Marketing major would be required to take. Since middle and high school science teachers typically specialize in one branch of science in their teaching, 28 hours seems a reasonable background to support their instruction. However, for elementary teachers who might teach

weather, the solar system, and the forest ecosystem within the course of a year, it is doubtful that their undergraduate degree with 8 hours in science content provided them the content background to support their teaching.

Research shows that pre-service teachers report confidence in their ability to teach science (Fitzgerald, 2020; Hanson, Hardman, Lucas, Luke, 2022; Suryandari, et al., 2017) but then there are no studies that follow these confident pre-service teachers to see if they remain confident in their ability to teach science once they are leading their own classrooms. My experience in teaching science in elementary schools and seeing other teachers' reticence about science instruction leaves me believing that many teachers' relationship with the science content is the flawed transaction in the instructional core.

Instructional Core

City et al. (2009) offer the simple definition, "the instructional core is composed of the teacher and the student in the presence of the content" (p. 22). Doyle (1983) further explains that if the teacher, student, and content form the corners of a triangle for the instructional core, in the center of that triangle, and dependent upon each of those three facets' relationships with one another (teacher relationship to the student, teacher relationship with the content, student relationship with the content) lies the instructional task, which is what the student is asked to do in the process of instruction. (Figure 1)

The Instructional Core



This triad of teacher, student, and content with an instructional task balanced at the center only successful remains together if the relationships between the three corners remains strong. I believe that science instructional tasks in elementary classrooms are often unsuccessful because of teachers' relationships with the science content. These same teachers maintain consistent strong relationships with their students, and in other areas where the teachers do have strong capable relationships with the content (spelling, literature, math, social studies...) the instructional tasks advance students' learning. I do not believe that a majority of our current population of teachers in schools feel confident enough in their knowledge and skill in teaching science content to maintain the balance of the instructional core.

Citizen Science

Citizen Science is "a collaboration between scientists and [people] who are just curious or concerned and motivated to make a difference" (SciStarter, 2022). The process is that scientists share data they have collected, volunteers make observations and help sort the data, and then scientists draw conclusions on the data. There are multiple clearinghouses online where researchers can list their projects and how they need help and then volunteers can register and lend their efforts. Many projects only require a device to access the internet to participate, but there are also listings for projects which are looking for in-person help at certain times and places. Projects range from observing satellite photos of archeological sites and identifying possible looting, to going outside and finding and taking photos of all the fungi that can be found in a month's time, to coastal trash pick-ups. While the name, citizen science, implies that participants will be engaging in some type of science, the topic may be within another realm, but the observation and working with the data is the consistent science.

With a multitude of projects looking for volunteers to engage in real scientific inquiry, citizen science projects offer a lot of benefits. Science teachers have a perfect way to teach Science and Engineering Practices, students can experience the real-world application of the Disciplinary Core Ideas and Science and Engineering Practices they have been learning, and scientists can more quickly and effectively manage the data they have been collecting and can generate conclusions in a more timely manner.

Teacher Leadership

Katzenmeyer and Moller (2009) offer a comprehensive definition of teacher leadership, "teacher leaders lead within and beyond the classroom; identify with and contribute to a community of teacher learners and leaders; influence others toward improved educational practice; and accept responsibility for achieving the outcomes of their leadership" (p. 6). Whether they have formal leadership with titles like "department head," "instructional coach," or "lead teacher" or if their leadership is informal and comes from being the person who is willing to ask hard questions or by being willing to share new lesson ideas within the teaching team,

SERVICE LEARNING- IT'S ELEMENTARY!

teacher leaders are exceptional teachers in their own classrooms and remain focused on enhancing the learning for all students. These educators work collaboratively with other teachers to improve their own practice and to support their colleague's professional growth. Teacher leaders are the people within the school that work towards making it a place in which the children and the adults are learning more every day.

An essential element toward the building of teacher leaders is a collaborative environment focused on student learning outcomes throughout the building (Brown, 2014; Donaldson, 2006; Fullan, 2016; Katzenmeyer & Moller, 2009; Louis & Wahlstrom, 2014). In some cases, the responsibility for building a collaborative environment falls to formal, administrative leaders (Donaldson, 2006; Fullan, 2016; Louis & Wahlstrom, 2014), while in other circumstances, the onus falls to individuals fostering relationships built on trust (Costa & Garmston, 1994; Katzenmeyer & Moller, 2009). Regardless of who fosters the collaborative culture, "it is the collaborative group that accelerates performance, including squeezing out poor performers [teachers] as teaching becomes less private and more collaborative" (Fullan, 2016, p. 44). Teacher leaders flourish in a collaborative environment and can be essential for building a collaborative environment in schools.

Along the same lines, it becomes clear that in the development of teacher leaders, both potential leaders and those already teacher leaders, teachers require some voice in the professional development experiences they take part in. It is those closest to the student learning needs who are best prepared to decide what training would be most beneficial to them and the students. Additionally, "when principals encourage teachers to step forward and have a voice, teachers are more likely to trust the principal" (Louis & Wahlstrom, 2014, p.13). This furthers the necessary collaborative environment of the school.

Fullan (2016) states, "successful schools focused on developing the professional capacity of teachers" (p. 45) to explain how educational change can be made. He further explains that "capacity-building experiences develop skills, clarity (as you become more skilled, you become more specifically clear), and motivation" (p. 50). It is a waste of resources to focus professional development on attempting to mitigate the "problem areas" of teachers who are struggling to have students achieve. Instead, we can see far greater results if we take student learning outcomes from "okay" and elevate them into something far more improved. This is only going to happen if the investment in honing teachers' skills is made and fostered over time to encourage continual growth and improvement.

Finally, by building the capacity of all teachers we are increasing the ranks of those who may step into a teacher leadership role. This is necessary because of the reality of schools today. Firstly, it is important to note that teachers stay far longer at a school than administrators, and because of this, it is teacher leaders who can ensure that improvement is continuous despite leadership turnover. And, it is beneficial to have a larger cadre of teacher leaders "so that when a teacher leader must attend to personal issues, there are other teachers to assume the responsibilities" (Katzenmeyer & Moller, 2009, p. 76) and the continual growth and improvement is ensured.

Fullan (2016) reminds educators that "making a difference in the lives of students requires care, commitment, and passion as well as the intellectual know-how to do something about it. Moral purpose and knowledge are the two main change forces that drive success" (p.18). Teachers and teacher leaders who are armed with knowledge on how to develop and implement service learning projects into their classes and schools, and how to avoid potential pitfalls that may come in doing so, have the power to affect dramatic change for their learners and society as a whole.

Change- Facilitated and Hindered

Teacher Leadership, by its very nature, is about making changes- changes in student outcomes, changes in instructional practices, changes in school culture- which are all positive things. It is important for teacher leaders to always remember that "change means loss; loss means abandonment" (Reeves, 2009, p. 9), and as such, change must be navigated carefully. There are key things to be sought to help facilitate change and landmines to avoid so that effective change is not hindered. Fullan (2016) notes that "effective change processes shape and reshape good ideas, as they build capacity and ownership among participants" (p.41). Teacher leadership is all about shaping and reshaping good ideas and building capacity and ownership in and with the people involved.

First and foremost, Katzemeyer and Moller (2009) remind us that, "active involvement of individuals at all levels in an organization is necessary to implement and sustain change" (p. 28). Nothing happens in schools if all stakeholders are not working toward the change. Clement and Vandenberghe (2001) point out that there is an "importance of collegial interactions between staff and particularly the role of school leaders in creating workplace conditions which allow learning opportunities and learning space for teachers" (p. 22). Leveraging a culture in which all stakeholders share and are encouraged to learn fosters change.

Additionally, there are factors which can hinder any change effort in a school. Katzenmeyer & Moller (2009) state, "failure to include teachers in leading the implementation of innovations results in resistance to change" (p.32). In any school teachers are on the frontlines of anything that is going to affect student outcomes or instructional practice, and without having

37

support and leadership from them, any change effort is on shaky ground. And Lortie's (1975) "apprenticeship of observation" certainly has a significant effect on how teachers will embrace any change effort. Because every teacher once had at least 16 years as a student observing how teachers operate, they are likely to repeat actions and traits they observed as teachers themselves (Adler, 1991; Bullough, 1989; Ginsburg, 1988; Hollingsworth, 1989; Liston & Zeichner, 1991; Segall, 2002; Shor, 1986). To affect change in schools, teacher leaders need to help current teachers un-learn the lessons of their education journey to best serve today's students.

Limitations in the Literature

As much as we know about the value of social justice pedagogy, there remains a lot to be learned about how to apply this theory successfully to affluent populations. And, there is almost no research about how to leverage social justice theory with students as young as middle school or upper elementary school. This seems a missed opportunity since we know that topics students are exposed to early enough become topics for lifelong learning and growth. Despite clear benefits to learners engaged in service learning, many institutions do not have these programs in place. Celio, Durlak, and Dymnicki (2011) found in their meta-analysis of 62 studies of service learning programs that 68% of those programs were for undergrads, 16% served high school students, and both middle and elementary school programs each only accounted for 5% of the studies. It is unlikely that our K-12 students have the opportunity to take advantage of the benefits of service learning. This is an opportunity for teacher leaders to affect meaningful change for students and communities as they build service learning projects and programs for K-12 students.

Chapter 3: Methodology

Introduction

This chapter describes the research design and question for this study, the setting and the participants. It will also explain why a phenomenological approach was taken. These will establish the base for the findings presented in later chapters and will add to the body of knowledge on successful service learning projects and how teacher leaders can design these successful projects.

Research Design and Purpose

This study was originally conceptualized as a narrative inquiry examining the service learning units completed by the First and Fifth Grades at Williams Academy. The study's intention was to yield a better understanding of what teachers need to consider when developing a service learning program or project for elementary-aged students. I believed narrative inquiry to be ideal for this study because my positionality would allow me to collect stories of service and planning service from students and teachers. As "portal [s] through which a person enters the world and by which their experience of the world is interpreted and made personally meaningful" (Connelly & Clandinin, 2006, p. 375) stories are a powerful medium for understanding one's own and other's worldview. By pursuing and sharing the stories of the teachers and students engaged in service learning at this school, I hoped to shed light on what can be gained through true service learning.

My plans changed. The lockdown in March 2020 necessitated a shift in what and how I could collect data. If schools had remained meeting in-person, regular class times would have been utilized to conduct group and individual student interviews. Families, students, and teachers were already over-taxed with navigating schooling moved to the digital world and amid anxiety

over physical safety, an attempt to collect reflections, stories, and impressions from students of service learning in that environment would have been ill-received. Additionally, after conducting interviews with First and Fifth Grade teachers, it became clear that these service leaders' decisions were guided by curriculum documents like state and national standards and by expectations and limitations set by the school's administration. As it became necessary to collect and analyze these guiding factors and as the participant numbers were dramatically whittled down, it was clear that a new methodological stance would need to be taken. Instead, I decided to use phenomenology as a way to uncover how teachers, who might not have a deep understanding of service learning, could design and implement a service learning project for their elementary-aged students.

Phenomenology

Phenomenological research seeks to describe "the common meaning for several individuals of their lived experiences of a concept or a phenomenon" (Cresswell, 2013, p.76). Phenomenology asks, "how did this phenomenon occur?" and "what are the essential themes that characterize this phenomenon?" This type of qualitative study utilizes a small number of participants whose experience is described without adulteration from the researcher's views. Hermeneutical phenomenology considers the "texts" that influence the experience (Glesne, 2016) making it the appropriate choice of methodology for a study looking to describe the what and how of developing and implementing a service-learning project for elementary-aged students based off the organizers' beliefs, experiences, reflections, and guiding "texts."

This study will examine the phenomenon of elementary teachers successfully navigating the process of designing and implementing a service learning project for their elementary-aged students. None of the teachers in the study had extensive knowledge on what differentiates

SERVICE LEARNING- IT'S ELEMENTARY!

service learning from community service, but they all made choices and decisions that resulted in powerful service learning experiences for their students. The texts examined in this study will include in-house curriculum documents (curriculum maps and unit learning progressions), the school mission statement, and the school's self-study for SAIS re-accreditation. This phenomenological study can help other researchers or educators make appropriate decisions for their own service learning projects in their settings.

Researchers use phenomenology to uncover how people experience a certain phenomenon and what that means to those who experience it. Phenomenology examines a "subjective experience to gain insights around people's actions and motivations" (Deakin University, n.d.). For example, Groenewald (2004) found that co-operative education ("student teaching" in the U.S.) success was greatly predicated on suitable mentor teachers supervising the placement. Unlike grounded theory, phenomenology seeks only understand the lived experiences not to develop a theory from abstractions of the data.

Texts within Teacher Experience

Segall (2002) discusses how traditionally, *text* refers specifically to written words but that since the 1980s, the idea of what is *text* has grown to encompass anything in the world that has "encoded meaning" (p. 7). As such, teachers and their teaching is informed by a variety of texts. "Texts" that guide teachers and their experience may be the traditional view of text and be actual texts like the ubiquitous classroom management book *The First Days of School*, educator memoirs like *Educating Esme*, or commonly taught author/ researchers like Robert Marzano, all of which have been widely read by educators. Texts also include documents like state and national standards or specific curriculum materials adopted by schools and districts. Other texts

offerings, journal publications from professional organizations, and trainings (like CPR or Stewards of Children) required by schools.

What might be less apparent, more varied, and subjectively influential from person to person, are the less tangible "texts" that influence teacher experience. These encoded experiences that serve as texts might be the culture within the school, school leadership, and individuals' personal experiences (childhood, socioeconomic status, geographic location, preferred news outlet...) all of which influence how teachers see the world and approach their teaching.

Research Question

This study was designed to answer the following question:

What should teachers consider and prioritize when designing a service learning project or program for elementary-aged students?

Setting and Population

This study took place in a Southeast independent school in the suburb of a major metropolitan city. As such, the teachers in this study operated within certain constraints that might not be self-evident to the wider education community which are far more familiar with public schooling. (NAIS, n.d.; SAIS, n.d.)

Independent Schools

Independent schools are non-profit private schools that operate under their individual management, missions, philosophies and budgets. They are, however, accredited and guided by regional organizations made up of member schools. There are 1,629 independent schools in the United States, making them 12.5% of the total school in the U.S. (NAIS, n.d.). On average, the class ratio is 8.84 students to one teacher, the median class size is 14, and the median tuition is \$26,982 at day schools. Almost 30% of the teachers at independent schools have 21+ years of

teaching experience (NAIS, n.d.). Pritchard (2002) found that nearly 80% of independent schools have service-learning programs.

Individual schools are governed by boards of trustees whose sole employee is the head of school. Together, the board, which operates as a corporate body that is legally responsible for the school, and the head "provide leadership and a framework within which the faculty members enact the institutional mission every day as they teach their students" (Hundely DeKuyper, 2007, p. 5). To be accredited, schools go through a process of self-evaluation every five years to ensure compliance with standards set by the regional accrediting organization and continuous improvement toward goals that align with the school's individual mission. (SAIS, n.d.) Schools complete a self-study consisting of a "school snapshot," a response to the standards and indicators, and a report for growth (SAIS, 2021).

For Southern Association of Independent Schools' member schools, the standards and indicators for accreditation include standards on the school's mission, governance and leadership, teaching and learning, communications and constituent relationships, and resources and support systems. While there is a specific standard for schools' missions, all of the standards refer back to the individual school's mission. The mission standard states that "an SAIS accredited school's mission guides decision-making, allocation of resources, and the building of community" (SAIS, n.d.). The governance and leadership standard is explained, "in an SAIS accredited school, trustees and administrators clearly understand their roles and are advocates for the school's mission, vision, and continuous improvement. Leaders encourage collaborations and shared responsibility for school improvement among stakeholders" (SAIS, n.d.). For teachers at an independent school, the teaching and learning standard is the one that looks directly at what and how teachers are teaching by providing a curriculum and instructional methods "that facilitate achievement of all students in support of its mission." An SAIS accredited school "provides a curriculum that reflects best practices, strategies, and activities. The curriculum includes clearly defined expectation for student development that are subject to review and revision at regular intervals" (SAIS, n.d.) Short and to-the-point, the stakeholder communication and relationships standard is that "the school develops and maintains effective communication and relationships to further its mission" (SAIS, n.d.) And finally, with the resources and support systems standard schools are required to "have the resources, services, and policies necessary to support its mission," and this is further delineated as, "sufficient humans and material resources, employs a qualified and competent staff, and provides ongoing professional development. The school has well-defined and communication policies and procedures to promote a safe, healthy, and orderly environment" (SAIS, n.d.) To be accredited, schools must "live" their mission.

Trustee Handbook: A Guide to effective Governance for Independent School Boards (2007) explains that independent schools' missions are "guideposts for all major decisions" (p. 28), articulate the school's individuality, and "do not explain 'how' or 'why.' They communicate 'what' in clear, inspiring, and guiding words" (p. 6) Olverson and Vives (2012) state that "a mission statement should be more than a statement of purpose; it should be a constant call to arms" (p.100). Many schools' mission statements include similar language and lofty goals, but they do differ in the philosophy under which the school operates and what character traits are included. Regardless of which philosophy guides the mission or what language is used to describe the learners or the learning outcomes of the school, if the school does not meet their self-directed mission, they will not be accredited or re-accredited.

Missions help guide independent schools in their decisions and strategic planning, and the missions are a reflection of the school's overarching philosophical view. The National Center

SERVICE LEARNING- IT'S ELEMENTARY!

for Education Statistics classifies independent schools into the categories according to their religious affiliation. The five categories include: Catholic, conservative Christian, affiliated religious (whose affiliations are not Catholic or conservative Christian), unaffiliated religious (those schools with a religious orientation that are not affiliated with any specific denomination), and nonsectarian (n.d.). NCES reports that in 2015, 20 percent of independent schools in the United States were Catholic, 12 percent were conservative Christian, 9 percent were affiliated, 26 percent were affiliated, and 33 percent were nonsectarian schools (n.d.).

While independent schools charge tuition, it is important to recognize that for most independent schools only about 80% of the operating budget is covered by tuition and the remainder is made up through charitable contributions, annual funds, capital campaigns, and endowments. Depending on the size of the school, institutions often have a development or advancement office whose purpose is to raise the tuition budget shortfall. This office partners with the head of school to support the goals and mission of the school and ensure clear and consistent messaging about the school's financial needs and goals (Colson, 2015). Most of the focus is on fund-raising, but to do so efficiently, these offices work with the board who offer leadership "in creating a culture of philanthropy," (p. 45) they educate the faculty, staff, new parents, and students becoming alumni on the importance of philanthropy, and they cultivate a strong cadre of volunteers to help with the fund raising. In his advice to independent school leaders and development offices in the Handbook of Philanthropy at Independent Schools (2015), Colson begins, "Nothing matters more than major gifts. Your program must be designed to build and nurture close relationships with the trustees, parents, alumni, parents of alumni, grandparents, and friends whose generosity can empower your school" (p.16). And because of this, part of the faculty and staff education on philanthropy is to forgo appealing to families of

students to make additional donations either for classroom needs or for charitable works. All requests for additional giving are channeled through the development/ advancement office to avoid families, which are already paying tuition, being "nickeled and dimed."

Just like in public schools, funding in independent schools is important and controls what educators can do. But in independent schools, the sources of funding regularly drive carpool rather than remain distant, faceless entities. This just adds some nuanced challenges for teacher leaders hoping to fundraise for service learning projects.

Williams Academy

Williams Academy, a pseudonym for the school in this study, has an enrollment just under 600 students, an average student to teacher ratio of 6:1, and a tuition cost that matches the national average for independent schools. The faculty is a veteran one with 32 percent having 21+ years of experience in education. The school's mission includes the phrases "community of learners," "diverse environment," and students who "develop knowledge, skills, and character," to be "responsible, productive, and compassionate" members of "the School and greater community." Williams Academy was founded by a church to meet the "need for an early elementary educational program" (Williams Academy, n.d.) but began operating independently after about 20 years. Currently, the school maintains a relationship with the founding church and uses its sanctuary for holiday and graduation programs, but Williams would be considered an unaffiliated school. The school does have an advancement office made up of five staff members and which oversees the communication team of two. Eighty-five percent of Williams Academy's budget is covered by tuition with the remaining 15 percent being covered by philanthropic dollars (Williams Academy, n.d.)

Participants

The participants in this study were the Fifth Grade science teacher and two First Grade teachers. The Fifth Grade science teacher was the initiator and lead facilitator of the Freshwater Fair project and is solely responsible for the students' knowledge of freshwater ecosystems. One of the First Grade teachers was the initiator of the Pantry Pals project. The other First Grade teacher became the motivator/ main driver of the project when it morphed into supporting the Lunch Angel program. The two First Grade teachers taught in different classrooms with a co-teacher; both teachers in each room shared responsibility for student knowledge of healthy habits, nutrition, food groups, letter writing, and social-emotional growth.

Positionality

I had access to the participants as a fellow Williams Academy faculty member and had worked with all three of the participant teachers for several years. At the time the interviews were conducted, I was in the science department with the Fifth Grade teacher and had also previously been on the same grade level team with one of the First Grade teachers. As such, my relationship with those two teachers was more than just collegial, however I had been teaching longer and at Williams Academy longer than any of the teacher-participants. This study took place in the 2019-2020 school year.

Additionally, 4th through 12th grade, I attended independent schools in another southeastern metropolitan area. In particular, the progressive school I attended for elementary school was very influential on my education and then, as an educator, on my view of what an ideal school should be like. In my more than two decades as an educator, I have only taught in southeastern independent schools. While I had a similarly privileged childhood to the students who attend Williams Academy, I live a very middle-class life funded solely on my income as a teacher.

It is also important to note that my mother had been a social worker out of college, then worked for non-profit organizations like Big Brothers, Big Sisters and the local Girl Scout council as a program director, before becoming a stay-at-home mother after my youngest sister was born. This resulted in my having a front-row seat for my mother's own volunteerism and watching as organizations I was involved with tapping into my mother's ability to organize and mobilize other volunteers which ranged from organizing all of the costumes for all-school musicals, environmental clean-ups, and establishing in-roads for youth organizations to volunteer with the local children's hospital. I grew up understanding that service was what our family did in our "free time."

Data Collection

The Institutional Review Board processes were followed for research involving human subjects during this study. Signed informed consent forms stating the purpose of the research, the time required, and the perceived risks and benefits were obtained from all participants. Participants were informed that their identities would remain confidential and each selected the pseudonym to be used.

Data was collected through audio taped interviews, observations, curriculum documents, and photos. When world events necessitated a shift in my research plan, a revision was submitted and approved through the Institutional Review Board. Interviews were conducted individually both face-to-face and over Google Meet. The anticipated interview questions are Appendix A. These audio taped interviews were transcribed for further analysis.

Analysis

After interviews were conducted, they were listened to again for the purpose of fleshing out the notes that were taken during the interviews. These post-interview notes were analyzed for any areas that warranted follow-up conversation with any of the participants for further clarification. Next, the interviews were transcribed. The transcriptions were coded for responses that aligned or deviated from Berman (2006) definition of service learning ("in -context learning that connects specific educational goals with meaningful community service... Students learn course content, processes, and skills, strengthening their thinking skills as they develop empathy, personal ethics, and the habit of helping their communities" (p. xxi)) and the National Youth Council's standards for "quality" service learning (service which is meaningful and personally relevant, linked to the curriculum, includes ongoing reflection, promotes diversity and understanding, allows for student voice, and establishes collaborative and mutually beneficial partnerships), for participants' perceptions of what was successful, and for the participants noting student growth. Additionally, the curriculum maps for these grades, the learning objectives for these units, and the progress report skills for the grade was analyzed to determine when and where these projects aligned with the "educational goals," "course content," and "linked to the curriculum." For example,

From an educational standpoint, then, it's important because not only are these k-, like a lot of our population is, ah, very blessed in what they have, and I think it's important that they learn this should be part of who they are. You know, if you have all these blessings, you need to first of all be aware that that's unusual... and part of it is seeing what's out there, and that is, there's a lot of different. And that they can have a lot of positive impact on that.

was coded as aligning with Berman (2006)'s definition on personal ethics and the habit of helping. And,

We do have that conversation, maybe not always right then, but we have that conversation later, but they still need to be aware, like, everything you're using, there's water that goes into that. So, it's a math, it's kind of a cool math activity in that it's like, you do relate to what's going on over there. So, there's a social emotional tie-in, but there's also this big math tie-in, and like a other side of the world tie-in.

was coded as aligning with Berman's definition on in-context learning and course content and the National Youth Council's standard for being linked to the curriculum. While, "we just made it mandatory for all of 5th Grade, even if you weren't raising money, library is closed, you need to go outside and do Every Lap Counts," was coded as deviating from the National Youth Council's standard of allowing for student voice.

Three themes emerged. Williams Academy's projects were more successful with ties to the curriculum, connection and ownership, and when students "shouldered the weight."

Conclusion

The purpose of this study was to gain an understanding of how teachers, without expertise in service learning, make decisions that would develop rich service learning experiences for elementary-aged students. Qualitative data gathered stories and personal insights from the participants and was flexible enough to tolerate a shift in methodologies when outside, world-wide events necessitated that pivot. The stories and insights shared provide a sketch of what needs to be included and considered for building service learning projects that will enhance students' educational experiences.

Chapter 4: Findings

Introduction

The goal of this study was to study the factors that enabled two elementary teachers (one in early elementary, and another in upper elementary) to design and implement service learning projects for their grade level. While service learning in which elementary students are performing the service are a rarity, these projects were all the more remarkable because they fit the Berman's (2006) definition of service learning. To help explain this phenomenon, this chapter includes a description of how the two projects developed and of the influencing teachers. Data was collected in the form of interviews with three teachers and observations of their projects in-action. The three themes that emerged were: ties to the curriculum, connection and ownership, and students "shouldering the weight." To understand these phenomena and the themes that emerged, I will begin by providing a description of each project.

The Service Learning Projects

Freshwater Fair

In the introduction of Chapter One, I provided a narrative description of the Freshwater Fair as an observer/ participant attending the fair with my Sixth Grade students. The fair consisted of Fifth Graders presenting/ leading interactive games about a threatened or endangered freshwater animal. Some games were "cardboard arcade" games á la Caine's Arcade (see Figure 2), others were hands-on simulations (see Figure 3), and some were in the vein of educational board games (see Figure 4). These games were set up in the science hallway and classrooms and in the school's media center. The other grades at the school were invited to come to the fair in 20-minute time slots to play the games the Fifth Graders built. The attending grades were asked through school communications like the website, the weekly newsletter, and in

Figure 2

Caine's Arcade Style Freshwater Fair Game



Figure 4

Educational Board Game Freshwater Fair Game



announcements on each classroom's digital portfolio platform to bring in five coins as an "entrance fee" to the fair. All of these coins were donated to Pure for All (Kenya) to provide water filters for families in the Njoro region.

Weeks before the Freshwater Fair, in the Fifth Grade science classroom, students spent time studying the properties of water, the water cycle, how pollution moves through the water cycle, and then learned how to test water in a local watershed (the creek that runs through a portion of the school property). Students learned how to test the temperature, pH, dissolved solids, turbidity, depth, and nitrate and dissolved oxygen levels of the creek and how variations

Figure 3

Simulation of Animal's Adaptation Freshwater Fair Game



in those qualities affect the "health" of the creek as well as how those qualities affect organisms who depend on it as a water source. Concurrently, these Fifth Graders were reading Linda Sue Park's *A Long Walk to Water* in their base classrooms in literacy to focus on the theme of Understanding Differences and Empathy. To further support these themes, in science class, students experienced their own "long walk to water" and were challenged to collect and carry a "day's" worth of water up from the school creek. (Figures 5 and 6)

The students then learned about the different freshwater biomes (lakes, rivers, and wetlands) and organisms whose niche is in one of these biomes. After learning about habitats,

Figure 5

Wide Variety of Containers Used to Carry Water



Figure 6

Students Use Teamwork to Carry Water in a Larger Container



adaptations, diet, and human threats, Fifth Graders began researching a threatened or endangered freshwater organism. They spent 1.5 weeks "designing and building an interactive, child appropriate game" (Williams Academy, 2019) to help teach others about the animal they researched and which would be presented at the Freshwater Fair. Over these same weeks, students were challenged to fulfill a 10-day Walk-a-thon to continue to build empathy for those who have to walk to collect water each day and optionally raise additional funds for Pure for All (Kenya).

The project culminated with Fifth Graders hosting the "Freshwater Fair." This boisterous event provided an opportunity for Fifth Grade students to showcase all they learned about freshwater, demonstrate their burgeoning leadership and public speaking skills, and see how small steps (or just a few coins) by many people could accumulate into larger change (or hundreds of dollars).

As this event became a "Williams Tradition," students, faculty, and staff were excited as the date approached on the calendar. Large portions of the school community rallied around supporting the Fifth Graders' fundraising efforts. Many families of younger students sent in more than the requested five coins, and some families sent in paper bills because they wanted to support more people receiving filters. The classroom teachers always had extra coins on-hand so that every child could "pay" the entrance fee even if they forgot their coins and so that they (the teachers) could also play the games at the fair.

The Fifth Graders donated the entrance coins from the Freshwater Fair and the monies raised in their Walk-a-thon to Pure for All (Kenya), an organization that educates families on the importance of clean water and installed filters that will last for 10 years into those families'

homes. The Fair portion of this project consistently raises around \$600 (12 filters) and the Walka-thon portion raised \$15,000 the year data for this research inquiry was collected.

Pantry Pals

Pantry Pals culminated with 76 First Graders hopping down the steps of a bus and grabbing a plastic grocery bag that held four cans of food. They then walked through the doors of a school that was not theirs and down a hallway to a classroom that only had some empty shelves and tables along three sides. The Williams' First Graders then went to the school's lunchroom where they were the audience for a holiday performance by students who had been their pen pals for four weeks. After the performance, students were introduced to their pen pals and pairs of students spread out to read holiday books and eat cookies together.

Weeks before this field trip, First Graders studied hand washing, tooth care, the importance of sleep and exercise, and nutrition in their "Healthy Habits" science unit. The nutrition topics included: "red, yellow, and green light" foods, food groups, and how nutrition affects health. Additionally, First Graders are taught the format of a friendly letter, and the literacy expectations of utilizing beginning and ending sound letters for spelling, finger-spaces between words, and writing with an audience in mind are continually reinforced.

First Grade teachers communicated with families through the school's digital portfolio platform and in weekly "newsletters" about the project and with requests that families donate non-perishable food for students who might be experiencing some food insecurities. These donations were sorted into "food group" bins by the students as they came in in the morning and then would be bagged up by the students. The teachers were able to formatively assess the students as they first sorted the donations they brought in and then as they packed bags with a fruit, a vegetable, a starch, and a protein.

Findings

Freshwater Fair

When Gennie began as the Fifth Grade science teacher at Williams Academy, she inherited a curriculum that included electricity and magnetism, the human body systems of skeletal, muscular, and nervous systems, freshwater ecosystems, and a six-paragraph research paper. Following what had been done before, Gennie asked the students to select a freshwater animal to research, but looking to add a sense of purpose to the research, she required it to be a threatened or endangered freshwater animal.

The students focused their research around the animal's adaptations, variations, diet, and habitat. As they researched, students would often drift over to their friends to talk about what they had discovered about the organism they were researching. Gennie realized that many students became very attached to the animal they had chosen and that they wanted others to care as much for "their" animal, and this led to the first incarnation of what is now known as the Freshwater Fair.

Gennie's second year in the role of Fifth Grade science teacher found her organizing the "Freshwater Zoo," as an outlet for her students to share their research with others. The Freshwater Zoo took place during students' science class period and involved students posted in different locations in the school's media center with Powerpoint presentations about their researched animal on laptops to teach others about that animal. The other grades and all the faculty and staff were invited to come by the media center during the 5th Grade science class times to learn about the threatened and endangered organisms.

At this point, there was no fundraising tied with the Freshwater Zoo. As an independent school, Williams' teachers are discouraged from asking the students to embark on fundraising

activities because the families have already invested quite a bit in the school for tuition and might be ill-timed for when the school's development office might be embarking on a larger fund-raising campaign.

In the following year, as Gennie launched the research project with her classes, a parent of a Fifth Grader reached out to her with an idea to raise money for water filters in Haiti. The parent was involved with a particular organization and arranged to have a spokesperson come and speak with the students about the impact that clean water has on a community. Gennie asked the Head of School about supporting this organization in some way. Inspired by the 2012 viral video, "Caine's Arcade," she was interested in having the Fifth Graders build cardboard arcade games to teach others about the animal. Younger students at the school could bring in five coins, any denomination of coin, and play five games. The Head of School felt that asking students to bring in five coins would not be financially taxing and could even be something students gathered from the ashtray in the car before hopping out to go to school.

This first fundraising iteration brought in between \$300 and \$400. The organization that was working to bring water filters into Haiti received enough for seven filters. Gennie worked to get pictures and communication from this organization so that the students could see the impact of their work, but after she sent them the check from the Freshwater Fair, she did not receive any other communication from them.

About this time, Pure for All spoke at Gennie's church to share about their work in the Njoro region of Kenya to bring clean water to as many households as possible. Timothy Lodes was a passionate spokesperson for Pure for All's mission and brought one of the organization's filters to the engaging talk. Gennie approached Lodes about speaking with her Fifth Grade science classes.

57

Pure for All uses filters that can last 10 years, and they do a lot of research about which areas are best to help sooner. The organization looks to impact the greatest number of people, and they track the individual filters' use through registration. Additionally, they provide ongoing education about how to maintain the filters and the health benefits of clean water. Pure for All knows the household size and ages of people using each filter and has pictures of each filter being distributed to the families.

The Freshwater Fair has supported Pure for All, Kenya since its third year and has consistently raised about \$600 for water filters.

In its fourth year, Gennie wanted to add something to the project that would allow the students to understand how much human energy is expended to get water in other parts of the world. To this end, Gennie added the "water- carrying challenge" to the portion of the unit in which students learned about the importance of clean water for humans. Without being warned ahead of time, students arrive at science class and are told that they are part of a family (two lab table partnerships, 4 students) that need to collect their water for the day. They have two minutes to look around the room for what they are going to use to collect their "family's" water.

Students grab items like plastic bins that normally hold class sets of school supplies, plastic coffee cans, and a baby pool from the science closet, and they troop down to the creek that runs through the woods on the school's property. They are then challenged to collect water from the creek and get it back up the hill to the school's track. It's not a far distance from the creek to the track, but the students quickly learn lessons like: a baby pool's large carrying capacity makes it almost impossible to move when filled, or that carrying any amount of water any distance becomes a challenging and taxing task. That same year, when Lodes came to speak with the science classes, he had an extra communication tool "up his sleeve." In Pure for All's most recent trip to the Njoro region, Lodes made a VR goggle tour of the village being supported. Utilizing the VR goggles that the school already had on-hand, students were able to "visit" the people who would be benefiting from the water filters. Part of the tour took students into one of the family homes.

These homes were very different from any home the Williams' Fifth Graders had ever visited, and Gennie acknowledges it might have shaken students' concepts of "home." This paradigm shift inspired many students to go home talking about what they had seen. After several students set up lemonade stands in their own neighborhoods to raise money outside of the Freshwater Fair, parents started reaching out to Gennie to ask, "what more can our families/ children do to support this organization?"

With all this momentum behind supporting Pure for All and the drive to help people's access to clean water, Gennie added a Walk-a-Thon component to the fundraising. By utilizing the already in-place structure of Every Lap Counts, the school's morning lap run/walking movement program, students sought sponsorship for walking a predetermined number of laps or completing all 10 days of the Walk-a-Thon. The Fifth Grade teaching team took turns helping supervise Every Lap Counts during that time to both encourage the students to meet their goals and to support the coaches who already had plenty of younger students to supervise. In the first year, the Walk-a-Thon component alone raised more than \$8,000; the second year, it raised over \$15,000!

It is possible that excitement for the Walk-a-Thon or competition to "best" the previous class allowed its proceeds to almost double, but Gennie credits another factor. After becoming more involved with the Freshwater Fair through the supervision of the Walk-a-Thon, the Fifth Grade teaching team decided to change one of the novels they studied as part of language arts. That year, Fifth Graders read *A Long Walk to Water*. The Fifth Grade teachers used the book as a springboard for larger conversations about how important water is to people, and regardless of where someone lives – the Sudan, Kenya, or Flint – access to water might be compromised.

Pantry Pals

Some ideas and projects get started in unlikely places. A need for a space for teachers to work one-on-one with struggling readers made Lorene set her sights on cleaning out a closet shared by two First Grade classrooms.

As the mountains of bulletin board border, leveled readers, craft supplies, and formerstudent folders piled up in her classroom, Lorene struggled against the thought of lugging it all to the dumpster, which would be her quickest route to being done with this task. Yes, some things needed to be discarded, and many things could be donated to Goodwill, but she wrestled with the tremendous waste she was seeing.

Lorene worked on cleaning out the closet over several days and happened to mention to a family member what she was working on at school. That family member remarked that her next-door neighbor was also an elementary school teacher who was also working on a clean out project. The neighbor was working to empty an extra classroom that had been used for storage for a few years so that it could be turned into a food pantry for students at the school who might occasionally experience food insecurity.

A lightbulb went off for Lorene- the teachers and classrooms at this school might be able to use the extra supplies and texts that she was trying to move out of her classroom and closet. The neighbor teacher was delighted to take a donation of extra school supplies, classroom decorations, and books, and Lorene drove a carload over to Twain Elementary. While there, the neighbor took Lorene on a tour of the school and to the cleaned-out classroom. As they walked together, the neighbor explained more about her hopes to get organizations to donate nonperishable food items for the students' food pantry, and Lorene started to realize that she wanted to do more to help this teacher and to help the students.

Lorene returned to her First Grade team at Williams Academy and shared her newest inspiration and plan. She suggested that they ask First Graders to collect food for Twain's pantry and tie the collection to their "Healthy Habits" science unit. She also saw potential for the First Graders at Williams and Twain to become pen pals since both had a letter-writing unit in common. The team was fully behind this shift since they were becoming less satisfied with their project packing little bags with hygiene products that would then be delivered to area shelters.

The First Grade Healthy Habits unit covers nutrition topics including: "red, yellow, and green light" foods, food groups, and how nutrition affects health. "Red, yellow, and green light" foods are introduced to Williams' students in Kindergarten as somewhat subjective groupings of foods that can be eaten but in small portions and rarely, foods that should be eaten in moderation, and foods that can be eaten in any quantity. Confusing to this researcher is that the only foods that are considered "green light" foods are those things that one could go out in nature and pick up off the ground or tree and eat. All proteins are "yellow light" foods regardless of how it is prepared- baked chicken breast and fried chicken are considered the same light. First Grade reviews the "light" categories but adds in the concept that these foods need to be eaten "in balance"- while apples are "green light" foods, it's important to not *just* eat apples, but instead,

with some proteins and a variety of other "green light" foods. First Grade also introduces the concept of balancing exercise levels with food consumption.

For First Graders, the letter writing unit covers using a greeting, starting a conversation with the recipient by posing questions, and closings. Conventions of writing, like using capital letters at the beginning of sentences and for proper nouns, finger-spaces between words, writing in complete sentences and with appropriate end punctuation are expectations and are reinforced during letter writing.

To introduce the concept of food insecurity and launch the food collection drive, First Grade teaching teams read their classes "Maddi's Fridge" by Lois Brandt. The classes used Morning Meeting time to discuss what the students saw and felt with the book and to brainstorm ways they could help a friend who didn't have food in their fridge. The teachers then explained that they were all going to work together to help some other kids who, like Maddi, might not always have a full fridge. The teachers reminded the students about the different food groups and explained that their homework over the next few weeks would be to bring in foods and sort them into those groups. The students were shown the collection bins- fruits, vegetables, proteins, starches- into which they would place the items they brought. The classes had discussions about examples and how to sort them including what to do if an item could be sorted into multiple categories. For example, if a student brought in canned ravioli, the students all recognized that it could be a vegetable because of the tomato sauce, a starch because of the pasta, and a protein because of the meat filling. The classes decided to sort that into the protein bin because it was "mostly" protein, while SpaghettiOs were determined to mostly be a starch. At the same time, the teachers communicated to the parents via Seesaw, the digital portfolio platform utilized by

the school, about the project and provided examples of items to donate and the need for those donations to be nonperishable.

The Williams' students' letters initiated the pen pal exchange. The students wrote letters introducing themselves and posing a question or two to the Twain students. The First Grade teachers emphasized the need for clear communication through finger spaces between words and with focus on correct beginning and ending sound letters so that others could understand each word.

As the food donations began coming into school, the First Grade teachers used the sorting into bins as a formative assessment of how well the students were retaining the food groups and were able to reteach in-the-moment if necessary. The drafting of letters offered opportunities to reinforce spelling of learned words, letter formation, and keeping an audience in mind while writing. Additionally, the teachers found a myriad of opportunities to use these lessons as socialemotional learning opportunities to think about someone else.

To culminate the project, the Williams Academy First Graders took a field trip to visit Twain Elementary and deliver the food. On the morning of the field trip, First Graders packed recycled plastic grocery bags with a fruit, a vegetable, a protein, and a starch. Rather than loading all those bags onto a cart to be taken up to the bus, the students each carried two bags to the bus and then off the bus into Twain Elementary. At Twain, the Williams' students were the audience for the dress rehearsal for the Twain students' upcoming holiday assembly and then met with their pen pal to read holiday books and ate cookies together.

Lorene and the Williams First Grade teachers were excited to continue this project for years to come because of this successful first year, but the neighbor teacher contacted her with some disappointing news three months after their visit. The availability of that extra classroom at Twain to be used as a food pantry was coming to an end. The next school year, that classroom would need to be a classroom.

Lorene jumped into action trying to come up with a creative solution. Could a POD or shipping container be secured, kept on Twain property, and used as a pantry/ annex? No, there was no good way to keep pests out. Could the pantry be stored at Williams? No, there was no space in the building. Could Williams bring weekly donations to immediately go home with the students for the weekend? No, this would have been too timely an undertaking that could not be guaranteed consistently. How else could Williams First Graders ensure that Twain students wouldn't be hungry?

While the teacher neighbor and Lorene couldn't find a solution for the food pantry that would provide food for students experiencing food insecurity over the weekends, they did realize a way that Twain students' food needs could be ameliorated.

The teacher neighbor explained how students at Twain would accumulate debts at lunch with no way of paying those debts. The school booster organization had established a "Lunch Angels" program to which families and organizations could donate money to pay off the students' debts. The First Grade teaching team decided that this was the best way to continue with a service project that they felt strongly about supporting.

The project shifted from focusing on food groups to focusing on doing good deeds to raise money for the Lunch Angels program. The teachers still used "Maddi's Fridge" to talk about food insecurities and helping others, but now the students were to do good deeds and chores at home to earn money to bring into school. At least one classroom set a goal for how much they wanted to raise and then kept a record of how close they were to their goal as the donations came in. The families were asked to support the students' efforts by paying small amounts to the students for accomplishing chores or helping around their homes. Some students became very enterprising and did lemonade and cookie stands and others did chores for neighbors.

The First Graders also still wrote letters to the First Graders at Twain, but the link to the science unit of Healthy Habits was lost. The teachers still reported that the students loved visiting their pen pals at Twain, but they also acknowledged that something was lost with the lessened curricular link or with the abstraction of donating coins that were then converted into a check by the school that was handed over adult to adult by the teachers.

What made these projects work?

Themes Identified

Within this study, three themes emerged as pivotal for the success of elementary teachers designing and implementing service learning projects. These themes were identified through analysis of interviews with the Fifth Grade science teacher and two First Grade teachers and notes from observations of the projects. The interviews and observations were coded for instances where the descriptions matched with Berman's (2006) definition of service learning and the National Youth Leadership Council's standards for quality service learning. The three themes were: ties to the curriculum; connection, ownership, and buy-in; and students "shouldering the weight."

Theme 1: Ties to curriculum- explicit and hidden

In both the First and Fifth Grade projects, there were strong and multiple ties to the curriculum the teachers were charged with covering. (Table 1)

Table 1

Curricular Connections to Service Learning Projects	Cur	ricular	Connec	ctions to	o Service	Learning	Projects
---	-----	---------	--------	-----------	-----------	----------	-----------------

Curricular Connections						
Freshwater Fair	Pantry Pals					
 Freshwater ecosystem Limited supply of clean water for human use Endangered/ Threatened freshwater organisms Adaptations Food chain Design-thinking 	 Healthy Habits Nutrition food groups balanced diet importance of hydration and vitamins Letter writing Letter format Writing with an audience in mind Clear communication correct letter formation use of learned words finger-spacing between words 					

The science curriculum for First Grade includes a unit named, "Healthy Habits." Topics in this unit seek to answer the question, "How can I keep my body healthy and strong?" and include the importance of clean teeth and hands, getting enough sleep, exercise, and water, and maintaining a balanced diet. During the food collection stage of the Pantry Pals project, First Grade teachers were able to reinforce and formatively assess students' knowledge of food groups as they brought in donations and sorted them into "food group" boxes. Lorene explained, "you've got grains, you've got a protein, you've got fruits and veggies... and that was a wellbalanced meal." They were also able to use the project to cover letter-writing structure. And through the letter-writing, they reinforced "writing with an audience in mind," capitalization, spacing between words, and letter formation. Finally, by identifying where on the map the school they would be visiting was, the teachers reinforced map skills of cardinal directions, map legends, and birds'-eye-view. When Lorene said, "we wanted, through our curriculum, to teach

SERVICE LEARNING- IT'S ELEMENTARY!

them not just about healthy habits and food groups, but also use what they were learning about those food groups, and what it means to eat healthy, but use that to also help someone else," she was identifying what made Pantry Pals a service learning project. Additionally, when she stated, "I think what was the biggest reward for, for all of us in First Grade, as teachers is just how many different ways it connected to our curriculum," Lorene was naming how one project, which started out primarily connecting with science content ended up meeting multiple curricular needs and became well-worth the effort that the teachers put into seeing it through.

Much in the same way the First Grade teachers built a service learning project based on a science content topic and then found interdisciplinary connections to other content areas, the Fifth Grade project grew from the science curriculum. The Fifth Grade curriculum includes a unit on freshwater which encompasses not only properties of water, the water cycle, and watersheds but also topics like how the water cycle affects the movement of pollution, freshwater biomes and ecosystems, and human and animal dependence on freshwater. As Gennie expressed it,

They get to learn more about people who don't have fresh water, and what that's like, and what that looks like where, even where they get their water, what their water looks like, what their water receiving experience is. And then to understand that they are helping people, not just survive, but, that they're helping people totally change their lifestyle.

The project also reinforces application of the scientific method, research skills, and the engineering-design process, all of which are also part of the science curriculum. When Gennie said, "so, I feel like, as a science teacher, it's great to be able to say, like, this is sort of like a lab. They're [Pure for All] researching, they're collecting data, it's thorough,... they're

controlling as many variables as they can," she was identifying the less explicit ways this project was helping her meet curricular needs. Additional curricular connections are made to this project in the base classrooms as students read "*A Long Walk to Water*" as part of their literacy curriculum.

With all these ties to the official school curriculum, it is inevitable that hidden curricular aims are also fulfilled. Giroux (1978) explains the official curriculum as the explicitly stated learning goals and outcomes while the hidden curriculum are those norms, values, and beliefs that are absorbed through the structures of a school or schooling without intention of having them be learned. When students saw whole grade level teams, all the teachers they spent their time with, engaging in the project and working to fulfill the goals, they understood the importance of engaging in the project as well. Students learned that service to others was for all, not the purview of certain people. The overall importance of this deeper engagement, not just participation, was underscored by the amount of time that was dedicated to fulfilling the project. Because the grades and the teachers spent weeks working on and talking about the projects and the reason for supporting the projects. Additionally, because these projects were woven into the "official" curriculum in substantial and varied ways, students saw the projects not as an optional or extra part of their education.

Not all of the "hidden" curriculum lessons were sunny. It cannot be denied that there was a distinct start and end to the projects and the class time dedicated to the projects. This, inevitably, teaches students that we only need to work toward helping others *some* of the time, it's not a lifelong pursuit. A month after the projects, students didn't always remember that they had done it. Because the students were introduced, in varying degrees and in general terms, to the people they were helping, it is possible that students left the projects thinking that *all* students at that school or in public schools struggled to have enough food or that *all* people in Kenya or even Africa did not have access to clean water.

Theme 2: Connection and ownership

Defining effective change, Fullan (2016) states, "effective change processes shape and reshape good ideas, as they build capacity and ownership among participants" (p. 41). In all three of the teachers' descriptions about how and why they undertook these two projects, passion for and connection to the people being helped and the autonomy to change the projects to follow those passions were instrumental in facilitating buy-in from other teachers, the administration, and the students.

Connection. For one of the First Grade teachers, her connection was to another teacher at the school who was tackling a room clean-out. And while these teachers were cleaning out spaces for different purposes, it was this initial commonality that introduced the Williams' teacher to Twain's need for a food pantry. Lorene shared how much that connection meant to her when she said,

it didn't matter why we were there, that we were the one who had donated anything, it just was a really big sense of community and connection. And it made me really, I mean still to this day, really really strive for that service learning feeling and project every year.

The two teachers' connection began with their original reason for meeting- they both were cleaning out neglected, over-crowded spaces that needed to be put to better use to serve students; they were sharing a common burden. In his 2014 leadership book, *Leaders Eat Last*, Simon Sinek points out "feeling a shared common burden is one of the things that brings us together"

(p. 208). Building community and sharing a connection helped each teacher accomplish her goals.

Connection was also important for the second First Grade teacher, but for her, it was a connection to the Twain students. While she didn't know any of them personally, she felt connected to those students because she had once worked in a Title I school and knew how beneficial a food pantry like the one being established at Twain would have been for her former students. Julia stated, "knowing the students that I taught before and what they went through, and to be able to help students of similar needs is, was, a big thing for me." Sinek (2014) discussed the importance of relationships and the oxytocin that is released when bonds are formed and how this is enhanced by, "service to the real, living, knowable human beings with whom we work every day"" (p. 204). Teachers and students form bonds within their classrooms, and because this teacher formed bonds with her students at a previous school, she was eager to guide her current students to help other young people.

For the Fifth Grade science teacher, the initial connection was to the founder of Pure for All. Gennie shared why she initially felt connection with the founder when she stated, "what I love about Timothy Lodes, who's with Pure for All, he talks to them like they're adults." She appreciated the scientific approach that the organization takes. Her connection then grew as she was able to see photos and videos of families and villages being helped by being educated about the importance of clean water and having water filters provided to them. Gennie explained,

He made this whole VR goggle thing where you could look around the village that was supported, and they had a video inside so they could see. Like, when you say, 'This filter is going to support one family, one home,' the term 'home' is really loose... these people were living in a space that I could only describe as a closet, with walls that were hanging blankets.

Gennie saw how invested her students became in helping these people and she wanted to take that energy back to her classroom.

Additionally, as the science teacher was building and modifying the project year-to-year, the base (homeroom teachers who teach language arts and social studies) teachers had to become more involved to help manage the students and the scope of the project. This led to greater investment and interest from the base teachers who then modified their reading curriculum to include a text that would support the students' understanding of the struggle many face to obtain clean water. To explain the increased involvement from the base teachers, Gennie shared,

First year, what I saw most was base teachers being a little bit more involved. They were coming down, taking pictures, helping at the Fairs. And then the next year was when they started doing the walk-a-thon, and so the base teachers got more involved with that. And then this year, they incorporated 'A Long Walk to Water'.

The rest of the Fifth Grade built off of the work that Gennie had been doing in science and with the Freshwater Fair to further their own curricular goals.

Interestingly, these base teachers were teaching their classrooms how to engage with texts through the Notice and Note Signposts which are lessons "for helping students read literary texts with deeper understanding" (Beers and Probst, 2013, p. 1). In addressing the relationship between comprehension and the signposts, Beers and Probst (2013) state, "the more students noticed the signposts, the more they were using the comprehension processes: visualizing, predicting, summarizing, clarifying, questioning, inferring, and making connections" (p.69). It is very likely that the same thing happened to the base teachers as they were asked to engage more

in the Freshwater Fair. They were given concrete ways they could support the Fair and the students, these tasks caused them to notice more about the Fair and the service project, and without being asked to they found ways to make connections to the curriculum that they would be covering in their classrooms away from science. There is no denying the whole-community approach that this project has taken on.

Ownership. For all three of the teachers, the ability to go to the administration with an idea for changing or redirecting their grade level projects gave the teachers ownership over the projects. By considering teachers' opinions and allowing them to be flexible and work autonomously, school leaders can ensure greater job satisfaction and professionalism from the teachers (Matlock et al., 2016). Because of the autonomy given by school administration, these teachers could confidently say, and Lorene did, "We want to partner with you again. We want to come and visit. We want to do our pen pals program, anything the same that we can do, we've got to figure out a way to make this work." This stands in sharp contrast to what Endacott, et al. (2015) found when studying Common Core State Standards implementation- "authoritarian, top-down accountability was a driving force behind the de-professionalization of teachers through the perceived imbalance of risk reward in their work," (427) and further underscores the importance of teacher-ownership of curricular decisions. Lorene and the other Williams Academy First Grade teachers were willing to "figure out a way to make this work" because they found the rewards to be great and their self-efficacy and agency were intact.

Additionally, because the idea was spearheaded by a teacher, and not directed by an administrator or parent volunteer, peers rallied behind the project as well. Fullan (2016) states, "Once you realize that plans are for implementers (not planners) you have shifted the phenomenology of change to participants, which is where success of a plan stands or

falls. Planning and action need to be intertwined" (p. 86). Williams Academy builds classroom schedules around maximizing uninterrupted blocks of learning time and common planning periods for grade levels. These common planning times ensure consistency across classrooms and cohesion among teams. Williams Academy believes as Brownell, et al. 2006 do; that, "the act of planning and working together, by itself, is a powerful professional development tool" (169).

Buy-in. Buy-in from stakeholders is crucial for change to happen. In discussing how educational change occurs, Fullan (2016) states "most important, teachers, unions or not, must become partners in the change or it will fail" (p. 63) so it becomes crucial to understand how teachers become these partners. Teachers who teach the same curriculum in the same school culture, work within the same scheduling constraints, and share the same age of student or individual students as the Williams Academy teachers do inexorably share a closely aligned "educator worldview." Bromwell (2006) sites similar existing knowledge and beliefs among teachers as the linchpin to determine how effective collaboration can be. If service learning is a "group project" of different groupings of people (i.e. mixed grade levels, teachers and parents, random assignments made without allowing voice and choice...) the success will be diminished and the project is difficult to sustain.

It is also very likely that the nature of independent schools' teacher population enhanced the buy-in from the peer teachers, the administration, and the students' families. With 20% of the teachers in U.S. independent schools having six to ten years' experience and almost 30% having 21 or more years in education (NAIS, n.d.), it is understandable that these seasoned educators carry a lot of trust from the stakeholders. Additionally, because these schools are independent and focus on fulfilling their self-appointed missions, teacher autonomy and individual passion are leveraged toward creating programs of study that are unique to the school and dependent on the staffing.

Theme 3: Students "shouldering the weight"

In both projects there was an element of students *literally* carrying weight that deepened student connection to the people they were helping.

The First Grade teachers both noted a difference between student buy-in and connection between when nonperishable items were donated and then carried into the school over when it was a monetary donation to Twain's lunch fund. Some of this might be due to the abstraction of coin and dollar donations being converted into a check, but it might also be the weight difference between a Ziploc of money and four cans of peas in a student backpack. Lorene made this abundantly clear when she said, "my preference would have been to do the cans always because I feel like they really understood exactly what was going on. They carried it in."

Within the Fifth Grade project, students build empathy for the challenge that not having plumbed water poses a large portion of the world by being tasked with carrying water from the school creek. Gennie explains how she builds this understanding first, "[I] show them pictures of people getting water, and [I'm] like, 'What are they using?' They're using like, bowls, and they're using a five gallon bucket, and they're using gas cans, and they're using all these different containers." Students were challenged to find containers in the classroom to use to transport water and then actually go outside and transport the water with their items. In explaining how she helps students really understand and empathize with this task, Gennie shares,

Some of them will see the baby pool, and they'll be like, 'Oh man! We're going to have so much water.'... They'll carry it down, and then they try to teamwork it up... But it's really hard to carry a baby pool full of water... It's folding, and they're spilling, and I'm like, 'That's the water you need! For the whole day! For your family!'... Even the ones with the small buckets are like, [in a mock whine] 'I'm so tired going up the hill.' And I'm like, 'Mmm, it is far, and it is steep.'

By struggling to carry water 0.1 mile from the creek uphill to the school track, the students had the opportunity to gain empathy for the effort that goes into transporting water.

Social Constructivism

Because social constructivism involves individuals who seek to "understand the world in which they live and work" (Creswell, 2013, p. 24) and it utilizes participants' subjective views of the phenomenon or event, it was one of theories that guided this study. Students constructed their knowledge of the issues of food insecurities and available freshwater for human use through these projects. It bears mentioning that the teachers who initiated and led these service learning projects also constructed knowledge though their interactions with students, families, the recipients of their efforts, and each other. These teacher leaders were responsive to the reactions and needs of those around them, and their knowledge of how to facilitate a service learning project grew with each iteration.

Service Learning or Community Service?

While the balance of looking at an early elementary grade, First Grade, and an end of elementary grade, Fifth Grade, made it appealing to study these grades' projects, the reality was/ is that not all grade levels' projects are service learning according to this researcher even though they are referred to as such by the school. The Williams Academy does not have a consistent metric for service learning and no one to oversee the projects and ensure consistency of themes, thoroughness, or terminology. It is acceptable at many grade levels to have a "one and done" service experience that is tenuously tied to the curriculum. An example of a "one and done"

SERVICE LEARNING- IT'S ELEMENTARY!

service experience would be a grade level that studies patriotic songs in music class and letterwriting structure in literacy and then considers writing thank you notes to U.S. service members to receive around Thanksgiving to be their service learning. Both the First and Fifth Grade projects require a tremendous amount of orchestration among peers and within the school and also require orchestration with the organizations receiving the service. These teachers have made a choice to put their energies toward deepening the impact of their service projects when they could have very easily done something on a smaller and less taxing scale and still have fulfilled what the school considers to be service learning.

Berman (2006) defines service learning as "in-context learning that connects specific educational goals with meaningful community service... Students learn course content, processes, and skills, strengthening their thinking skills as they develop empathy, personal ethics, and the habit of helping their communities" (p. xxi) and Cress (2013) further expounds that it is, "community service activities with intentional academic and learning goals and opportunities for reflection that connect to their academic disciplines" (p. 9). Williams Academy's website lists "Service Learning" as a subsection on the website tab of "Campus Life" along with "Extended Programs," "Sustainability," and "WA TV." In the description of service learning at the school, the projects are only referred to as "community service" and are described as being "grade-level specific activities that are developmentally appropriate and have purposeful connections to each grade's curriculum" (Williams Academy, n.d.). As such, studying patriotic songs and letterwriting and then writing thank you letters to troops fits the school's definition of service learning. But, it is the Freshwater Fair and Pantry Pals projects that can make a claim that they are teaching "course content, processes, and skills" (Berman, 2006, p. xxi) while also allowing the "opportunities for reflection that connect to their academic disciplines" (p. 9) that Cress

(2013) suggests is necessary.

Table 2

Community Service versus Service Learning in Schools

Community Service	Service Learning
Supervised and directed at specific tasks	
Can be done in isolation from the curriculum	Is tied to academic and learning goals
Focus is on the outcome for the community	Focus is on the learning of the service
	provider
Requisite hours to be completed	Engages students in planning,
	implementation, and reflection

Conclusion

This phenomenological study utilized the stories and reflections of three participants who were instrumental in building their grade levels' service learning projects. The purpose of this study was to explore how these teachers made decisions and choices to build these service learning projects for elementary students. A description of the influencing teachers and their projects was given and the themes that emerged were described.

These findings might serve as a resource for elementary teachers and administrators who are looking to reap the benefits of the participation in service learning for their students. It is also my hope that teacher leaders who are looking to affect change in their schools, for service learning or otherwise, will take lessons from how these teachers navigated the implementation of their projects to facilitate their own change initiatives. Additionally, these findings might serve as encouragement for teachers who don't see themselves as teacher leaders to step toward the role and "accept responsibility for achieving the outcomes of their leadership" (Katzenmeyer & Moller, 2009, p. 6).

Chapter 5: Discussion

Introduction

The purpose of this study was to conduct an investigation of what elementary teachers needed to consider when designing and implementing a service learning project for elementary-aged students. This chapter discusses the findings from this inquiry. I explain the findings, lessons learned, and implications for further research. It is my hope that these findings might serve as a resource for elementary teachers and administrators who are looking to implement service learning as part of the curriculum their students experience. Lessons gleaned from this inquiry may serve teacher leaders who are looking for guidance on how to implement their own change initiatives. The educators who participated in this study navigated the implementation of their projects and stepped into teacher leader roles without meaning to do in the same way that Muijs and Harris (2007) described teacher leadership as "increased teacher participation in decision-making, and opportunities for teachers to take initiative and lead school improvement" (p.113), and it is my hope that their efforts will inspire other teachers to do the same.

Dissertation Summary

This study's goal was to investigate how two elementary teachers designed and implemented service learning projects for their respective grade levels. Elementary students performing service learning was difficult to find in the literature, so these projects were of interest to help expand understanding of the benefits of service learning for young students and how others could do the same. Data was collected in the form of interviews with three teachers who were instrumental in the design and implementation of their grade levels' projects and through observations of their projects in-action. The three themes that emerged were: ties to the curriculum, connection and ownership, and students "shouldering the weight."

Findings Summary

I will begin by discussing the three themes and the implications for other teacher leaders looking to establish service learning projects for elementary students.

Within this study, three themes emerged as pivotal for the success of elementary teachers designing and implementing service learning projects. The three themes were: ties to the curriculum; connection, ownership, and buy-in; and students "shouldering the weight." In both the First and Fifth Grade projects, there were strong and multiple ties to the curriculum the teachers were charged with covering. For the participants of this study, in discussing the "how" and "why" they undertook these projects, passion for and connection to the people being helped and the autonomy to change the projects to follow those passions were instrumental in facilitating buy-in from other teachers, the administration, and the students. Additionally, the ability to go to the administration with an idea for changing or redirecting their grade level projects gave the teachers ownership over the projects. The three participants in this study demonstrated how trust enabled them to get buy-in from the different stakeholders in the projects and successfully complete the projects within a school year. Finally, both projects had students *literally* carrying weight that deepened student connection to the people they were helping.

Lessons Learned

The following sections of this chapter include the findings and discussion on how lessons learned about buy-in, ownership, and students "doing" can guide other educators wanting to implement service learning or other teacher-initiated change enterprises. This inquiry suggests implications for teacher leaders and school leaders who want to establish service learning for their schools and their students.

Buy-in

Service learning projects are often too large to orchestrate in isolation and require buy-in from peers, students, and in the case of elementary students, the students' families. Buy-in refers to a leader's ability to get willing followers and active supporters of a project. These leaders may be traditional leaders who hold the mantle of power from their role like administrators, or these leaders may be teacher leaders who other educators look to for guidance and support. Aguilar (2016) states, "you get people to act by believing that they want to act, by demonstrating your own commitment to a project, and by creating conditions in which they can be effective" (p.82). This study found several ways these teacher leaders gained buy-in for a service learning project.

First and foremost, service learning should be deeply embedded in the course curriculum. For teacher leaders who are implementing service learning, it becomes easier to justify the time and effort spent organizing and completing the service if it helps accomplish learning goals for students. Because service learning projects require the support of other teachers, it is important to consider how to get buy-in for a project from colleagues. Although this study is not about peer buy-in, having that buy-in will make the road to implementation smoother. Because teacher leaders are "respected by their peers, [are] continuous learners, approachable and use skills and influences to improve the educational practice of their peers" (Troen & Boles, 2012, p. 30) service learning projects that move students closer to learning goals are much easier to get other teachers on-board and assisting with. Finally, students recognize when they are learning and growing. For many students, if they understand that the service is applying their learning or is helping them learn something, they will have buy-in, as well.

Resisting Resistance to Buy-in

In The Art of Coaching Teams, Aguilar (2016) discusses how to navigate resistance when coaching teaching teams by explaining, "human beings want to be with others, and we crave trusting relationships the same way we want food" (p. 200). In other words, working together on this project, or any project that requires collaboration, not only fulfilled the basic human need for connection and relationships, it also reduced resistance for the project. It seems to me that these teacher leaders got buy-in for these service learning projects from their colleagues, students, and parents because they had worked to build trusting relationships from all constituencies. They had used years of teaching alongside the other teachers to build a trusting relationship so that when presented with an idea, their teaching teams were ready to say, "yes!" It was very apparent through observations of these teachers, both the initiators of the service learning and their colleagues, that these educators formed strong and trusting relationships with their students. (Students must trust a teacher who asks them to make several trips to fill random plastic containers from the classroom with water from a creek and carry them uphill!) This study did not look at parent perceptions of or reaction to the service learning, but the participants shared in their interviews that parents reached out asking what more their families could do to support the organizations, which indicates to me that at least some of the families had buy-in for the projects. It is possible that parent buy-in is granted automatically to projects done at school because they have already bought-in with their tuition payments.

Ownership

Teaching can be a taxing occupation, and at the same time, many find it incredibly fulfilling at the same time. Having connection to and ownership of what students experience in courses and in classrooms helps tip the scale more toward the fulfilling side. If teachers are passionate about a topic or a project, students feed off that energy and get behind it as well. For me, and I suspect that many other teachers have found the same, that student excitement becomes a feedback loop for even more teacher passion and connection to a topic or project. Furthermore, teachers who are given the flexibility to make decisions for their classrooms, and therefore more ownership over what students experience in those classrooms, feel more satisfaction and investment in their projects. There's a greater sense of accomplishment and pride if gains are made from decisions that are made "in the trenches" as opposed to those decisions which came "from the top."

Students "Doing"

Finally, there appears to be benefit from students carrying figurative and literal "weight" within service learning. The teachers believed that when students were able to make decisions about how things were accomplished, or they felt their actions were responsible for helping something get done, there was to be greater investment in the project. This was enhanced when students had to actually do something physical to accomplish the service or experientially learn within the project. Four cans in a plastic bag may not seem like a lot to carry to an adult who does regular household grocery shopping, but for a 1st grader, that same bag of cans makes the responsibility of helping others stay fed a very weighty reality. And being challenged to collect and carry water like much of the world still has to creates a memorable experience that has students going home talking to their families about how "something more has to be done!" *Citizens Today*

As noted in the review of literature, little research exists on how elementary-aged students do, rather than receive, service learning. Although the reason for this is likely due to a variety of factors, one reason may be due to deficit discourses about children's capabilities. The

SERVICE LEARNING- IT'S ELEMENTARY!

teachers in this study clearly held different views. Their projects' designs show they believed young people are capable of making contributions to their communities through their voices, being problem solvers, and having the knowledge and skills to affect change. This is consistent with a capabilities approach and is supported by the research on building agency in and countering deficit thinking about young learners through a capabilities approach (Colegrove & Adair, 2014; Kinney, 2015; Payne, 2018; Swalwell & Payne, 2019). These studies begin with the assumption that young people are not simply citizens-in-training but are "citizens now." Rubin (2007) established that young people base their civic identities on their "sense of connection to and participation in a community" (p. 450) and both of these projects encouraged Williams' students to participate as citizens today and as citizens who are vital members of the school community.

Additionally, when considering Westheimer's (2015) explanation that people communicate how they see themselves as citizen through the ways they treat one another, the ways they learn from one another, and the ways they live together in communities, these students were being citizens through these projects. Westheimer and Kahn described three different types of citizenships: personally responsible, participatory, and social justice-oriented. Students who experienced in these projects were participatory citizens by being active members of an improvement effort, using strategies for accomplishing collective tasks, and gaining a beginning understanding of how different agencies work. Neither of these projects asked students to critically assess social, political, or economic structures, or to explore strategies to address root causes of the issues, but I would argue that these students' experiences with these projects being participatory citizens has laid the groundwork for these young people to become social justiceoriented citizens in the coming years. None of the three themes that emerged came with an additional cost- financial, resourcewise, or in effort from the teacher leaders implementing the projects- but they appeared to be instrumental in these projects meeting Berman's 2006 definition of service learning. Other teacher leaders looking to have service learning as part of their courses or classrooms would be advised to utilize them to enhance their programs.

Discussion

Student Age

Although it didn't warrant its own theme within the findings of this study, student age was influential over the findings and had implications for the lessons garnered. There is not a lot in the literature looking at elementary-aged students participating in service learning, and that makes this inquiry unique. There are many benefits for learners who participate in service learning, and it is widely understood that elementary school is where many academic and personal life habits are established. But, there are several challenges for elementary school teachers looking to implement service learning at their schools or in their classes, the primary one being the age of the students.

The National Youth Leadership Council's (2009) standards for "quality" service learning include service which is meaningful and personally relevant, linked to the curriculum, includes ongoing reflection, promotes diversity and understanding, allows for student voice, and establishes collaborative and mutually beneficial partnerships. Because elementary schools have students who are 13 or younger, it's difficult to find meaningful and personally relevant service activities that they can complete independently or with lightly scaffolded support. For many who do service activities, one of the ways service becomes personally relevant is when those providing the service get to know and form relationships with the people receiving the service.

Additionally, the standard of "allowing for student voice" can be a challenge for those looking to involve elementary students in service learning. Elementary students can and should have some voice in all of their learning, but even in traditional curricular areas, for management purposes, teachers offer limited choices that fall within their predetermined criteria. Further, because of elementary students' age, their life and educational experience is limited. They may not be able to conceive of ways to provide service or areas of service connection to the learning goals for the course. Or, it is possible that too many educators are not utilizing a "capabilities" approach when considering undertaking projects of this nature with younger students.

Also, within the vein of how elementary students' ages can be a challenge for those seeking to implement service learning in their classes is the fact that students' families naturally have influence over the students' understanding of the world and want to have a say in what the young learners are exposed to. Certain curricula have become highly politicized and it is not uncommon for families to have a panicked knee-jerk reaction when they hear the school is doing something "new." Schools and teachers need to consider the climate of the student population's families when deciding which projects to undertake and how that will be communicated to families and other stakeholders.

"Pics or It Didn't Happen"

In modern internet discussions there is a meme known as "pics or it didn't happen." It has many different visual versions like Figure 7, but the phrase always means that the person saying it doubts another person's claim, that they won't believe it until they see photographic proof.

In my position as a Sixth Grade teacher at Williams Academy, I worked with students at the end of the school year on reflections that would be shared during graduation. Students could remember events that are "Williams Traditions" like the Nursery Rhyme Parade from PreK and

Figure 7

Pics or It Didn't Happen Internet Meme



what their "suitcase" looked like when they traveled "Around the World" in Kindergarten, but when working on their graduation reflections, they would not include the Freshwater Fair without being prompted to do so. Students always wanted to include something about their role in the "Nutcracker" or which Olympic city they represented in the Fifth Grade Olympics, but the Freshwater Fair was never mentioned even though they were able to attend the fair again as Sixth Graders. In fact, none of the service projects done at the school were mentioned in the reflections.

These service learning projects loom large in teachers' memories, but they do not seem to hold the same weight in students' memories. While not officially part of the data, my theory is that students remember those events which parents attend and take pictures at. In the "age of the influencer," educators might find themselves competing with "insta-worthy" projects. Because service learning is done during the school day, embedded in the day-to-day curriculum, and doesn't involve costumes or an audience, parents are not on-hand to capture photos of. It appears that young students' memories are in line with the meme, "pics or it didn't happen."

Suggestions for Further Investigation

One of my main takeaways from the literature review is the dearth of empirical studies of service learning in elementary schools and classrooms. In my reading of the literature on service learning, it was very concerning how little is written about service learning in which elementary students are the ones completing the service. There were ample examples of elementary students being the recipients of others' service, but no examples of service learning that met the Berman (2006) definition which is "in -context learning that connects specific educational goals with meaningful community service... Students learn course content, processes, and skills, strengthening their thinking skills as they develop empathy, personal ethics, and the habit of helping their communities" (p. xxi). There is a need for research on if service learning is occurring at the elementary school level. And if there is, there is room in the literature for empirical studies on the projects and their effect on the students who perform the service and the community being helped.

The occurrence of students who engaged in these service learning experiences which did meet Berman's 2006 definition and some of the standards for "quality" set out by the National Youth Leadership Council but didn't name them as some favorite memories from the grade make me wonder if these experiences will quietly influence these young people to become service leaders or if they will leave no impact after all. I would love to follow the students from Williams Academy to see if they continue to perform service or continue to be drawn to helping others in similar ways to the Freshwater Fair or Pantry Pals when they become adults. Will they be more likely than their peers from other schools to be lifelong service leaders? The first group of students who experienced Freshwater Fair are still in college and the Pantry Pals First Graders of this study are currently in Fifth Grade in the 2022- 2023 school year. This also makes me very interested to see how students will respond to having experienced two service learning projects embedded in their elementary school career. These will be the first set of Williams' students to do so. Will multiple exposures to service learning make these students more likely to be lifelong service leaders?

Scholars like Swalwell (2013) and Seider (2008) caution those interested in embarking on service or social justice pedagogy with privileged youth. There is risk that these students will "keep an abstract, impersonal distance from oppression" (Swalwell, 2013, p. 25). Swalwell recommends that privileged students act as "allies with oppressed peoples' struggles rather than patronizing or colonizing savior swooping in to aid the Other" (p. 27). However, Swalwell and Seider worked with high school aged students, and I wonder how they would suggest ally-ship could be built in students under the age of 13. While there is great potential in establishing positive behaviors and traits for a lifetime in elementary students, there is also some risk that negative behaviors and mindsets cannot be unwound if they are established too early. I don't have the answers but would be very interested to see research that established what elementary teachers could do or avoid to build activist allies in privileged elementary students.

Final Conclusion

The two service learning projects observed in this study were examples of service learning that meets Berman's (2006) definition, but they were outliers at their school. The age of the students (and by default, the students' limited choice on how they focus their time and energies inside and out of school) and the other demands on elementary teachers makes service learning that fits the definition challenging to implement. The three teacher participants in this

SERVICE LEARNING- IT'S ELEMENTARY!

study were pleased with how their projects developed and how the students responded to the projects without having focused on the National Youth Leadership Council's standards for "quality" service learning as they were building the projects. And all three participants expressed interest in finding better or additional ways to get students involved in serving their community. Certainly, these teachers were operating in a unique school community, one that both propelled and hindered their projects at different times, but making strong ties to the curriculum, connections being built and ownership of the projects, and students "shouldering the weight" are characteristics that can be attained in other school communities as well.

REFERENCES

- Adler, S. (1991). The education of social studies teachers. In J. P. Shaver (Ed.) *Handbook of Research in Social Studies Teaching and Learning* (p. 210-221). Macmillan.
- Aguilar, E. (2016). The Art of Coaching Teams: Building resilient communities that transform schools. Jossey-Bass.
- Allen, J. A., Fosler, K., & Orange, K. (2021). All Service-Learning Experiences Are NOT Created Equal! Effects of Service Learning Quality on Self-Efficacy and Engagement. *Journal of Higher Education outreach and Engagement*, 25(4), 41-57.
- Atwell, M. N., Bridgeland, J. M., Manspile, E. P. (2021). Ready to Engage: Perspectives of teachers and parents on social and emotional learning and service-learning in America's public schools. Civic and Hart Research Associates.
- Baumann, P. (2012). NCLC Schools of Success Network Shows that Service-Learning Quality Matters [White paper]. Education Commission of the States. <u>https://www.ecs.org</u> /clearinghouse/01/05/09/10509.pdf
- Beers, K., & Probst, R.E. (2013). Notice & Note. Heinemann.
- Berman, S. (2006). Service Learning: A guide to planning, implementing, and assessing student projects. Corwin.
- Billig, S. (2011). Making the Most of Your Time: Implementing the K-12 Service Learning Standards for Quality Practice. *The Prevention Researcher*, 18(1), 8-13.
- Billig, S.H. (2017). Implementing Service-Learning in Elementary Schools to Enhance Inclusion, Service-Learning (International Perspectives on Inclusive Education, Vol. 12), Emerald Publishing Limited, Bingley, pp. 75-94.

- Billig, S., Root, S., & Jesse, D. (2005). The Relationship Between the Quality Indicators of Service-Learning and Student Outcomes: Testing professional wisdom. Advances in Service-learning Research: Improving Service-learning Practice: Research on Models to Enhance Impacts. 97-115.
- Board on Science Education. (2012). A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas. National Academies Press.
- Broido, E. M. (2000). The development of social justice allies during college: A phenomenological investigation. *Journal of College Student Development*, 41, 3-18.
- Bromwell, M. T., Adams, A., Sindelar, P., Waldron, N., & Vanhover, S. (2006). Learning from Collaboration: The Role of Teacher Qualities. *Exceptional Children* 72(2), 169-185.
- Brown, L. (2014). The case for teacher-led school improvement. In F. W. Parkay, E. J. Anctil, and G. Hass (Eds.) *Curriculum leadership: Readings for developing quality instructional programs*. (10th ed., pp. 346-349). Pearson.

Bullough, R. (1989). First Year Teacher: A case study. Teachers College Press.

Camanigan, P. R. (2015). Teach like lives depend on it: Agitate, arouse and inspire. *Urban Education*, 50 (4), 424-453.

Cammarota, J. (2011). From hopelessness to hope: Social justice pedagogy in urban education and youth development. Urban Education, 46 (4), 828-844. doi: 10.1177/0042085911399931

Celio, C. I., Durlak, J., & Dymnicki, A. (2011). A Meta-analysis of the Impact of Service-Learning on Students. *Journal of Experiential Education*, *34*(2), 164-181.

- Chubbuck, S. & Zembylas, M. (2008). The emotional ambivalence of socially just teaching: A case study of a novice urban schoolteacher. *American Educational Research Journal*, 45(2), 274-318.
- Chugh, D. (2018). The Person You Mean to Be. Harper Collins Publishers.
- Chung, S. & Li, D. (2020). Socially Engaged Art Education: Exploring issues of homelessness in an elementary art classroom. *International Journal of Education & the Arts*, 21(21), 1-20.
- City, E., Elmore, R., Fiarman, S., & Teitel, L. (2009). *Instructional Rounds in Education: A network approach to improving teaching and learning*. Harvard Education Press.
- Colegrove, K.S. and Adair, J.K. (2014). Countering Deficit Thinking: agency, capabilities and the early learning experiences of children of Latina/o immigrants. *Contemporary Issue in Early Childhood*, *15*(2), 122-135.
- Colson, H.A. (2015). *Handbook of Philanthropy at Independent Schools*. National Association of Independent Schools
- Costa, A. L. and Garmston, R. J. (1994). *Cognitive coaching: A foundation for Renaissance schools*. Christopher-Gordon Publishers, Inc.
- Cress, C., Collier, P., Reitenauer, V., & Associates. (2013). Learning through Serving: A student guidebook for service learning and civic engagement across academic disciplines and cultural communities. Stylus.
- Creswell, J. (2013). Qualitative Inquiry & Research Design: Choosing Among Five Approaches. Sage.
- Deakin University (n.d.) *Qualitative Study Design*. <u>https://deakin.libguides.com/qualitative-</u> study-designs/phenomenology

- Dewey, J. (1938). Traditional vs. Progressive Education. In Parkay, F. W., Anctil, E. J., Hass,
 G. (Eds.) *Curriculum leadership: Readings for developing quality instructional programs*. (10th ed., pp. 11-15). Pearson.
- Donaldson, G. (2006). *Cultivating leadership in schools: Connecting people, purpose, and practice*. Teachers College Press.

Doyle, W. (1983). Academic Work. Review of Educational Research 53 (2), 159-199.

- Duncan-Andrade, J. (2007) Gangstas, Wankstas, and Ridas: defining, developing, and supporting effective teachers in urban schools. *International Journal of Qualitative Studies in Education*, 20(6), 617-638, DOI: 10.1080/09518390701630767
- Endacott, J., Wright, G. P., Goering, C., Collet, V. S., Denny, G. S., & Jennings-Davis, J.
 (2015).Robots Teaching Other Little Robots: Neoliberalism, CCSS, and Teacher
 Professionalism. *Review of Education, Pedagogy, and Cultural Studies, 37*(5), 414-437.
- Fitzgerald, A. (2020). Out in the Field: Examining the role of field-based experiences in preparing primary pre-service teachers as confident and competent teachers of science. *International Journal of Science Education* 42(2), 290-309.
- Freire, P. (1970/2000). Pedagogy of the Oppressed. New York: Continuum.
- Frey, N., Fisher, D., & Hattie, J. (2017). Surface, Deep, and Transfer? Considering the Role of Content Literacy Instructional Strategies. *Journal of Adolescent & Adult Literacy*, 60(5), 567-575.
- Fullan, M. (2016). The New Meaning of Educational Change. Teachers College Press.
- Garrett, H. J., & Kerr, S. L. (2016). Theorizing the Use of Aesthetic Texts in Social Studies Education. *Theory & Research in Social Education*, 44(4), 505-531.

- Gibson, P. A. (2014). Extending the ally model of social justice to social work pedagogy.*Journal of Teaching in Social Work, 34*, 199-214. doi: 10.1080/08841233.2014.890691
- Ginsburg, M. (1988). Contradictions in Teacher Education and Society: A critical analysis. Basic Books.
- Giroux, H. (1978). Developing Educational Programs: Overcoming the Hidden Curriculum. *The Clearing House*, *52*(4), 148-151.
- Goodman, D. J. (2000). Motivating people from privileged groups to support social justice. *Teachers College Record*, 102 (6), 1061-1085.
- Groenewald, T. (2004). A Phenomenological Research Design Illustrated. *International Journal of Qualitative Methods*, *3*(1), 42-55.
- Hanson, J., Hardman, S., Luke, S., & Lucas, B. (2022). Developing Pre-service Primary
 Teachers' Understanding of Engineering Through Engineering Habits of Mind and
 Engagement with Engineers. *International Journal of Technology & Design Education*32 (3) 1469-1494.
- Hollingsworth, S. (1989). Prior Beliefs and Cognitive Change in Learning to Teach. *American Educational Research Journal*, 26 (2), 160-189.
- Hundley DeKuyper, M. (2007). *Trustee Handbook: A Guide to Effective Governance for Independent School Boards*. National Association of Independent Schools.

Katzenmeyer, M. & Moller, G. (2009). Awakening the Sleeping Giant. Corwin.

Kinney, A. (2015). Compelling Counternarratives to Deficict Discourses: an investigation into the Funds of Knowledge of culturally and linguistically diverse U.S. elementary students' households. *Qualitative Research in Education*, 4(1), 1-25.

- Knight, J. (2022). *The Definitive Guide to Instructional Coaching*. Association for Supervision and Curriculum Development.
- Kolb, D. (2015). Experiential Learning: Experience as the Source of Learning and Development. Pearson Education, Inc. Retrieved from: <u>https://learning.oreilly.com/</u> library/view/experiential-learning-experience/9780133892512/ch02.html#:-:text=Ideas% 20are%20not,formed%20through%20experience.
- Kronick, R., Cunningham, R., Gourley, M. (2011). Conclusion. In R. Kronick, R. Cunningham, & M. Gourley (Eds.), *Experiencing Service-Learning*. (pp. 149-151). University of Tennessee Press. https://books.google.com/books?hl=en&lr=&id=smKVGBAsa 54C&oi=fnd&pg= PR5&dq=experiencing+service+learning&ots=IdVP672vlw&sig= y0pB1FiZRnN1YMBT9XrZfKOiA_w#v=onepage&q=experiencing%20service %20learning&f=false.
- Ladson-Billings, G. (1995). But that's just good teaching! The case for culturally relevant pedagogy. *Theory into Practice, 34* (3), 159-165. doi: 10.1080/00405849509543675
- Lane, H., Hudson, R., McCray, E., Tragash, J., & Zeig, J. (2011). Tutoring Opened My Eyes: Tutor experiences in the America Reads Challenge. *Mentoring & Tutoring: Partnership in Learning*, 19(2), 199-218.
- Lintner, T. (2006). Hurricanes and Tsunamis: Teaching about natural disasters and civic responsibility in elementary classrooms. *Social Studies*, 97(3), 101-104.
- Liston, D. and Zeichner, K. (1991). *Teacher Education and the Social Conditions of Schooling*. Routledge.
- Lortie, D. (1975). Schoolteacher: a sociological study. University of Chicago Press.

- Louis, K. S. & Wahlstrom, K. (2014). Principals as cultural leaders. In F. W. Parkay, E. J. Anctil, and G. Hass (Eds.) *Curriculum leadership: Readings for developing quality instructional programs*. (10th ed., pp. 11-15). Pearson.
- Matlock, K. L., Goering, C. Z., Endacott, J., Collet, V. S., Denny, G. S., Jennings-Davis, J., &
 Wright, G. P. (2016). Teachers Views of the Common Core State Standards and Its
 Implementation. *Educational Review*, 68(3), 291-305.

Mertler, C. (2014). Action Research: Improving Schools and Empowering Educators. Sage.

- Muijs, D. & Harris, A. (2007). Teacher leadership in (in)action. *Educational Management Administration and Leadership*, *35*(1): 111–134.
- National Academies of Science, Engineering, and Medicine (2012). *A Framework for K-12 Science Education*. National Research Council.
- National Association of Independent Schools (n.d.) *About NAIS*. https://www.nais.org/about/ about-nais/
- National Center for Educational Statistics (n.d.) *Private School Enrollment*. https://nces.ed.gov/programs/coe/indicator/cgc
- National Commission on Service-Learning (n.d.) *Learning in Deed*. Newton, MA: Educational Development Center, Inc.
- National Youth Leadership Council. (2009). K-12 Service-Learning Standards for Quality Practice. https://www.nylc.org/page/standards
- Next Generation Science Standards. (2013). Next Generation Science Standards. https://www. nextgenscience.org/

- Nurenberg, D. (2011). What does injustice have to do with me? A pedagogy of the privileged. *Harvard Educational Review*, 81(1), 50-63. doi:http://dx.doi.org/10.17763/haer.81.1. 50456q442p161473
- Olverson, T. & Vives, C. (2012). Consider the Virtuous Cycle: A Blueprint for School Leadership. *Independent School*, 71(3), 100-108.

Oxford Languages. (n.d.). Philanthropy. In Oxford Languages. Retrieved April 16, 2022.

- Payne, K. A. (2018) Young Children's Everyday Civics. The Social Studies, 109(2), 57-63.
- Pritchard, I. (2002). Community Service and Service-Learning in America. In A. Furco & S. H. Billig (Eds.), Advances in Service Learning Research: Vol. 1. Service-Learning: The essence of the pedagogy (p. 3-21). Greenwich, CT: Information Age Publishing.
- Reeves, D. (2009) Leading Change in Your School: How to conquer myths, build commitment, and get results. ASCD.
- Rhodes, C., Stokes, M., & Hampton, G. (2004). *A Practical Guide to Mentoring, Coaching, and Peer-networking*. RoutledgeFalmer.
- Rimm-Kaufman, S. E., Merritt, E. G., Lapan, C., DeCoster, J., Hunt, A., & Bowers, N. (2021).
 Can Service Learning Boost Science Achievement, Civic Engagement, and Social Skills?
 A randomized controlled trial of Connect Science. *Journal of Applied Developmental Psychology*, 74, 1-15.
- Rubin, B.C. (2007). There's Still Not Justice': Youth civic identity development amid distinct school and community contexts. *Teachers College Record* 109(2): 449–481.
- Scheurman, G. & Newmann, F. (2022). Authentic Intellectual Work in Social Studies: Putting Performance Before Pedagogy Criteria for Authentic Intellectual Work.

The Science Council. (n.d.). Our Definition of Science. https://sciencecouncil.org/about-science

/our-definition-of-science/

SciStarter. (2022). What is Citizen Science? https://scistarter.org/citizen-science

Segall, A. (2002). Disturbing Practice: Reading teacher education as text. Peter Lang.

- Seider, S. (2008a). Resisting obligation: How privileged adolescents conceive of their responsibilities to others. *Journal of Research in Character Education*, 6 (1), 3-19.
- Seider, S. (2008b). "Bad things could happen": How fear impedes social responsibility in privileged adolescents. *Journal of Adolescent Research*, 23, 647-666. doi: 10.1177/0743558408322144

Seider, S. (2009). Social justice in the suburbs. *Educational Leadership*, 66 (8), 54-58.

- Serriere, S. C., Mitra, D., & Reed, K. (2011). Student Voice in the Elementary Years: Fostering youth-adult partnerships in elementary service-learning. *Theory & Research in Social Education*, 39(4), 541-575.
- Shor, I. (1986). Equality is Excellence: Transforming teacher education and the learning process. *Harvard Educational Review 56* (4), 406-426.
- Sims Bishop, R. (1990). Mirrors, Windows, and Sliding Glass Doors. *Perspectives: Choosing and Using Books for the Classroom* 6(3), ix-xi.
- Sinek, S. (2014). Leaders Eat Last. Penguin.
- Southern Association of Independent Schools. (n.d.) *About SAIS*. <u>https://sais.org/about-sais/</u> about-sais-overview/
- Southern Association of Independent Schools. (2021). SAIS Accreditation Guidebook Version: September, 2021. <u>https://sais.org/accguidebook/</u>
- Southern Association of Independent Schools. (n.d.) What Is Accreditation?

https://sais.org/accreditation/what-is-accreditation/

- Suryandari, K., Sajidan, Rahardjo, S., Prasetyo, Z. (2017). The Beliefs Toward Science Teaching Orientation of Preservice Teachers in Primary Teacher Education Programme. *Pertanika Journal of Social Sciences & Humanities*, 169-185.
- Swalwell, K. M. (2013). *Educating activist allies: Social justice pedagogy with suburban and urban elite*. Routledge.
- Swalwell, K. & Payne, K. A. (2019). Critical Civic Education for Young Children. *Multicultural Perspectives*, 21(2), 127-132.
- Troen, V. & Boles, K. (2012). *The Power of Teacher Teams: with cases, analyses, and strategies for success.* Corwin.
- Turner, R. (2012, February 12). What is the difference between community service and service learning? Retrieved from <u>http://msue.anr.msu.edu/news/what_is_the_difference</u> <u>between_community_service_and_service_learning</u>
- Westheimer, J. (2015). *What Kind of Citizen? Educating our children for the common good*. Teacher College Press.

Appendix A

Teachers on Service Learning

- 1) What does "community service" mean to you?
- 2) What do the people receiving service from your project get from the service?
- 3) What our students get from completing this project/ unit?

Teachers on Grade Level Project

- 1) Tell me about how your grade decided on this project.
- 2) How has the project changed over time?
- 3) Why were those changes necessary?
- 4) What is your "pride point" on this project?
- 5) What do you wish could be changed about the project?
- 6) Can you share any favorite stories about kids engaging in this project?
- 7) Are there any students you would consider having has a "strong" (good or bad) reaction to their experience?