# TABLE OF CONTENTS

Description of Teaching Context/Rationale .......................................................... 3

Wonderings and Questions .................................................................................. 5

Data Collection Process ..................................................................................... 8

Data Analysis Process ....................................................................................... 14

Explanation of Findings ..................................................................................... 16

  Claim One ....................................................................................................... 16

  Claim Two ..................................................................................................... 19

  Claim Three .................................................................................................. 20

Reflections and Future Practice ....................................................................... 23

Reference Page ................................................................................................. 26

Appendices ....................................................................................................... 27

  Appendix A: Inquiry Brief ............................................................................ 27

  Appendix B: Pre-Inquiry Student Survey .................................................... 35

  Appendix C: Pre-Inquiry Student Interview ............................................... 41

  Appendix D: Pre-Inquiry Teacher Interview .............................................. 43

  Appendix E: How-To Instructional Lesson .................................................. 47

  Appendix F: Post-Inquiry Student Survey ................................................... 49

  Appendix G: Post-Inquiry Student Interview .............................................. 55

  Appendix H: Standards ................................................................................ 57

Bibliography ..................................................................................................... 60
TEACHING CONTEXT/RATIONALE

I have been interning in a fifth grade classroom at Radio Park Elementary in the State College Area School District (SCASD) for the 2010 – 2011 academic school year. As a Professional Development School (PDS) intern, I have been able to take advantage of resources available as a result of the collaboration between SCASD and Penn State University. PDS has four main goals: enhance the educational experiences of all children; ensure high quality induction of new teachers into the profession; engage in furthering professional growth as teachers and teacher educators; and educate the next generation of teacher educators. In my fifth grade classroom at Radio Park there are 18 students. The majority of students come from middle-class families with two or three children in the family. Many of my students have traveled many places within the United States, as well as out of the country, which provides the classroom with diverse cultural and historical backgrounds and perspectives. Although the class is small, there is a significant academic achievement gap among the students. However, all of the students in the class are high-level thinkers who have the ability to critically analyze and participate in intense conversations.

Learning in my classroom mainly occurs through discussions, activities, and student-inquiry. Prior to starting this inquiry, students in my classroom were studying environmental science. Environmental science is an interdisciplinary and integrated unit that integrates physical and biological sciences to the study of the environment, and possible solutions to environmental problems. Students learned about the water cycle and how water becomes contaminated, many times because of humans. The students learned that the Earth is about 70 percent water, but only about one percent of that water is drinkable. This is because most of the water on Earth is salt water. Students learned that water from the faucet comes from two different places – from lakes
or rivers (surface water), and from wells (groundwater). People in State College get their
drinking water from groundwater because we don’t have lakes or many rivers nearby. We then
calculated our water footprint on the National Geographic website, and found that we use
thousands of gallons of water each week. Not only do we use lots of water each week, but
everything we buy at the store is made or processed using water. The students then realized that
people in third world countries use a fraction of the amount that we use each week. They then
started to wonder why people in the United States use so much more water than people in other
countries and why people in other countries don’t have access to clean water, when we can just
get a glass of drinkable water from our faucets. To encourage further geographic and
environmental study, students answer geography questions three times a week for morning work,
using an atlas to find the answers as well.

With the help and collaboration from Penn State University faculty and students in
environmental engineering, the class came up with the idea of creating pictorial brochures to
send to Africa, and South and Central America to help people understand how to clean dirty
water with f-sand, made from moringa tree seeds. After looking at a map of water scarcity,
students realized that areas of the world in a water crisis are in Africa, and South and Central
America. Moringa trees actually grow best in these areas – most moringa trees grow in arid, dry
climates and in the desert. (See Appendix A for Inquiry Brief.)
WONDERINGS & QUESTIONS

Main Wondering

After completing my methods classes in the fall and learning about service-learning in my Social Studies class, I started to wonder about the benefits of doing a service project in my own classroom. Being in the PDS program, I’ve learned to constantly critically analyze and reflect on my teaching, lesson plans, and student learning. So I decided to introduce the idea of service-learning to the students; they were all extremely excited and enthused about making a difference in the world and in the lives of others.

Service-learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen the community. According to a service-learning website, “When students engage in service to the community, in addition to learning, they are contributing to their long-term social and civic development. When youth engage in service, they are more likely to carry those values through to adulthood” (Learning to Give, 2011).

After teaching students about what service learning is, they started to think of service projects to complete. We wanted to help people in other countries who are less fortunate than we are. At the time, the class was learning about environmental science, specifically about water and the water cycle. I found a video for the students to watch about the causes and effects of dirty water, which had the students questioning why some people lack access to potable water and others have it readily available. After doing some research, I discovered that the lack of safe drinking water affects an overwhelming number of people in the world. Nearly one billion or approximately one in six people lacks access to safe water. Children are especially vulnerable. In the developing world, 24,000 children under the age of five die every day from preventable
causes like diarrhea contracted from unclean water. Diarrheal diseases caused by poor sanitation and dirty water kill more children than AIDS, malaria and measles combined (Water facts, 2011). Students in my class are quite knowledgeable about geography, so some of this research did not surprise them. As a class, we calculated our water footprint and realized how much water we use each day (Water footprint calculator, 2011). Students compared these numbers to the amounts of water that people in Africa and other third world countries use – the amounts were drastically different. We use hundreds of gallons more water than most people in the world. This made students realize how fortunate we are to have access to safe drinking water and sanitation.

While students were starting to research the water inequity, I read an article about the moringa tree, and how it’s seeds can filter dirty water. I contacted researchers at Penn State University involved in using moringa tree seeds to filter dirty water to help with the class project. Students had already formulated the wondering about why a water crisis exists in the world, but we weren’t sure how to go about configuring a solution to the problem. PSU researchers came to talk to the students and explained more about the moringa tree. The students were excited and wanted to collaborate with professors and students from Penn State University to help people in underdeveloped countries obtain access to potable water. At this point I formed my main wondering: How can students benefit from participating in a service-learning project? (See Appendix A for Inquiry Brief.)

From there, I followed the framework below to complete the service-learning project.

<table>
<thead>
<tr>
<th>Goals</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define service-learning</td>
<td>Students understand service-learning and its components</td>
</tr>
<tr>
<td>Discover needs and problem(s)</td>
<td>Guest speakers</td>
</tr>
<tr>
<td>Investigate problem(s)</td>
<td>Guest speakers and research</td>
</tr>
<tr>
<td>Research solutions</td>
<td>Identify project goals</td>
</tr>
<tr>
<td>Decide on project</td>
<td>Brochures</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Plan project</td>
<td>Mini-lessons, research, experiments</td>
</tr>
<tr>
<td>Implement plan</td>
<td>Create brochures</td>
</tr>
<tr>
<td>Present</td>
<td>Presentation to 3rd/4th graders</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Reflection</td>
</tr>
</tbody>
</table>

Sub-Wonderings

- How can other academic skills be incorporated into service learning? Note-taking skills, computer skills, summarizing, reflective writing, blogs, etc?
- How can students help others through service-learning?
- What do 5th grade teachers think about service-learning and service projects? Have they ever done a service project? Would they consider doing one?
- How will a service project affect students’ thinking about service after completing the project?
- Will students hope to become more involved in service after completing a service project?
- After seeing the class present their project, do teachers have different opinions of a service project? Would they consider doing one now if they haven’t already?
- How did this project correlate with PA standards and the SCASD curriculum?
DATA COLLECTION PROCESS

Prior to starting my data collection for this inquiry, I first had to define what service-learning is and figure out what questions I wanted to address. According to the Corporation for National and Community Service (2010), service-learning is defined as: “A teaching and learning strategy that integrates meaningful service with instruction and reflection to enrich the curriculum and students’ learning experiences, teach civic responsibility, and encourage long-term social and civic development.” I collected a variety of data to help me analyze and reflect on the benefits of service-learning and helping the students in my class complete a service project. Data was collected before, during, and after the inquiry through surveys, interviews, mini-lessons, and a reflection. In order to gain a comprehensive understanding of my students’ existing and evolving ideas about service-learning and activism, I implemented different types of data collection prior to, during, and after the students completed the service project. I focused on asking questions in the different data collection methods that would help me answer my main wondering: How can students benefit from participating in a service project? The data that I collected helped to answer my sub-wonderings as well.

Pre-Inquiry Data Collection

Prior to starting the inquiry and service-learning project, I designed a student survey to assess the students’ knowledge and ideas about helping others, service projects, and civic responsibility. I also gathered data to see how much they knew about the water crisis in other countries. Before taking the pre-project survey, students had already learned some about many third world countries that lack potable water. (See Appendix B for Pre-Inquiry Student Survey.)
Based on the students’ answers to the survey questions, I chose five students to interview further about their knowledge and ideas about service-learning. Three of the six students to interview who seemed to be quite knowledgeable about service-learning and what a service project entails. I knew that these three students were knowledgeable about service-learning because they described service-learning accurately in their surveys and gave examples of service projects in their survey answers as well. Three additional students seemed to be unsure about what service-learning is and how they could go about helping people in other countries. I used answers from these students’ surveys to determine that they were unsure about service learning. One student simply wrote, “I’m not sure what service-learning is.” I was interested in learning more about these five students’ answers to their survey questions, as well as what they thought about a few additional interview questions. The interview included questions that asked students if they had done a service project prior to fifth grade, if they had ever helped people before, and if they had ever been to an underdeveloped place in the United States or to an underdeveloped country. I wanted to see if answers to the survey were correlated with prior knowledge of service-learning, and/or travel to underdeveloped parts of the country and world. (See Appendix C for Pre-Inquiry Student Interviews.)

I also conducted teacher interviews prior to completing the service project to gather data on teachers’ knowledge about service-learning. I was interested in learning whether other teachers had done service projects with their classes before, if they thought that there were benefits or drawbacks to doing service projects, and if they thought students needed to be a certain age before being able to benefit from participating in a service project. Additionally, I asked the teachers I interviewed if they thought students benefit from service projects in the classroom. I chose to interview teachers as well as students to see if there was any correlation
between knowledge and excitement about service-learning, and if there were any other trends about benefits of service-learning. Prior to starting data collection during the project, I contacted and met with professors and students in environmental engineering. Together we configured a framework for the project. We discussed the ideas with the students, and we agreed that making pictorial how-to brochures would be the most beneficial. Students realized that the brochures needed to only include pictures and diagrams because the people in countries that we plan to send the brochures to don’t necessarily speak English. *(See Appendix D for Pre-Inquiry Teacher Interviews.)*

**During Project Data Collection**

Before the students started the service project, I taught a mini-lesson about how-to instructional books and brochures. Since the students in my class had never written and drawn an instructional how-to brochure, I wanted to teach them what an instructional brochure entails. I put students in heterogeneous groups of three, based on their responses to the survey, and asked them to write how-to instructions about how to make a peanut butter and jelly sandwich. The idea was to get the students to first perform a task that was familiar to them so that they could start thinking about how to visually represent instructions, rather than writing them down. First, students had to think about being very specific with their instructions, keeping in mind that they would be drawing the brochures for someone who has never filtered water with crushed up moringa seeds before. Each group wrote detailed instructions but left out steps they assumed I would know while making the sandwich. As a class, we then generated a list of steps that would be needed to instruct someone how to make a PB&J sandwich who had never made one before. The final list contained ten different steps, which was many more steps than any of the students
had anticipated. This connection helped students understand that while making the pictorial how-to brochures, they wouldn’t be able to assume any prior knowledge about how to use moringa seeds to filter dirty water.

Prior to starting to create the brochures, PSU researchers discovered that mixing moringa seeds with sand (f-sand) actually preserved the water longer. When only moringa seeds were used to filter the water, the water became contaminated after 24 hours. However, when f-sand was used to filter the water, it lasted up to three months. Students realized that when making the pictorial brochures about how to clean dirty water with moringa tree seeds they would need to be very specific and detailed with their drawings. They had never created instructional brochures before or tried to show instructions by using only pictures. This was challenging for many students at first, but with help from the PSU professors and teachers the students were able to create drawings and diagrams to show the steps to clean the water. Students spent about a week creating the instructional pictorial brochures. In each of the five groups working on a brochure, elapsed time proved to be a challenge to show visually. Some students realized that people in other countries probably wouldn’t be able to read time with our clocks. This led students to do some research about how people tell time in other countries. Students realized that clocks originated from sundials, so they came up with the idea of drawing a clock with tallies then an arrow to another clock to show twenty minutes elapsed (time required to filter water with moringa seeds and f-sand). Each group’s brochure has similar pictures and diagrams, but each brochure is unique. (See Appendix E for During Inquiry How-To Instructional Lesson.)
Post-Project Data Collection

I again conducted a student survey, student interviews, and teacher interviews after the students had completed the project. In the post-project student survey I asked similar questions to the pre-project survey, but also asked the students what they’d learned from the process, what their favorite part of the project was, and what other projects they hoped to participate in sometime in the future. The post-project survey asked some of the same questions as the pre-project survey so that I could compare students’ answers. Additional questions were included as part of a reflection of the project and also so that I could gauge how much the students valued the project. (See Appendix F for Post-Inquiry Student Survey.)

Post-project interviews were conducted with the same students I interviewed prior to completing the project so that I could compare pre- and post-inquiry answers. Some of the same questions were asked, but there were also additional questions similar to those in the post-project survey. Students were asked to expand on some of their answers from the survey and to discuss the project’s impact on their learning and future implications. (See Appendix G for Post-Inquiry Student Interviews.)

I also plan to interview the same teachers after the project is presented to the third and fourth grade classes. The interview contains many of the same questions as the pre-project teacher interview, but I also want to ask the teachers to expand on their thoughts about service-learning and the project that my class presents. I plan to interview the same teachers as I did before completing the project so that I can compare and analyze their responses before and after listening to my class’ presentation about our water filtration project.

The final part of the project includes a reflection about the process and what was learned throughout the project. Within their blog entries, students will describe the project, what problem
our project addressed, and how we helped people fix the problem. Reflection is a crucial part of service-learning, because it allows students to look back on, think critically about, and learn from their service experience. This reflection can occur in many different forms, including writing. Students created personal blog pages at the beginning of the semester, writing and posting about activities and events that happen in the classroom, personal accomplishments, and schoolwork. Blogging about the project is a creative way for students to express their thoughts and feelings about the project.
DATA ANALYSIS PROCESS

I began to analyze the data I had gathered throughout the project by systematically organizing the different forms of data collected. I arranged the data in many different ways to determine if there were any trends that formed. This helped me observe whether the data had helped me answer my main wondering: How can students benefit from participating in a service-learning project? I hoped that rearranging and comparing data would display which forms of data collection best answered my wondering. In order to accurately measure service-learning benefits based on the data I collected, I used the description of service-learning that I defined in my main wondering on page six.

To start, I compiled all the students’ responses to the pre-inquiry survey, as well as all the students’ responses to the post-inquiry survey. In survey monkey, I sorted the responses by question, and grouped similar questions together as well. I then grouped together similar responses from students to see what the most common responses were. I initially looked for trends among student answers in the pre-inquiry survey, grouping together similar answers and began to systematically record similarities in student responses. These groupings showed that many students’ views and thoughts about helping others and knowledge about service-learning were similar. Every student in my class said that they enjoy helping others and nearly 95% said that they go out of their way at least once a day to help people without being asked. Student responses were also similar in the way that they defined service-learning – most students defined it as learning about a problem and then figuring out a way to fix the problem and help people who are suffering as a result of a problem.

Similar to responses in the pre-inquiry surveys, students still enjoy helping others, based on post-inquiry surveys. Every student was able to accurately describe service-learning after the
project was completed. Additionally, students’ responses showed that they were able to identify that other countries need our help, but that we need to understand and learn about cultural differences first. In the post-inquiry surveys students also seemed more confident in their responses that they can help make a difference in other peoples’ lives.
EXPLANATION OF FINDINGS

After analyzing all of my data, I identified common patterns and outcomes that allowed me to formulate three claims regarding benefits of service-learning. The following claims address my main and sub wonderings, explaining why service-learning helped my students gain and apply the knowledge and perspectives necessary to successfully complete their project.

Claim One: Students enjoy helping others through completing a service project, and anticipate doing more service projects in the future as a result.

This inquiry was student-initiated, and therefore much more valuable to the students. As the students worked on their brochures they gained a sense of empowerment, realizing their potential to make a difference. Leading up to this project, students participated in a “win-win” activity, giving flowers to people throughout the school. We discussed how doing something nice for someone makes you feel happy. The class was able to make this connection in the service project as well, even though they did not see the effect it will have on people in other countries.

When I compared and analyzed the pre- and post-inquiry student surveys, it was evident that students enjoyed participating in the service project. (See Appendices B and G.) In the post-inquiry survey I also asked additional questions to gather data about what students enjoyed most about the project and if they would consider doing a service project in the future. Questions asked in the survey included questions about helping others, the feeling of being helpful and fortunate, age required to be able to help someone else, the meaning of service, and future service-learning projects. Eight out of eighteen students said that the part of the project they liked most was learning about and performing the water filtration process with the f-sand. The rest of
the students wrote that their favorite part of the project was creating the pictorial posters/brochures to send to Africa and South and Central America.

Additionally, all but two students wrote that the part they enjoyed most was knowing that they were helping other people. I explored this common response more in student interviews, asking the students I interviewed what they liked most about the project and helping other people. Of the six students interviewed, five students said that they enjoyed doing the project because they were able to create something to send to Africa and other underdeveloped countries to help make a difference and give people a means to access clean water. The other student said he just enjoyed doing the project and couldn’t explain more about why he enjoyed it.

Students learned about people whose experiences and backgrounds are different from theirs, who lack basic resources and sanitation, and who are suffering as a result. When asked if they would enjoy participating in another service project, sixteen students said yes, and the other two students said they were unsure. They learned about other people who aren’t as fortunate and they wanted to help them. Students felt happiness and accomplishment by helping these people obtain a basic need – clean water – by creating pictorial posters/brochures to teach them how to filter their water. This was evident in the responses from the student post-inquiry surveys and student interviews. One student said, “I thought this project was really cool. It felt really good knowing I was helping people get clean water.”

By participating in this project, students have a deeper understanding of current situations around the world and the need to look for social and political solutions. Students also developed an understanding of social justice as a result of service-learning. Fourteen of eighteen students also stated that participating in the project made them feel good about themselves – it gave them a sense of self-efficacy. As I stated previously, six students were interviewed further after
completing the survey. The same six students were interviewed post-inquiry as were interviewed pre-inquiry. One of the questions asked in both the student survey and interview was about participating in future service-learning projects. In the survey, fifteen students said that they want to do another service-learning project in the future. Students who were interviewed also all said that they wanted to participate in another service-learning project sometime soon. One student interviewed even asked if the class would be able to participate in another service-learning project this year.
Claim Two: Teachers see many benefits of service-learning for students in and out of the classroom.

Based on the results of the interviews I conducted with teachers who work at Radio Park Elementary, it is evident that they value service-learning. Teachers also see many benefits of having students participate in a service project. (See Appendices D and H.) One teacher stated in the pre-inquiry teacher interview that, “Service-learning connects students to people outside of the classroom. It also helps students understand that there are significant needs in the world.” There were some students in my class who were unaware of the poverty and lack of resources in underdeveloped countries prior to starting the service-learning project. According to Cipolle (2010), “Service-learning projects, when designed and carried out effectively with an emphasis on critical pedagogy, play a crucial role in developing citizens engaged for the common good (p. 22).”

Now, the students in my class are very knowledgeable about the water crisis in Africa and other developing countries around the world. They also realized their capacity to give, while learning that compassion and kindness can go a long way. Overall, all teachers I interviewed saw many benefits to doing service-learning projects in the classroom, because students become much more aware of what’s going on in the world. Benefits that teachers listed from the interviews conducted are that service-learning connects students to people outside the classroom, helps students understand that there are significant needs in the world, teaches students about the value of helping others in their community, and is an engaging way to help students participate in a project that helps others.
Claim Three: Many academic skills and standards can be incorporated into service-learning projects.

As I planned and wrote lessons for my inquiry on service-learning, it became evident that multiple academic skills could be incorporated into the project. Some of the additional academic skills that were incorporated into the service project were inquiry, experiments, note-taking skills, computer skills, blogging, researching, informational picture writing, design, summarizing, public speaking, speech writing, and reflective writing. Initially when students were learning about environmental science, they researched the water cycle, took notes on their research, and then created posters in groups showing the path of water. The class then listened to a guest speaker from the State College Borough, Amy Story, a State College Borough Engineer, who discussed the effects of contaminated ground water on the environment and on us. Ms. Story brought pictures and explained the detrimental effects that littering and pollution indirectly cause on our drinking water. So at this point in the inquiry, the students were knowledgeable about the local issues involving water. But they were still curious about the global crisis.

For the next few months, students spent time learning about the global water crisis. We had three different guest speakers from Penn State University talk to the class about countries that are suffering because the people lack access to potable water. One of the professors, Dr. Rick Schuhmann, showed the class pictures from his trips to different underdeveloped countries around the world. He asked the students why they thought some people lacked the resources to obtain clean water, which motivated many students to start questioning why water access is not equitable around the world. Around that time, I read an article in the Penn State Newswire about a “miracle tree” called moringa. The article discussed several advantages to purifying water with the moringa seed. The technology is locally acceptable, sustainable and easily accessed
by those in developing countries; it can be grown right within a village, lessening the need for the transport of chemicals. The moringa seed grows naturally in harsh environments, and grows best in the desert – where clean water is needed most. I showed the students the article and asked them if they thought this would be an idea we could pursue to help people in other countries filter their dirty water. The students were excited and curious to learn about the moringa tree and how it could help filter water. I contacted another professor from Penn State University, Dr. Stephanie Velegol, who came with a PSU student to talk to the class specifically about the moringa tree. Dr. Velegol works in a lab at PSU and is trying to discover ways to use the moringa seeds to filter water. Along with other researchers, Dr. Velegol helped create a mixture of moringa seeds and sand, called f-sand. This sand proved to be a more effective water filter, keeping the water potable for much longer periods of time. The students were able to use f-sand created in the lab to experiment with filtering dirty water in our classroom.

After students learned how to use the f-sand to filter dirty water to obtain clean drinking water, we started to brainstorm ways we could draw the steps that we learned to show people how to filter water. The idea behind using pictorial brochures was so that people in any country could use the brochures to learn how to filter water. Students realized that if we included words in English, many people around the world wouldn’t be able to understand the instructions. In groups of three, students brainstormed the necessary how-to steps as well as picture and diagram ideas to include in the brochures. Then as a class, we decided on a list of six pictorial steps for students to illustrate in their brochures. Some groups decided to add an extra step or two to make the brochure more detailed, while other groups decided to combine a few steps to make the brochure more concise. The brochures turned out to be incredibly well-done and easy to understand, and the students are very proud of their work.
An important part of completing a service project is to engage in a reflection. We not only learn from doing, but we also learn most from thinking about what we do. The Northwest Service Academy (2008), states that reflection is a crucial part of service-learning because it allows students to look back on, think critically about, and learn from their service experience. Reflection gives meaning to the experience and helps students further develop a spirit of service and civic-mindedness. Reflection can occur in many different forms. Since the students in my class have created personal blogs, they liked the idea of making a blog post about the project – acknowledging and sharing their feelings, reactions, observations, and ideas about anything regarding service-learning and the project itself.

After completing this inquiry and service-learning project, I’ve realized that many standards can be easily incorporated into the project. Research has shown that student achievement can increase when service is integrated into subject matter and a clear connection exists between goals and activities (Cipolle, 69). While working on this service-learning project, students were able to learn about civic responsibility and government; environment and ecology; humans and the environment; earth sciences; geography; and culture. Students also practiced reading, writing, speaking, and listening skills; research, and technology. The PA Standards that were met while completing this service learning project can be found in Appendix H.
REFLECTION & FUTURE PRACTICE

This inquiry process has shown me that students benefit greatly when they engage in service-learning and complete a service-learning project. Not only do students benefit academically from service-learning, but they also enjoy the experience. Teachers see many benefits to service-learning as well and support projects that raise awareness and encourage students to make a difference. Service-learning can incorporate and include numerous academic skills and standards as well. Based on my claims, I believe that my inquiry successfully benefitted students, as well as answered my main and sub-wonderings.

Prior to completing this service-learning inquiry, I had read and researched about service-learning in countless books, articles, and web pages. Nearly everything I read listed numerous benefits of service projects in the classroom. Service-Learning and Social Justice: Engaging Students in Social Change, by Susan Benigni Cipolle, discusses how effective service-learning helps students see their potential to impact a change as they go through the four essential elements of critical consciousness development: self-awareness, awareness of others, awareness of social issues, and ethic of service. Cippolle (2010) states, “Developing a greater awareness and broader perspective of social issues occurs through accurate information, constructive service experiences, and critical reflection…Students develop a more critical, complex view of the world and begin to see how power relations limit options for oppressed groups.”

I strongly value and advocate service-learning and social justice. After taking a political justice class in college, I became interested in learning why inequity occurs, why there is such a divide among people, and how I can help create social change. When I introduced the idea of creating a service project out of the students’ wonderings about why many people in the developing world lack access to potable water, I discovered that students in my class were just as
excited about making a difference and figuring out ways to help others as I am. Students everywhere learn about issues and problems around the world and how people in developing countries lack resources, food, water, and sanitation. But how often do students participate in the service part? This thinking is what generated my main wondering: How can students benefit from participating in a service-learning project?

Students will be presenting to the third and fourth grade classes at Radio Park. Students are incredibly proud of the service-learning project that they participated in and want to share their research, brochures, and blog pages. While students are presenting their project, a Centre Daily Times reporter will be listening to the presentation as well, and will be interviewing students afterwards for a story in the paper. Presentation of the project is an incredibly important part of a service-learning experience. This gives students a chance to publicly display their work and to teach others about a problem they are passionate about with a solution that they chose to pursue. Students will also be writing a reflection about the project on their blogs after presenting the brochures. Reflection is a key part in a service-learning process because it allows students time to think about and analyze the process they went through completing the project. It also gives them a chance to think about the effect that the project product has on people – how the project has or will help others.

I am incredibly proud of my students for completing this service-learning project about cleaning dirty water. I think it taught them many valuable ideas and responsibilities. I wish I would have had more time to incorporate more activities into the project, such as taking a field trip to the lab where the f-sand is produced, and being able to see pictures of people in Africa using the brochures to help them clean the dirty water there. One part of the project that I think was difficult for the students was not being able to see how their brochures helped people. They
are still aware of how they helped people gain access to clean water though.

There are numerous service-learning possibilities for students, teachers, classroom communities, and school environments, as I learned through completing this inquiry. I hope to continue to engage students in service-learning through service-learning projects that are integrated into the curriculum. One of the most important skills students can learn is to become an educated democratic citizen who understands and engages in civic responsibility. “When teachers focus on social-justice education, they make a long-term commitment and accept an awesome responsibility to students and to society” (Cipolle, 2010). Completing this service-learning project on cleaning water was a tremendous amount of work, and I would definitely like to complete a similar project dealing with cleaning the water now that I’m familiar with all the steps of this project. I would, however, like to also complete other projects with my students involving service-learning. I think the ideas and projects are most powerful when they are student-generated. Projects that have to do with current events seem to be quite powerful as well. Some students in my class talked about trying to do a project to help people in Japan who survived the tsunami. In the future, I would also like to try completing a service-learning project with a different grade level class in the school. Eventually, I’d like to coordinate a project with another school in the country, or even another school somewhere around the world. I think that would be incredibly powerful for the students to skype with other students in the world and share excitement working towards a common goal of helping others.
REFERENCES
APPENDIX A: INQUIRY BRIEF

Context

I am currently an intern at Radio Park Elementary School in a fifth grade classroom. The building has three each of kindergarten, first, and second grade classrooms, three each of third and fourth grade classrooms, and four fifth grade classrooms. The school also shares a Learning Enrichment teacher, has a Speech and Language Specialist, an Occupational Therapist, an Instructional Support teacher (IST), a school nurse, two Title I teachers, an Instructional Technology Specialist, two guidance counselors, a school psychologist, and an ELL teacher. Additionally, Radio Park has an all-purpose room, an art room, a library, a music, and a band room.

My fifth grade classroom is comprised of 18 students, which includes eleven males and seven females. Although there are only 18 students in this fifth grade class, there is a significant academic achievement gap among the students. However, all of the students in the class are high-level thinkers who have the ability to critically analyze and participate in intense conversations. Six students are performing above grade level in mathematics and leave the classroom to go to an advanced math class. Ten students are about on grade level for math, and the other two students are below grade level. A few students from other fifth grade classes join this class for math. Among the eight students who are right around grade level, abilities and thinking strategies vary greatly. Because of this achievement gap, teaching math has proven to be difficult. Differentiated instruction has worked well; students who finish early have the opportunity to work on extension activities, and students who need extra help have the choice of working with a teacher at the back table.

Reading, writing, research, listening and speaking skills are taught in the context of what students are learning. There is a wide range of reading abilities in this class. Six students are
reading at a sixth grade level; eight students are reading at grade level; and four students are reading below grade level. The students who struggle with reading leave the classroom to go to learning support for reading. One student goes to Title I reading support, which is a program where students receive extra support in reading. In the group of eight students who are reading on grade level, there is still a range of reading comprehension ability. This is evident during small group reading instruction and from reading students’ reading journals. There are many creative writers in this class. Each week students write spelling stories and have written some incredibly amusing and creative stories. The same four students who struggle with reading also struggle with writing. These students go to learning support for writing as well. The rest of the students in the class work at very different paces when writing.

Many students in this class take school very seriously, but also know that there are appropriate times to be social throughout the day. For the most part, students in the class get along with each other. This is evident when students are paired and grouped together and complete work enthusiastically in a timely manner. The students are also very accepting and interested in differences. I have observed students socializing frequently in the morning when they get to school. All of the students have at least one good friend in the class, and seem to be forming additional healthy peer relationships within the class and in the 5th grade. On the playground, students in the class all seem to have a group of friends with whom they play. A few games have escalated into disagreements and arguments, but most of the time the students are able to settle these disagreements without the involvement and intervention of a teacher.

In this fifth grade class, students come from a variety of cultural backgrounds. The students have different knowledge bases, customs, traditions, values, and norms. Three students have one or both parents who are from China, and these students all celebrate the Chinese New
Year in addition to American holidays. Two students have fathers who lived in South Africa. Additionally, a student from South Korea joined the class about two months into the school year. Many students in the class have traveled outside of the United States and have an astute cultural awareness and understanding. Three times a week students complete geography work for morning work, and on those days morning meeting lasts nearly half an hour because students are so interested in geography and the different cultures that exist in different countries.

**Rationale**

After completing my methods classes in the fall and talking a lot about service learning in my Social Studies class, I started to wonder about the benefits of doing a service project in my classroom. Being in the PDS program, I’ve learned to constantly critically analyze and reflect on my teaching, lessons, and student learning. So I decided to introduce the idea of service-learning to the students to see what their reaction would be and they were all extremely excited and enthused about making a difference in the world and in the lives of others. After reading an article about the moringa plant, I started to contact people at Penn State University to help with the project. I am very interested in learning if and/or how service learning can improve students’ learning and help them better understand civics.

Service-learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen the community. According to a service-learning website, “When students engage in service to the community, in addition to learning, they are contributing to their long-term social and civic development. When youth engage in service, they are more likely to carry those values through to adulthood” (*Learning to Give*, 2011).
After teaching students about what service learning is, they started to think of service projects to complete. We wanted to help people in other countries who are less fortunate than us. At the time, the class was in the environmental science unit, so the students were learning about water. The lack of safe drinking water affects an overwhelming number of people in the world. Nearly one billion or approximately one in eight people lacks access to safe water. Children are especially vulnerable. In the developing world, 24,000 children under the age of five die every day from preventable causes like diarrhea contracted from unclean water. Diarrheal diseases caused by poor sanitation and dirty water kill more children than AIDS, malaria and measles combined ("Water facts," 2011). This is important and relevant to students because they will learn about different parts of the world and how fortunate we are to have access to safe drinking water and sanitation.

Through this inquiry, I will complete a service project with the students involving helping raise awareness of the moringa plant in developing countries by assisting the students in making pamphlets about how to use moringa to filter dirty water. The students will learn about the filtration process and how to make a how-to instructional pamphlet for people to use. They will also be completing a page on our class blog describing how moringa works. After completing the project, the class will present our service project to the other 5th grade classes.

Main Wondering

How can students benefit from participating in a service-learning project?

Sub-Questions

- How can other academic skills be incorporated into service learning? Note-taking skills, computer skills, summarizing, reflective writing, blogs, etc?
• How can students help others through service-learning?
• What do 5th grade teachers think about service-learning and service projects? Have they ever done a service project? Would they consider doing one?
• How will a service project affect students’ thinking about service after completing the project?
• Will students hope to become more involved in service after completing a service project?
• After seeing the class present their project, do teachers have different opinions of a service project? Would they consider doing one now if they haven’t already?
• How did this project relate to PA standards and the SCASD curriculum?

Data Collection

In order to collect data for this inquiry service-learning project, I have already given a pre-inquiry survey to the entire class about service learning, the project that we have planned, and about why it’s important to help others who are less fortunate. The survey was not anonymous, and the questions were mostly short answers with two multiple-choice questions. Based on these results, I will determine who I would like to further interview about their survey questions. I will be interviewing four students – two students who gave answers that seemed like they understand service learning, the project with moringa, and the importance of civics, and other two interviews will be with students who gave answers different from the rest in terms of their understanding and interest in service learning and the project. I will also interview the other 5th grade teachers at Radio Park about service learning to find out if they think service learning is important, beneficial, and relevant to 5th graders.

This inquiry project is a service-learning project – students will be participating in learning about the importance of service and will be completing a project which consists of creating pamphlets that will be shown at an EPA Conference in Washington, DC towards the end of April, and will also be creating a blog page about the class project. The EPA Conference hosts the National Sustainable Design Expo featuring EPA’s P3 competition. The P3 – People, Prosperity
and the Planet Student Design Competition for Sustainability is an annual event for teams of graduate and undergraduate students to design solutions for environmental and sustainability challenges world-wide.

After conducting interviews with teachers and students, the students will learn about the moringa seed filtration process that Penn State professors and graduate students have figured out. Prior to the presentation, students will participate in a mini lesson on note taking so that they’ll be able to take notes while the speakers are presenting the moringa filter and how it works. Students will be able to use pictures from the presentations so that they can use the pictures on the blog and for their pamphlets. Our class will also be getting a moringa plant for the classroom so that we’ll be able to use the seeds of the plant to do the filtration process ourselves. Next, students will participate in two lessons about how to write an instructional book or pamphlet – what’s important to include, etc. The pamphlets will consist mostly of pictures and diagrams with limited words because they will be used to give to people in developing countries who will most likely not understand English. Students will need quite a bit of time to complete their pamphlets, and when they finish, they will then work on a blog page about the moringa filtration process. Students will be encouraged to write about the project on their blogs as part of the reflection process – what they’ve learned about moringa and filtering dirty water, what they enjoyed most about the project, and what they hope to do in the future regarding service projects.

After completing the project, students will present their pamphlets and blog page to the other 5th grade classes in the form of a Public Service Announcement. I will also be interviewing the same four students to see if their opinions and thoughts about service learning and the project have changed. The whole class will take a post-inquiry survey as well. Many questions on the
survey will be the same as the pre-inquiry survey. The same Radio Park 5th grade teachers will be interviewed after seeing my class’s final project is completed.

**Timeline**

**Week 1 – February 14**

- Conduct pre-inquiry survey with whole class – mostly short answer questions with a few multiple choice questions. Not anonymous so that certain students can be interviewed further about their responses.
- Analyze survey answers; try to pick students to interview further.

**Week 2 – February 21**

- Interview students selected based on their answers to the surveys.
- Interview other 5th grade teachers.
- PSU professors/grad students discuss project possibilities with students – students take pictures and film presentation.

**Week 3 – February 28**

- Interview other 5th grade teachers.
- Analyze interview responses.

**Week 4 – March 7**

- Spring break
- Send email to parents describing service-learning and the project that the class is participating in.

**Week 5 – March 14**

- Lessons on how to create an informational pamphlet (How-To book)
- Students start generating ideas for pamphlet.

**Week 6 – March 21**

- Generate list of steps for water filtration process.
- Touch base with students to see how they are feeling about the project.

**Week 7 – March 28**

- Guest speakers to help with organization of pamphlets.

**Week 8 – April 4**

- Pamphlet work – sketches of pictures for brochures.

**Week 9 – April 11**

- Students finalize pamphlets.
• Photocopy pamphlets to take to EPA conference in DC.
• Give students post-project survey.

Week 10 – April 18
• Conduct post-project interviews with same students.
• Blog entries – reflection of project.
• Continue to work on inquiry paper.

Week 11 – April 25
• Present brochures to third and fourth grade classes.
• Conduct post-project interviews with same teachers.
• Finalize inquiry project/paper & prepare for conference.
• Student celebration of completion of service project.
APPENDIX B: PRE-INQUIRY STUDENT SURVEY

2. How many times per day do you do something nice or helpful for someone else without being asked?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
<th>Count</th>
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<td>0.0%</td>
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<tr>
<td>1</td>
<td>5.6%</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>16.7%</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>33.3%</td>
<td>6</td>
</tr>
<tr>
<td>4 or more</td>
<td>44.4%</td>
<td>8</td>
</tr>
</tbody>
</table>

answered question: 18
skipped question: 0

3. How often do you think about other people in the world who are less fortunate than you?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>A lot</td>
<td>22.2%</td>
<td>4</td>
</tr>
<tr>
<td>Often</td>
<td>50.0%</td>
<td>9</td>
</tr>
<tr>
<td>Sometimes</td>
<td>27.8%</td>
<td>5</td>
</tr>
<tr>
<td>Never</td>
<td>5.6%</td>
<td>1</td>
</tr>
</tbody>
</table>

answered question: 18
skipped question: 0
4. Do you consider yourself fortunate or unfortunate? Explain why you think either answer.

<table>
<thead>
<tr>
<th>Response Count</th>
<th>18</th>
</tr>
</thead>
</table>

**GOLD FEATURE:** Text Analysis allows you to view frequently used words and phrases, categorize responses, and turn open-ended text into data you can really use. To use Text Analysis, upgrade to a GOLD or PLATINUM plan.

Showing 18 text responses

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/17/11 1:33AM</td>
<td>I consider myself fortunate because we live in a big house and we have food for 2 or 3 meals a day. We also get to go on trips a lot during the year. Many people don't get to food at least twice a day and they probably don't get to go on many trips as I have, or they don't get to go on any fun trips.</td>
</tr>
<tr>
<td>2/17/11 1:32AM</td>
<td>fortunate because I get food every day and have a house and good parents.</td>
</tr>
<tr>
<td>2/17/11 1:29AM</td>
<td>Fortunate, because kids in africa and other countries don't have a good education, enough food, and a large house</td>
</tr>
<tr>
<td>2/17/11 1:29AM</td>
<td>Fortunate, because I get to do so much more than other people.</td>
</tr>
<tr>
<td>2/17/11 1:29AM</td>
<td>I think that I am fortunate because I have the basic utilities plus extra things like Tv.</td>
</tr>
</tbody>
</table>

5. How old does a person have to be to help improve someone else's life?

<table>
<thead>
<tr>
<th>Response Count</th>
<th>17</th>
</tr>
</thead>
</table>

**GOLD FEATURE:** Text Analysis allows you to view frequently used words and phrases, categorize responses, and turn open-ended text into data you can really use. To use Text Analysis, upgrade to a GOLD or PLATINUM plan.

Showing 17 text responses

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Response</th>
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<tr>
<td>2/17/11 2:31AM</td>
<td>atleast 4</td>
</tr>
<tr>
<td>2/17/11 1:33AM</td>
<td>3</td>
</tr>
<tr>
<td>2/17/11 1:33AM</td>
<td>Any age you can help the community or someone else's life. Just a compliment will make most people smile and have a great day. Donating old toys or clothes helps kids have fun and exercise every day.</td>
</tr>
<tr>
<td>2/17/11 1:33AM</td>
<td>1, little things can lead to a big difference</td>
</tr>
<tr>
<td>2/17/11 1:29AM</td>
<td>It doesn't matter, in fact, I'm trying to get a micro loan to help kids in Zimbabwe and Kenya. I also am walking door to door to help raise money. Another thing that I'm trying to do, is put a box in all the elementary schools in the SCASD and send a note home with every person, saying to donate some money to kids in Zimbabwe and Kenya</td>
</tr>
</tbody>
</table>
6. Do you feel that you can make a difference in someone else's life? Why or why not?

Response Count: 18

Responses (18) | Text Analysis | My Categories (0)

**GOLD FEATURE:** Text Analysis allows you to view frequently used words and phrases, categorize responses and turn open-ended text into data you can really use. To use Text Analysis, upgrade to a GOLD or PLATINUM plan.

Showing 18 text responses

No responses selected

2/17/11 1:53AM View Responses

Yes, because giving food to a donation can help people stay healthy. If you donate money to help clean water you might be saving many people's life. In the United States we are very fortunate to have fresh water and food everyday.

2/17/11 1:33AM View Responses

Yes just picking up litter helps. When I went to south Africa me and my family give candy to kids that had no home or not a lot of food and bad water so it felt good to give.

2/17/11 1:32AM View Responses

Absolutely, because it doesn't matter how powerful you are, you can still make a difference in our world.

2/17/11 1:29AM View Responses

Yes, there is so much I can do to make a difference in anything.

2/17/11 1:29AM View Responses

I think that anyone can make a different in anyone's life.

2/17/11 1:29AM View Responses

7. What is “service?”

Response Count: 18

Responses (18) | Text Analysis | My Categories (0)

**GOLD FEATURE:** Text Analysis allows you to view frequently used words and phrases, categorize responses and turn open-ended text into data you can really use. To use Text Analysis, upgrade to a GOLD or PLATINUM plan.

Showing 18 text responses

No responses selected

2/17/11 1:28AM View Responses

Service is when you help others do something like kids care fair we help with that so it's service.

2/17/11 1:26AM View Responses

To serve someone.

2/17/11 1:26AM View Responses

A service is when you do something for any other person.

2/17/11 1:26AM View Responses

It is to do something on your own free will.

2/17/11 1:26AM View Responses

don't know

2/17/11 1:25AM View Responses

Doing something for some one.

2/17/11 1:24AM View Responses
8. What have you learned so far in our class service project about water?

- A lot of things that can help our planet.
  2/17/11 1:29 AM
- A lot about how to save water, and how sometimes other people don't have the same amount of water we do.
  2/17/11 1:29 AM
- That moringa purifies water, and the people in Africa need clean water.
  2/17/11 1:29 AM
- I have learned a lot with water. I now know what and what not to drink so I can help other people if they are going to drink something unsafe.
  2/17/11 1:29 AM
- 18 Africans die from lack of clean drinking water every 5 minutes.
  2/17/11 1:29 AM
- I learned that the moringa plant can clean water. It will help many people in Africa to get clean water that they need.
  2/17/11 1:29 AM

9. What do you still hope to learn from the service project about water?

- How we can help Africans get the clean drinking water they need.
  2/17/11 1:28 AM
- I still want to learn how other people's water gets dirty and find a way to clean it.
  2/17/11 1:28 AM
- How to make people clean water in Africa and other places.
  2/17/11 1:28 AM
- How to get rid of it for good.
  2/17/11 1:28 AM
- Nothing.
  2/17/11 1:24 AM
- How to help a lot.
  2/17/11 1:23 AM
10. How do you feel about our project?

I think it's a really good idea, because some people don't know how to save water.
2/17/11 1:29 AM  View Responses

I feel that people should do stuff like this more often
2/17/11 1:29 AM  View Responses

I love everything we do like this is the best class I've ever had.
2/17/11 1:28 AM  View Responses

Well, we're not really helping the Africans in any way (we're just learning about them), so I wouldn't really call this a project, so I can't rate it.
2/17/11 1:28 AM  View Responses

I feel that it is a very generous and giving project and that it is very important.
2/17/11 1:28 AM  View Responses

I think we should do it.
2/17/11 1:26 AM  View Responses

3. Is it important to get involved and help people in other countries? Why or why not?

Yes, because some people aren't as fortunate as we are and just thinking about all the people you could help makes you want to help them.
2/17/11 4:00 AM  View Responses

In school yes and I'm glad we do because it breaks my heart to see them not be able to eat real food or drink clean water like who else would want to live like they do.
2/17/11 1:37 AM  View Responses

It is important to help people in other countries because they need it more than we do.
2/17/11 1:34 AM  View Responses

Yes, it will greatly improve both of their lives.
2/17/11 1:34 AM  View Responses

Yes. We should help other countries because we could make friends.
2/17/11 1:32 AM  View Responses

Yes because what if a country was facing a plague and had no medicine, or they are facing famine, everybody would be wiped out eventually.
4. What do you need to know about a country before helping the people of that country fix a problem?

You need to know what is the problem before you try to fix it. If you don’t you could send food when the country need money.
2/17/11 4:00AM View Responses

You need to know there problem and you need to know how to fix it.
2/17/11 1:37AM View Responses

What their problem is, and you need to know what you need to fix this problem
2/17/11 1:34AM View Responses

What the problem is and what the climate is.
2/17/11 1:34AM View Responses

To find out what needs to be done and how we can help.
2/17/11 1:32AM View Responses

You need to know what kind of climate there was, or if they had certain rules, or even if the people would be willing to use whatever you’re going to use.
2/17/11 1:30AM View Responses

5. What do you gain from helping others?

RESPECT!!!
2/17/11 1:37AM View Responses

Happiness
2/17/11 1:34AM View Responses

Sometimes models (like the Model Of Freedom), and almost always happiness.
2/17/11 1:34AM View Responses

The feeling of helping others.
2/17/11 1:32AM View Responses

It makes you feel good about yourself that you helped somebody in need.
2/17/11 1:30AM View Responses

happiness
2/17/11 1:30AM View Responses
APPENDIX C: PRE-INQUIRY STUDENT INTERVIEWS

Student Interview 1

1. When you go home after school what kinds of things do you like to do?
   - Homework, practice flute, watch TV

2. What do you do on weekends?
   - Clean the house; read

3. Do you take family vacations? If yes, where do you usually go?
   - England for 4 months; NY; China

4. Do you enjoy helping people? In what ways? How does it make you feel when you help
   someone and you know they are happy because of it?
   - It makes me feel good and happy to help people

5. Do you participate in any club or organization that helps others?
   - Girl Scouts

6. Have you ever raised money for others who are less fortunate?
   - Yes, THON (donated money)

7. Have you ever been to a poor part of the U.S. or to an underdeveloped country?
   - NYC, China

8. Why do you think some people have easy access to resources and others don’t?
   - Bad background (less fortunate), no education

9. Have you thought of any ideas of other service projects you’d like to do in the future?
   - Something that helps animals and the environment

10. Have you done any other service projects in school before? If yes, what are they?
    - Yes in second grade – can’t remember though

11. What do you think about our moringa project?
    - Think it’s a good idea; should talk more about what other people don’t have (i.e.
      what resources they don’t have)
Student Interview 2

1. When you go home after school what kinds of things do you like to do?
   - Swim, homework, eat

2. What do you do on weekends?
   - Video games, play soccer, swim, hang out with friends

3. Do you take family vacations? If yes, where do you usually go?
   - Long Beach Island, NJ

4. Do you enjoy helping people? In what ways? How does it make you feel when you help someone and you know they are happy because of it?
   - Yes, makes me feel happy

5. Do you participate in any club or organization that helps others?
   - YMCA

6. Have you ever raised money for others who are less fortunate?
   - Yes, PAWS, collected cans for food bank

7. Have you ever been to a poor part of the U.S. or to an underdeveloped country?
   - Philadelphia, NYC

8. Why do you think some people have easy access to resources and others don’t?
   - Education; people who earn money have to work

9. Have you thought of any ideas of other service projects you’d like to do in the future?
   - Decrease global warming; planting more trees

10. Have you done any other service projects in school before? If yes, what are they?
    - LEP (learning enrichment project) – global warming and how we can decrease it

11. What do you think about our moringa project?
    - Thinks it’s a good idea. It’s a problem that people don’t have access to clean water
APPENDIX D: PRE-INQUIRY TEACHER INTERVIEWS
Teacher Interview 1

1. How would you describe service-learning? Can you think of some examples of service projects? (If inaccurate, describe what service learning is)
   - Ways to involve the class in social-action projects that are going to have an impact on a need in the world
   - Ex: books for libraries in Africa; collecting pennies for 100th day of school

2. Do you think there are benefits for students of doing a service project in the classroom? Are there drawbacks?
   - Benefits: connects students to people outside the classroom; helps students understand that there are significant needs in the world
   - Drawbacks: time – not enough time to develop background of project

3. Would you consider doing a service-learning project in your classroom? Why or why not?
   - Yes, endangered rainforest in Africa (sponsor acre of rainforest)

4. Do you think your students would be interested in and motivated to do a service project? Why or why not?
   - Yes, students seem to be motivated to help others

5. If you would do a service project in your classroom, what kinds of ideas do you have about what your students might be interested in doing?
   - Important that students are involved – has more meaning if students come up with the idea for the project

6. Do you feel like you would have access to resources to complete a service project? Why or why not?
   - Yes, most projects have websites and video resources

7. Do you think students have to be of a certain age before they can participate in service projects? Why?
   - No, as long as teacher supports them (benefits for all ages – may need to start simpler)
   - First grade bake sale for Haiti
Teacher Interview 2

1. How would you describe service-learning? Can you think of some examples of service projects? (if inaccurate, describe what service learning is)
   - Teaching kids the value of helping others in their community
   - Ex: Kids Care Fair

2. Do you think there are benefits for students of doing a service project in the classroom? Are there drawbacks?
   - Tremendous benefits
   - Drawback: time

3. Would you consider doing a service-learning project in your classroom? Why or why not?
   - Yes, very beneficial to students. Able to help others.
   - Previous projects include: Kids Care Fair, SPCA money collection

4. Do you think your students would be interested in and motivated to do a service project? Why or why not?
   - Yes, kids loved previous projects
   - Most kids are very motivated, but there is usually at least one student who isn’t motivated and involved in the project

5. If you would do a service project in your classroom, what kinds of ideas do you have about what your students might be interested in doing?
   - SPCA collection
   - PAWS donations

6. Do you feel like you would have access to resources to complete a service project? Why or why not?
   - Yes – resources would be available and also feel as though project would be supported by other teachers and principal

7. Do you think students have to be of a certain age before they can participate in service projects? Why?
   - No age; the sooner the better
Teacher Interview 3

1. How would you describe service-learning? Can you think of some examples of service projects?

   - I would describe it as a project that takes place in the classroom where the students people in their community in some way. Ex: Kids Care Fair

2. Do you think there are benefits for students of doing a service project in the classroom? Are there drawbacks?

   - I think that service learning is very beneficial to our students. I think it is very engaging, students learn how to do things that benefit others, there is the creative aspect. I think the only drawback is that you need to be completely committed as a teacher because it would take a lot of time.

3. Would you consider doing a service-learning project in your classroom? Why or why not?

   - Yes, most certainly. I think that any time you can involve the students in their own learning there is major benefits. It would be something that they would truly remember for years to come.

4. Do you think your students would be interested in and motivated to do a service project? Why or why not?

   - I think most would be very motivated. I know when Japan got hit a lot of students asked what they could do to help. I think the thing I would want to do to make sure that they were very motivated is to have them involved in every step of the process. (have them help decide which type of project they wanted to do)

5. If you would do a service project in your classroom, what kinds of ideas do you have about what your students might be interested in doing?

   - I know that my students had said about helping animal shelters before.

6. Do you feel like you would have access to resources to complete a service project? Why or why not?

   - I think I would have some but I really am not aware of any. I think because I am not from State College I would have to do some research before I would think about starting a service project to make sure I would be able to complete it. I would hate to start something like that and not be able to finish it due to lack of resources.
7. Do you think students have to be of a certain age before they can participate in service projects? Why?

- I think that 3rd would be the very youngest but I think the teacher would have to be doing a lot of the work. I think the ideal age would be 5th or higher. I think it would be neat for a younger grade to work with an older grade to complete a service project.
APPENDIX E: HOW-TO INSTRUCTIONAL LESSON

How-To Instructional Lesson Plan for PB&J Sandwiches

Before completing the brochures, I am going to first have the students complete a how-to of how to make a PB&J sandwich. The idea is to get the students to first do a task that is familiar to them so that they can start thinking about how to visually represent instructions, rather than writing them down. First, students have to think about being very specific with their instructions, keeping in mind that they will be drawing the brochures for someone who has never filtered water with f-sand before. The students will be in groups of three for writing the how-to steps, and for making their brochures.

In these groups, the students will work together to write how to make a PB&J sandwich. After they complete their instructions, the students will gather in the front of the room in front of the banana table. I will follow each group’s instructions carefully as they read them aloud. After each group shares, we'll come up with a master list together of detailed instructions about how to make a PB&J sandwich. From there, each group will draw pictures to instruct someone how to make a sandwich. This will probably take about an hour to an hour and a half depending on how much difficulty groups have with drawing the instructions.

For the next time they work on the project, each group will go through the filtration process again within their groups. Then, we’ll discuss the list of filtration steps together as a class and generate a list. We can discuss how to draw the first and second steps together so that they get an idea about how to draw it. They'll probably need about two hours to complete the brochures and color them.

Here are the steps that Lauren and Stephanie sent me about how to make f-sand and how to use the f-sand. I think having them create a brochure about how to make the f-sand and how to
use the f-sand will be too much. We can start with a how-to for using f-sand, and if there's time, make a how-to for making f-sand.

Making f-sand:

1. Find a plastic water or soda bottle (about 1/2 liter)

2. Fill the bottle with sand to about the height of your four fingers (as in have them set the bottle on a desk and wrap their hand around the bottom of the bottle then fill the bottle up to the level of their top finger)

3. Crush 25 seeds

4. Add the seeds to the bottle

5. Fill the bottle about 3/4 with water (make sure that all of the sand gets wet)

6. Shake or roll bottle for about 30 minutes

7. Rinse the sand really really well (until all pieces of seed are gone)

8. Spread the sand out on a flat surface to dry overnight

9. Put the sand back into the dry bottle to store

Using f-sand

1. Get a soda or water bottle (about 1/2 liter)

2. Set the bottle on a desk and wrap your hand around the bottom of the bottle

3. Add f-sand up to the top of your four fingers wrapped around the bottle.

4. Add dirty water until the bottle is mostly full (again make sure all of the sand is wet)

5. Roll gently for 30 minutes (don't shake the bottle)

6. Pour out the top clean water for drinking
## APPENDIX F: POST-INQUIRY STUDENT SURVEY

### 2. How many times per day do you do something nice or helpful for someone else without being asked?

<table>
<thead>
<tr>
<th>Response</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>6.3%</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>18.8%</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>31.3%</td>
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</tr>
<tr>
<td>4 or more</td>
<td>43.8%</td>
<td>7</td>
</tr>
</tbody>
</table>

*answered question 16, skipped question 0*

### 3. How often do you think about other people in the world who are less fortunate than you?

<table>
<thead>
<tr>
<th>Response</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>A lot</td>
<td>31.3%</td>
<td>5</td>
</tr>
<tr>
<td>Often</td>
<td>25.0%</td>
<td>4</td>
</tr>
<tr>
<td>Sometimes</td>
<td>43.8%</td>
<td>7</td>
</tr>
<tr>
<td>Never</td>
<td>0.0%</td>
<td>0</td>
</tr>
</tbody>
</table>

*answered question 16, skipped question 0*
4. Do you consider yourself fortunate or unfortunate? Please explain why you think either answer.

GOLD FEATURE: Text Analysis allows you to view frequently used words and phrases, categorize responses, and turn open-ended text into data you can really use. To use Text Analysis, upgrade to a GOLD or PLATINUM plan.

I consider myself as fortunate because there are people who don’t get water and food, who are struggling for their life and I have everything that they don’t.
4/15/11 9:28PM View Responses

Fortunate, because I have a home and food and clean water.
4/15/11 9:23PM View Responses

I consider myself a fortunate person. I think that because so many different people don’t have homes, don’t have clean water to drink and don’t have medicine to cure them when they get sick. Since I live in the US, I have all of those things. That is why I consider myself fortunate.
4/15/11 9:22PM View Responses

fortunate, we have more money and technology
4/15/11 9:22PM View Responses

I think I’m fortunate because I have a nice family and friends.
4/15/11 9:20PM View Responses

5. How old does a person have to be to help improve someone else’s life?

GOLD FEATURE: Text Analysis allows you to view frequently used words and phrases, categorize responses, and turn open-ended text into data you can really use. To use Text Analysis, upgrade to a GOLD or PLATINUM plan.

ANY age, because there are so many things you can do to help people.
4/15/11 9:25PM View Responses

Any age. For example, a small baby can give joy to someone and a middle-aged person can donate money to help.
4/15/11 9:22PM View Responses

no age
4/15/11 9:22PM View Responses

People any age can help improve someone else’s life
4/15/11 9:20PM View Responses

Any age can make a difference
4/15/11 9:19PM View Responses

Any age!
6. Do you feel that you can make a difference in someone else's life? Why or why not?

Showing 16 text responses

Yes, because I can do almost anything to help people.
4/15/11 9:23PM  View Responses

Yes, I feel I already have. Our whole class has made brochures to help people in Africa and South America get clean water.
4/15/11 9:22PM  View Responses

Yes by giving help
4/15/11 9:22PM  View Responses

Yes. Because there are people in other countries who need help
4/15/11 9:20PM  View Responses

Any one can make a difference, including me. Even just seeing an elderly person at a nursing home once a week can make a difference.
4/15/11 9:19PM  View Responses

Yes, I think that if I put my mind to doing nice things for someone else.
4/15/11 9:19PM  View Responses

8. Is it important to help people in other countries? Why or why not?

Showing 16 text responses

Because everybody on earth deserves a good life.
4/15/11 9:26PM  View Responses

It is if you can afford it people are important in different countries, but you want to make sure that you can take care of yourself first.
4/15/11 9:25PM  View Responses

Yes, because A LOT of people don't have access to food or clean water that they need to survive.
4/15/11 9:23PM  View Responses

Yes because if we didn't help them, they would most likely die.
4/15/11 9:22PM  View Responses

Yes because they need the support
4/15/11 9:22PM  View Responses

Yes. Then we can gain their trust and send doctors to help even more
4/15/11 9:20PM  View Responses
9. What do you need to know about a country before helping the people of that country fix a problem?

GOLD FEATURE: Text Analysis allows you to view frequently used words and phrases, categorize responses and turn open-ended text into data you can really use. To use Text Analysis, upgrade to a GOLD or PLATINUM plan.

Showing 16 text responses

Why they can't fix the problem, and what the problem is.
4/15/11 9:22PM  View Responses

What they need help with
4/15/11 9:22PM  View Responses

What the problem is. How to communicate. What to bring to help.
4/15/11 9:20PM  View Responses

Communication, and understanding the how to how them.
4/15/11 9:19PM  View Responses

You need to know what the problem is and how to fix it. For example: If I wanted to help treat water I would need to know how to do it and how to translate it to them.
4/15/11 9:18PM  View Responses

10. What do you gain from helping others?

GOLD FEATURE: Text Analysis allows you to view frequently used words and phrases, categorize responses and turn open-ended text into data you can really use. To use Text Analysis, upgrade to a GOLD or PLATINUM plan.

Showing 16 text responses

You gain the feeling that you really helped another person’s life.
4/15/11 9:23PM  View Responses

I gain the happiness of helping them.
4/15/11 9:22PM  View Responses

friendship
4/15/11 9:22PM  View Responses

You have the good feeling of helping others
4/15/11 9:20PM  View Responses

You know people out there aren't dying from dehydration, starvation, or dirty water.
4/15/11 9:19PM  View Responses

You gain the pleasure of doing something for someone. I would feel really good if I did something to help someone else. And I have felt that feeling before!
### 1. What is a service project?

**GOLD FEATURE:** Text Analysis allows you to view frequently used words and phrases, categorize responses and turn open-ended text into data you can really use. To use Text Analysis, upgrade to a GOLD or PLATINUM plan.

<table>
<thead>
<tr>
<th>Responses (14)</th>
<th>Text Analysis</th>
<th>My Categories (0)</th>
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<tbody>
<tr>
<td><strong>Showing 14 text responses</strong></td>
<td><strong>No responses selected</strong></td>
<td></td>
</tr>
</tbody>
</table>

- Something that helps somebody or something else.
  - 4/15/11 9:28PM
- It's a project you do to help others.
  - 4/15/11 9:27PM
- It is where you help others
  - 4/15/11 9:26PM
- It is a project that helps someone else.
  - 4/15/11 9:23PM
- Learning about something while doing service
  - 4/15/11 9:23PM
- A service project is something that helps someone or something in any way
  - 4/15/11 9:21PM

### 2. What have you learned from doing this service project on water?

**GOLD FEATURE:** Text Analysis allows you to view frequently used words and phrases, categorize responses and turn open-ended text into data you can really use. To use Text Analysis, upgrade to a GOLD or PLATINUM plan.

<table>
<thead>
<tr>
<th>Responses (15)</th>
<th>Text Analysis</th>
<th>My Categories (0)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Showing 15 text responses</strong></td>
<td><strong>No responses selected</strong></td>
<td></td>
</tr>
</tbody>
</table>

- That a lot of Africa needs clean water
  - 4/15/11 11:03PM
- About how bad the water problem is in Africa.
  - 4/15/11 9:32PM
- That we are very lucky to have good and clean water and I've learned to be thankful to the people who work to clean our water
  - 4/15/11 9:29PM
- I learned that being nice is helpful.
  - 4/15/11 9:26PM
- I learned that it is hard to draw a picture that represents cleaning water. Also, I learned that moringa can clean water. Many people don't have filter but places close to the equator have moringa plants so they can learn to clean their water.
  - 4/15/11 9:26PM
- That helping other beings is a great way to spend your time.
  - 4/15/11 9:28PM
4. What did you like most about this project?

**GOLD FEATURE**: Text Analysis allows you to view frequently used words and phrases, categorize responses and turn open-ended text into data you can really use. To use Text Analysis, upgrade to a GOLD or PLATINUM plan.

Showing 15 text responses

The "saving people's lives" part.
4/15/11 9:32PM View Responses

Seeing the change in the water and knowing that who ever drinks the water will be very thankful
4/15/11 9:25PM View Responses

I like being nice.
4/15/11 9:28PM View Responses

I liked the drawing and trying to figure out how to draw symbols that represent cleaning water.
4/15/11 9:28PM View Responses

That I knew in the end that I was helping somebody.
4/15/11 9:28PM View Responses

I like that people are helping other people that are suffering with no clean water.
4/15/11 9:27PM View Responses

5. Would you like to do a project like this again? Why or why not?

**GOLD FEATURE**: Text Analysis allows you to view frequently used words and phrases, categorize responses and turn open-ended text into data you can really use. To use Text Analysis, upgrade to a GOLD or PLATINUM plan.

Showing 15 text responses

Yes. I want people to be alive and drink clean water!!!!!!
4/15/11 9:32PM View Responses

Yes because it's fun knowing you just saved a life.
4/15/11 9:29PM View Responses

YES!!! It is fun being helpful.
4/15/11 9:29PM View Responses

Yes, because I really like the chance to help others who are not as fortunate as I am. I think that it is fun and challenging and I like that.
4/15/11 9:28PM View Responses

Yes because it's a good way to learn and help somebody else.
4/15/11 9:28PM View Responses

Yes, because I like helping less fortunate people.
4/15/11 9:27PM View Responses
APPENDIX G: POST-INQUIRY STUDENT INTERVIEW

Student Interview 1

1. Do you enjoy helping people? In what ways? How does it make you feel when you help someone and you know they are happy because of it?
   - Yes, help clean. It makes me feel good.

2. Do you participate in any club or organization that helps others?
   - Girl Scouts

3. Have you ever raised money for others who are less fortunate?
   - Yes; help mom with raising money for international students

4. Why do you think some people have easy access to resources and others don’t?
   - Sometimes the government prevents people from getting resources; technology

5. Have you done any other service projects in school before? If yes, what are they?
   - Yes; can’t remember

6. What did you think about our water project?
   - I liked doing this project, but it was difficult to draw pictures on the brochures showing how to clean the water. I thought it was really cool though.

7. Why is there a water crisis in other parts of the world?
   - The government controls some of it; people don’t have the technology or resources to get clean water.

8. What did you like best about the project?
   - Mini-lesson and rolling the test tubes (experiments with moringa and f-sand)

9. What is the most important thing that you learned from doing this service project?
   - I knew a lot about the water problems before, but I didn’t know a plant could be used to clean water.

10. Have you thought of any ideas of other service projects you’d like to do in the future?
    - Something to do with helping people in Japan after the tsunami or a project that helps animals.
Student Interview 2

1. Do you enjoy helping people? In what ways? How does it make you feel when you help someone and you know they are happy because of it?
   - Yes, mow neighbors’ lawns, shovel driveways in winter, rake leaves

2. Do you participate in any club or organization that helps others?
   - YMCA

3. Have you ever raised money for others who are less fortunate?
   - Yes, Aqua Laps, fund raisers

4. Why do you think some people have easy access to resources and others don’t?
   - No education, lack the right tools, live in a bad area

5. Have you done any other service projects in school before? If yes, what are they?
   - Yes, Kids Care Fair

6. What did you think about our water project?
   - I think it’s pretty cool. I like the idea of helping people in other countries get clean water.

7. Why is there a water crisis in other parts of the world?
   - Dry climate (no resources) and pollution

8. What did you like best about the project?
   - Rolling tubes with f-sand to filter the water

9. What is the most important thing that you learned from doing this service project?
   - Water is not as hard to clean as people think; people just need to take action and help out

10. Have you thought of any ideas of other service projects you’d like to do in the future?
    - Yes; project that helps clean up pollution and a project that helps to fix global warming


APPENDIX H: PA STANDARDS

• **Subject**: Civics and Government
  • **Area 5.2**: Rights and Responsibilities of Citizenship
  • **Grade 5.2.6**: Grade 6
  • **Standard A.**: Compare rights and responsibilities of citizenship.

  - **Key Content**: Personal responsibilities of the individual and to society
  - **Key Content**: Civic responsibilities of the individual and to society

  - **Standard E.**: Identify examples of the rights and responsibilities of citizenship.

  - **Standard G.**: Explain the importance of participating in government and civic life.

  • **Area 5.4**: How International Relationships Function
  • **Grade 5.4.6**: Grade 6
  • **Standard E.**: Explain how nations work together on common environmental problems, natural disasters and trade.

  • **Subject**: Environment and Ecology
  • **Area 4.1**: Watersheds and Wetlands
  • **Grade 4.1.4**: Grade 4
  • **Standard E.**: Recognize the impact of watersheds and wetlands on animals and plants.
    • Explain the role of watersheds in everyday life.
    • Identify the role of watersheds and wetlands for plants and animals.

  • **Area 4.3**: Environmental Health
  • **Grade 4.3.4**: Grade 4
  • **Standard B.**: Identify how human actions affect environmental health.
    • Identify pollutants.
    • Identify sources of pollution.
    • Identify litter and its effect on the environment.
    • Describe how people can reduce pollution.

  • **Area 4.8**: Humans and the Environment
  • **Grade 4.8.7**: Grade 7
  • **Standard A.**: Describe how the development of civilization relates to the environment.
    • Explain how people use natural resources in their environment.
    • Locate and identify natural resources in different parts of the world.
    • Compare and contrast how people use natural resources throughout the world.

  • **Standard B.**: Explain how people use natural resources.
    • Describe how natural resources are used for survival.
    • Explain how natural resources and technological changes have affected the development of civilizations.
    • Explain how climate and extreme weather events (e. g., drought, flood) influence people’s lives.
Standard C.: Explain how human activities may affect local, regional and national environments.
- Describe what effect consumption and related generation of wastes have on the environment.
- Explain how a particular human activity has changed the local area over the years.

Subject: Geography
Area 7.3: The Human Characteristics of Places and Regions
Grade 7.3.6: Grade 6

Standard B.: Describe the human characteristics of places and regions by their cultural characteristics.
- Ethnicity of people at the county and state levels (e.g., customs, celebrations, languages, religions)
- Spatial arrangement of cultures creates distinctive landscapes (e.g., cultural regions based on languages, customs, religion, building styles as in the Pennsylvania German region)

Standard D.: Describe the human characteristics of places and regions by their economic activities.
- Spatial distribution of economic activities in the local area (e.g., patterns of agriculture, forestry, mining, retailing, manufacturing, services)
- Factors that influence the location and spatial distribution of economic activities (e.g., market size for different types of business, accessibility, modes of transportation used to move people, goods and materials)
- Spatial distribution of resources and their relationship to population distribution
  Historical settlement patterns and natural resource use (e.g., powerhouse sites along the Fall Line)
  Natural resource-based industries (e.g., agriculture, mining, fishing, forestry)

Subject: Reading, Writing, Speaking and Listening
Area 1.6: Speaking and Listening
Grade 1.6.5: Grade 5

Standard A.: Listen to others.
- Ask pertinent questions.
- Distinguish relevant information, ideas and opinions from those that are irrelevant.
- Take notes when prompted.

Standard C.: Speak using skills appropriate to formal speech situations.
- Use complete sentences.
- Pronounce words correctly.
- Use appropriate volume.
- Pace speech so that it is understandable.
- Adjust content for different audiences (e.g., fellow classmates, parents).
- Speak with a purpose in mind.

Standard D.: Contribute to discussions.
- Ask relevant questions.
- Respond with relevant information or opinions to questions asked.
- Listen to and acknowledge the contributions of others.
- Adjust involvement to encourage equitable participation.
- Give reasons for opinions.
- Summarize, when prompted.

Standard E.: Participate in small and large group discussions and presentations.
- Participate in everyday conversation.
- Present an oral reading.
- Deliver research reports.
- Conduct interviews.
- Plan and participate in group presentations.
- Contribute to informal debates.

- Compare information received on television with that received on radio or in newspapers.
- Access information on Internet.
- Discuss the reliability of information received on Internet sources.
- Explain how film can represent either accurate versions or fictional versions of the same event.
- Explain the role of advertisers in the media.
- Use a variety of images and sounds to create an effective presentation on a topic.
• **Area 1.8:** Research
  • **Grade 1.8.5:** Grade 5

**Standard A.** Select and refine a topic for research.

**Standard B.** Locate information using appropriate sources and strategies.
  · Evaluate the usefulness and qualities of the sources.
  · Select appropriate sources (e.g., dictionaries, encyclopedias, other reference materials, interviews, observations, computer databases).
  · Use tables of contents, indices, key words, cross-references and appendices.
  · Use traditional and electronic search tools.

**Standard C.** Organize and present the main ideas from research.
  · Take notes from sources using a structured format.
  · Present the topic using relevant information.
  · Credit sources using a structured format (e.g., author, title).

**Subject:** Science and Technology

• **Area 3.2:** Inquiry and Design
  • **Grade 3.2.4:** Grade 4

**Standard C.** Recognize and use the elements of scientific inquiry to solve problems.
  • Generate questions about objects, organisms and/or events that can be answered through scientific investigations.
  • Design an investigation.
  • Conduct an experiment.
  • State a conclusion that is consistent with the information.

**Standard D.** Recognize and use the technological design process to solve problems.
  • Recognize and explain basic problems.
  • Identify possible solutions and their course of action.
  • Try a solution.
  • Describe the solution, identify its impacts and modify if necessary.
  • Show the steps taken and the results.

• **Area 3.5:** Earth Sciences
  • **Grade 3.5.4:** Grade 4

**Standard D.** Recognize the Earth's different water resources.
  • Know that approximately 4/10th of the earth is covered by water.
  • Describe locations of fresh and salt water in or near the state of Pennsylvania.
  • Identify examples of water in the form of solid, liquid and gas on or near the surface of the earth.
  • Explain and illustrate evaporation and condensation.
  • Recognize other resources available from water (e.g., energy, transportation, minerals, food).

• **Grade 3.5.7:** Grade 7

**Standard D.** Explain the behavior and impact of the earth's water systems.
  • Explain the water cycle using the processes of evaporation and condensation.
  • Describe factors that affect evaporation and condensation.
  • Distinguish salt from fresh water (e.g., density, electrical conduction).
  • Compare the effect of water type (e.g., polluted, fresh, salt water) and the life contained in them.
  • Identify ocean and shoreline features, (e.g., bays, inlets, spit, tidal marshes).

• **Area 3.7:** Technological Devices
  • **Grade 3.7.7:** Grade 7

**Standard C.** Explain and demonstrate basic computer operations and concepts.
  • Know specialized computer applications used in the community.
  • Describe the function of advanced input and output devices (e.g., scanners, video images, plotters, projectors) and demonstrate their use.
  • Demonstrate age appropriate keyboarding skills and techniques.
BIBLIOGRAPHY


In this article, the authors discuss the importance of service learning and the positive impacts that service learning projects have on students. Although this article focuses on college students, the ideas and procedures of any service-learning project are very similar, which parallel goals. One of the most important aspects of a service-learning project is that it’s important and relevant to the students. This confirms the way that I went about choosing a project to pursue for service learning and for inquiry. It seems that students are extremely excited and enthused about participating in this project, and I am interested to gather the data after the project has been completed. This article also discusses possible increased student engagement in service-learning projects. After the project is complete, it will be interesting to see engagement and interest levels compared to other projects that students complete in school. A wondering that I’ve formulated, which has arisen from research on service learning, is if or how learning is enhanced by doing a service-learning project. This article gives ideas about how to measure whether the project enhanced students learning in the end.


This book discusses the components of a How-To book, which will help me write lesson plans for teaching students how to make their pamphlets. Calkins suggests having students first write an informational piece on something that is familiar to them – making a peanut butter and jelly sandwich, playing UNO, riding a bike, etc. After learning the
components of an informational paper, students will be able to put together an accurate
blog page full of informative facts and how-to directions for the filtration project.
Another step is making the pamphlets, which mostly consists of labeling diagrams and
pictures. Calkins discusses the importance of using diagrams and pictures to explain
thinking as well. Students are familiar with informational and nonfiction texts, which
usually include pictures and diagrams, so this part of the lesson will be familiar to them.

Publishers, Inc.

The quote from this book that really got me thinking about implementing a service
project in my classroom was this: “Service-learning at its best: ‘Life isn’t fair, and people
don’t always get what they deserve. How far are we going to let people fall before we say
this is not acceptable?’” The students in my class are very empathetic and when we
discussed helping people in Africa and Central America, they were excited and wanted to
figure out a way we could help. The author of this book writes about the importance of
teaching the *children* not just teaching the students different subjects like math and
writing. I used this information to help me formulate a project idea involving the moringa
plant that the students would be able to understand and be excited about. Teachers need
to teach the whole student – school isn’t just so students can learn to read and write. It’s
also a place where students learn how to become caring democratic citizens who help
each other. This book provides information and emphasizes the importance of connecting
multicultural education and service learning to give students a better understanding of the
world and how they can have a positive impact on society.

Corporation for National and Community Service, Office of Research and Policy Development,
Community Service and Service-Learning in America’s Schools, 2008

Many research studies, including this article, show that students involved in service-learning demonstrate academic and personal growth in such areas as empowerment, leadership, and character development. Students’ connection to the community and to the world is strengthened through a service project because service-learning promotes cultural understanding, and builds a foundation for students to become dedicated democratic citizens. This article describes in detail the benefits of service learning and how it can be implemented into the classroom. After reading this research study, I started to think about how a service-learning project could be connected to the PA standards and SCASD curriculum. The information in this study provided me with ideas about how to teach students the importance of service and helping others.


This online article emphasizes the importance of teaching students about civics and how to encourage them to become active members of their community. It seems that the main goal in schools should be to teach and educate students about how to become informed and thoughtful citizens of a democracy. The service project on moringa encourages students to research the issue, find out how to solve the problem, and then act on it. This article gives good ideas about how to implement civic education in the classroom, not only through service learning. Civic education also includes involving parents, which would be an interesting component of the inquiry project. I plan on sending an email home to parents, letting them know about the service-learning project and encouraging
them to ask questions that they have about it. After the students complete the project, I’ll send home another email asking parents for their input and feedback about the project and how they felt it affected their students.


This book discusses how to incorporate and integrate service learning into the curriculum in a variety of ways. It has given me many ideas about how to incorporate PA standards and parts of the SCASD curriculum into the project. Some ideas include: note-taking skills, computer skills, summarizing, reflective skills, blogging, and others. The culture of the school can be altered through students participating in a service project. Students become more aware of helping others and becoming active democratic citizens within the school and community. Teachers who help students participate in a service project can facilitate learning through service learning and the project itself. There are many ways education can be improved through service learning, and the book gives great ideas about how teachers can support students’ learning through projects helping others. This book has given me many ideas about implementing other PA standards into the service project and has helped me develop lesson plans on instructing a how-to lesson for the pamphlets.


This website educates teachers and students alike about the importance of service. *Learning to Give* provides information to help encourage students to take voluntary citizen action for the common good in their classrooms, their lives, their communities, and the world. I used this resource to help the students narrow their ideas about what exactly we wanted to do for our service-learning project. The project needed to be
student-motivated so that students would be more invested in the project. Teaching students about how to be a democratic citizen is one of the most important skills a student can leave school knowing. This website gave me the idea about creating a blog page with the class about our project and presenting the final project and showing the pamphlets to the other 5th grade classes in the form of a PSA. The website provides ideas about how to incorporate civics into service learning, and how to teach students about the importance of helping others. Hopefully after presenting our project to the other 5th grades, other students will become interested in service-learning and will want to become more involved in helping others.


The Kid’s Guide to Social Action gives great information on how to solve social problems that students choose and turn creative thinking and ideas into positive action. This book emphasizes the importance of students being active in their community, within the state they live in, and worldwide. There is information about how to write successful, powerful speeches, which gave me ideas for helping students put together a speech and Public Service Announcement (PSA) for the other 5th grade classes after the project is completed. Lewis also gives great tips for writing PSAs. She has given examples within the text, as well as visuals to help give me ideas about how I can implement the PSA component into my inquiry project.


In this book, there is a step-by-step plan about how to construct and complete a service project. The information has helped me plan the service-learning project and has given
me ideas about how I can complete the water project with my class. Also, *Project Citizen* emphasizes the importance of doing a presentation and reflection after completing the project. I think that this is an extremely important part of the project. Students will be presenting our project in the form of a PSA to the other 5th grade classes after it is completed. Reflecting on the project afterwards will be incredibly helpful to me to see how much the students learned and how the service-learning project has affected them.


This book gives information about the importance of envisioning teaching as democratic activism. The chapters in this book discuss curriculum, teaching, justice, and the democratic vision, while tying them all together through teaching students to be active democratic citizens. The book gave me ideas about how to write lessons throughout this project to tie together curriculum with parts of the service project. Within the book is evidence to support the power of community as curriculum. This is part of what gave me the idea for students to create a blog page, as well as the pamphlets so that they could present our project to other students in a form similar to a PSA. So often, students learn most about oppression, struggle, resilience, and vision through being engaged in a project in school. *Be the Change* inspired me to really get this project going. I want to instill the same motivation I have to help others into the students.
