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**THE IMPACT OF SOCIAL JUSTICE THEMES ON STUDENT  
ARTWORK IN AN URBAN ELEMENTARY SCHOOL SETTING**

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## **ABSTRACT**

The purpose of this study was to measure the effects of a theme-based art education curriculum in an elementary school art classroom. The participants were fifth and fourth grade students in the art classroom who received art instruction on an eight-day rotation for 45 minutes. The unit plan took place over an eight-week period. Students worked collaboratively to research environmental rights and chose a subtopic to narrow in on for their research. Student groups conducted and documented research on their subtopics, designed inventions aimed at solving the chosen crisis, and made three dimensional representations of their final designs. Student groups completed artist statements, retrieved from <http://createartwithme.blogspot.com/2016/01/artist-statement-form-for-middle-school.html>, indicating both their research and artmaking processes. Final presentations and critiques indicated each student's individual job and reflected how they felt their project would solve the environmental subtopic that their group chose and why they chose that topic to research. Students presented to both myself and their classroom teachers.

Data recorded for this study were collected in the form of surveys, observational data, student work, and final critiques/presentations. The findings suggest that students are highly interested in working with groups who have the same interests as them and sharing their new-found knowledge. Research proved

to be a motivator for new questions about environmental rights and how students can work together to make a positive change for planet earth. Students developed increased empathy towards animals, the environment and concern for the sustainability of human life. Additionally, students showed evidence of increased pro-ecological paradigms, high interest in research, and extensive written/verbal responses based on self-proclaimed increases in knowledge. Students were driven by inquiry-based questions from curiosities developed through researching subcategories of interest and exhibited a desire to make a change in the environment and to share their knowledge with their peers.

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I promise we’ll just use clay next time.

And to my husband, for encouraging me to do this...

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## **RESEARCHER STANCE**

Reflecting back on my elementary art class experiences, I find myself struggling to recall any of the projects I created. Why is it that I cannot remember any of the drawings, paintings or sculptures that I created during my elementary years? I look through the box labeled “Angela Art” that my mom saved and it is filled with color wheels, paper turkey hands, macaroni popsicle stick frames (with my noticeably crooked teeth smile picture taped inside) and of course, and my school district’s favorite project, a clay ashtray. Through these projects I learned about lines, how to mix my secondary colors and how to press clay into a “pancake” shape while my teacher placed it into a bowl, forming its curved edges as it dried. My name is written prominently on the back of my paper pieces in all capital letters, but I have no recollection of creating these pieces. I remember enjoying art class because it was a break from the constant copying of notes from the chalkboard and reciting our multiplication tables, but how much did these early years of artmaking influence my learning?

When I arrived in high school, I had grown tired of perspective drawings that I never managed to complete just “right.” I had this urge to explore with my artmaking materials and loved classes where art was an option for projects. I had the freedom to create art and show what I had learned in class without step-by-step directions on how to complete my project the “correct” way. One of

the most notable was the three-dimensional sculpture of the Globe Theatre that my best friend and I created together for our Shakespeare class. We carefully reviewed our notes and researched the exterior appearance of the building and replicated it. In addition, we read about the interactions of the actors behind stage and created a backstage environment for half of the theater with what we imagined could have been the place where memories were made for the performers. The opportunity to work together and create art based on what we had learned in class was far superior to writing yet another paper.

I had decided to become an art major in high school and entered into the rigorous program that allowed for a distinction in fine arts displayed prominently on your diploma. The goal of the program was to prepare students for the process of creating an extensive portfolio and applying to schools centralized on art. Portfolio requirements were remarkably similar across the board. Colleges wanted to see 15 to 20 pieces in pencil or paint that demonstrated the student's ability to create works of art that were strong examples of properly using the elements and principles of design.

I can vividly remember the moment when the chair of the art education department in my school district brought my most recent piece of artwork for my portfolio to the cutting board. She simply stated that my work in progress didn't look "right" and this was the only way to fix it. She sliced off a significant portion

of the large colored pencil still life drawing I was working on and there was no going back. Admittedly, she was right about the perspective of the basket in the background of my drawing. However, why was I working on my *tenth* still life drawing of the year? I was bored with making art based on whatever objects were found in the closet that day. Nevertheless, this is what the department stressed colleges would be looking for, straightforward art as examples of using line, color and proportion appropriately.

I graduated from high school and accepted a scholarship to the University of Hartford Art School. I went to my first week of classes and quickly realized that I would be spending the next four years of my life making art while sitting around a still life and being told by a professional artist what was wrong with my drawing. This was the moment that I realized that being an artist was not for me.

Several years and a few career changes later, I came to realize that my passion still lay in artmaking. However, my concern was geared towards how to make art that was centralized on topics that interested me. I wanted opportunities to learn and collaborate with others. I realized that my art didn't have to focus solely on the basic elements and principles, but could use these techniques to convey my personal experiences and new-found knowledge on a topic. I found myself working in a children's mental health clinic for an art therapist. She explained how she utilized artmaking as a coping mechanism for children to

express their experiences, fears, and dreams. In that moment everything seemed to click. I could return to school to obtain my teaching certificate and change the way that artmaking was approached in schools. I wanted to embrace the concept of allowing students to further their interests, using personal experiences to express their knowledge and opinions on a topic through their artmaking. It is also my hope that approaching artmaking as an expression of knowledge would underscore the mentality that anyone can make art, not just those with given “talent.”

As an art educator, I often find myself reading artmaking curricula that are reminiscent of my childhood art classes, overly simplistic, and solely focused on the elements and principles of design. I have found that most curricula seem to insist that basic foundational fine motor skills and teaching the elements and principles of design should be the sole focus of art education. In my experience, this results in a great deal of transmission teaching. Though I absolutely agree that these aspects must be included in the curriculum, I find myself constantly feeling as though more can be done in the art room in terms of cross-curricular content. I have found that most students in kindergarten through fifth grade are naturally interested in the artmaking process and believe implementing an overarching theme of social justice could ignite more interesting artmaking endeavors.

In addition, the current art curriculum in place does not foster a strong

cross curricular or community involved action. Most school districts' mission statements, including my own, encompass the idea of a well-rounded education that fosters school-community relationships. As art educators, it is crucial to make our practice vital to this comprehensive student learning objective. During a time where art programs are being cut due to funding, it is increasingly imperative that the curriculum be interconnected with core subject areas. Teachers need to find a way to make themselves invaluable to the education process by taking on standards from other content areas and giving students the tools they need to express their understanding of new-found knowledge through artistic mediums. This process may then be used as a means of expression of knowledge for all subject areas.

I believe that knowledge is formulated from experiences, particularly hands-on, where the learner is immersed physically and mentally with content. Students learn best when they have the opportunity to create freely without fear of failure. Knowledge does not necessarily need to come from me, the instructor, but can develop from a student's interests and self-exploration of content and artmaking materials. Through utilizing Youth Participatory Action Research (YPAR) as the framework for my study, I am challenging the notion that research can only be conducted by collegiate adults. I want for my students to embrace the construction of their own knowledge through researching topics of personal

interest.

My question is: *How do students respond to a theme-based art education?*

In short, I want to know if the art classroom could be more than merely a forum to make a coil pot or use oil pastels. I want to see if students would be receptive to engaging in something more meaningful where they have a say in their education. I believe that by developing a social justice arts curriculum, students would experience a scaffolded experience towards building empathy about local community and global social issues. By encouraging student voice in the art education classroom, the curriculum could be driven by student interests, as opposed to what an educator believes to be most important. The fine motor skills that are meant to be developed in the art classroom should naturally progress through the art-making experience despite the topic of student artmaking expression. This style of curriculum could change the way students choose to express their knowledge across all of the content areas of their education.

## LITERATURE REVIEW

### Introduction

Art curricula have historically utilized step-by-step instructions to complete assignments. Soganci (2016), who implies that transmission teaching lessons disregard the capabilities of our students, suggests, “Concepts embedded in the curriculum such as one-size-fits-all and step-by-step instruction, lesson plans with predetermined details, and strict recording of attendance proved to be irrelevant for students' expectations” (p. 49). Art educators have widely debated whether or not the above-mentioned lessons provide valuable experiences to students in the art education classroom. Further explanation by Gude (2013) describes the limitations imposed by prescribed artmaking lessons in school settings, “Good art projects are not old school art-style recipes to achieve a good-looking product. Quality art projects are also not mere exercises in which students manipulate form according to teacher-prescribed parameters without any intrinsic purpose” (p. 7). A transmission format of teaching, as described by Soganci and Gude, has been enabled by the structure of the provided curriculum. The debate in education over utilizing an objectives-based curriculum, which views curriculum as a frame of knowledge to be transmitted, has continued since the 1920’s when scientific-curriculum making was developed.

Scientific-curriculum making details the ways in which the state standards were developed and have continued to apply predetermined, narrowed competencies to a variety of learners across all content areas. The problem being raised by the debate over the scientific-curriculum making approach is that the objectives are a hindrance, not a benefit to teaching. Kliebard (1975) argued,

If anything is ingrained in curriculum thinking today, it is the notion that it is the job of curriculum planners to anticipate the exact skills, knowledge, and--to use today's most fashionable term--"competencies" that will stand one in good stead at an imagined point in the future. These predictions about what one will need in the future become the bases of curriculum planning (p. 54).

The Pennsylvania standards cannot fully address the life skills which are most important for the diverse community of learners in our classrooms. Education and life are not an exact science and should not be treated as such.

In contrast, the National Art Education Association has refined the art education standards based on enduring understandings to enhance the artistic process. Stewart (2014) defines enduring understandings as "represent[ing] ideas and processes we want students to integrate, refine, and keep as they move through the art program and eventually into adulthood" (p. 6). Employing this alternative approach to standards into the art education curriculum will emphasize

this action research project by relating skills and competencies beyond simply directing students to learn the elements and principles of design. Rather, students will use artmaking processes to convey their new-found knowledge of a subject. However, a concern I have with the voluntary NAEA National Visual Art Standards is the presence of an inequality between proficient and advanced expectations. Students who are perceived to be of a competent skill level are merely anticipated to utilize multiple approaches to artmaking. Whereas “advanced” students are encouraged to create art to affect social change. The differences in student expectations in the national standards continues to be a topic of debate in education. Anyon (1981) argued, “students of different social class backgrounds are still likely to be exposed to qualitatively different types of educational knowledge.” (p. 3). By utilizing a curriculum that boosts expectations of all students, the cycle of reproducing inequalities in schools and communities could be broken.

An epistemological framework that can be used to challenge the hierarchy present in the National Visual Art Standards is Youth Participatory Action Research (YPAR). A core concept of YPAR is to transform marginalized youth into knowledge producers, as opposed to the passive receivers that scientific-curriculum making has constructed and the National Visual Art Standards are continuing to generate. YPAR includes students in the development

and process of research on social justice contexts that affect their daily lives and local communities. Measuring the effect of YPAR on diverse learners in an art education classroom could emphasize this notion of artmaking as a means of expressing self-constructed knowledge.

By applying a social justice theme-based art curriculum, I will challenge the broader policies of curriculum that encourage transmission teaching styles. A social justice theme that centralizes on the core concepts of YPAR will assist in the revamping of the elementary art curriculum to restore high expectations for all learners. The theme-based curriculum will also incorporate the NAEA's National Visual Art Standards "advanced" expectations for learners and support the aim to encourage deeper understandings of content. Perkins and Blythe (1994) explain how students "do a variety of thought-demanding things with a topic—like explaining, finding evidence and examples, generalizing, applying, analogizing and representing the topic in a new way" (pp. 5-6). I plan to implement a theme in the literary sense, which connects art to the everyday lives of students, as defined by Hubbard (2013) later in this review.

The social justice theme utilized will be carried out through the methodology of a Place-Based Art Education (PBAE). Bertling (2015) defines PBAE as "centering art education directly within place -- within the local context and content" (p. 2). PBAE's concept of situating art education in the local

community supports the core belief of YPAR to incorporate local communities as a key concept of designing the curriculum. Within the suggestions of PBAE, quantitative and qualitative data will be collected, intended to measure student ecological paradigms.

To enact these principles in the classroom, I am going to structure the curricular intervention on an approach used in YPAR known as “managing bias.” Students will be prepared to confront their expected results of the research and appropriately analyze data that conflicts with their personal opinions. This crucial component of knowledge-driven research will additionally underscore the ways in which students engage with problem solving behaviors developed by utilizing the National Visual Art Standards.

### **Broader Curriculum Policies**

As previously mentioned, the current Pennsylvania state standards are in alignment with an objectives-based curriculum. An overview of the current art education curriculum, based on the Standards Aligned System (SAS), is defined by the Pennsylvania Department of Education (PDE) as “a comprehensive, researched-based resource to improve student achievement” (“Standards Aligned System,” n.d.). The elementary art standards formulate around the instruction of the elements and principles of design, artmaking vocabulary, and the ability to identify these concepts in alternative artworks as the desired outcomes for student

learning. SAS considers elements such as standards, curriculum framework, and assessments as key components for student achievement (“Standards Aligned System,” n.d.).

The current system of curriculum and teaching is highly influenced by scientific-curriculum making. As Kliebard (1975) explains,

Teaching would be the application of standardized means by which predictable results would be achieved, and curriculum development the specification of the end-products and the rules for their efficient manufacture. Teacher education, in turn, would be the process by which persons are transformed into efficient manufacturers. (p. 59)

Kliebard (1975) implies that in addition to meticulously predicting objectives for curriculum, the formation of objectives-based standards was forcing educators to conform to a carefully constructed means of teaching. The necessary competencies needed for future success were predicted and used to design a curriculum that was expected to be taught with meticulousness. These objectives are stated with precision to exemplify the desired skills to be obtained. It is based on the concept that science should be able to solve the ambiguous questions that surround education. However, utilizing this theory to form a curriculum fails to consider the fact that students and their life experiences are highly variable and do not fall into one set category. It cannot merely be predicted to have a positive

outcome for all students based upon the general needs of the majority at the time of development. The history of scientific-curriculum making largely contributes to why I theorize incorporating aspects of the National Association of Art Education (NAEA) National Visual Art Standards could assist in the transformation of the art education curriculum.

Stewart (2014) references the recently developed National Standards for Art Education and supports the concept that art education standards formerly streamlined on predetermined competencies, “identification of what students should know and be able to do, evidenced in the 1994 standards, is not the same as identification of things we wish students to understand deeply.” (p. 6) As a result of competency-based curriculum standards, the NAEA developed the voluntary national visual arts standards for art education. The next section will outline the importance of incorporating aspects of the national visual arts standards to enhance the objectives of the elementary art curriculum.

### **National Visual Arts Standards**

In contrast to the Pennsylvania state standards, the National Visual Arts Standards encourage behaviors to increase comprehension of the enduring understandings, of which the standards are based upon, as described earlier in the review (“National Visual,” n.d.). The NAEA sought to revise the state standards

in order to create more meaningful artmaking experiences for students that incorporate personal life experiences. Stewart (2014) explains,

With artmaking experiences as a catalyst, the second strand of Connecting standards situates artmaker and artmaking processes firmly in the world, reinforcing the notion that in artmaking, alone or with others, we draw upon personal experience—our stories, our perceptions, events, and traditions in our communities—and try on alternate ways to see and understand the world. (p. 10).

The national standards encourage the technique of confronting multiple mindsets, which will be addressed as “managing bias” later in this review.

It is the expectation of NAEA that teachers who choose to incorporate the national standards will revamp their lesson plan ideas to involve the local community. Stewart (2014) explains, “With these new standards, as in the past, educators will exercise innovation in planning lessons and units of instruction that ignite the imaginations of their students, address student and community interests and needs, and tap into substantive art content.” (p. 10). Despite the integration of community interests into the curriculum, the national visual standards maintain the concept of adequate vs. advance standards. Woven into their expectations of advanced students making arts for social change NAEA accentuates the notion of

low social class expectations vs. that of the elite as described by Anyon (1981) above.

Youth Participatory Action Research (YPAR) challenges the hierarchy detailed by Anyon (1981) and the NAEA National Visual Art Standards. YPAR incorporates arts for social change into the curriculum for marginalized youth as a form of social justice pedagogies in art education. Additionally, YPAR supports artmaking as a means of expressing self-constructed knowledge, which will be discussed in the next section of this review.

### **Youth Participatory Action Research (YPAR)**

YPAR challenges the concept of students as passive receivers of information, as outlined by scientific-curriculum making, by encouraging students to participate in the research process and self-construction of their knowledge. Caraballo, Lozenski, Lyiscott, and Morell (2017) describe YPAR as:

PAR with youth (YPAR) engages in rigorous research inquiries and represents a radical effort in education research to take inquiry-based knowledge production out of the sole hands of academic institutions and include the youth who directly experience the educational contexts that scholars endeavor to understand. (p. 312)

YPAR involves the active engagement of students conducting research about community inequalities through inquiry-based knowledge construction in social

justice contexts with quantitative and qualitative data collection methods. YPAR's main focus is to include youth in the development of their own knowledge while collaborating with teachers, scholars and researchers in order to understand injustices and form a plan of action to make a change. Kirshner, Pozzoboni and Jones (2011) suggest challenging students to create the data collection tools, such as surveys, and continue to either add to or adjust questions in order to provoke more open-ended questions. This recommendation will enhance the concept of student engagement, as defined by active citizenship, discussed later in this paper.

YPAR is important to my action research project because it links students expressing their new-found knowledge of the everyday world through art to Hubbard's (2013) "theme" in the literary sense, as defined in the next section of this review. YPAR incorporates community and global issues through an arts-for-social-change-based curriculum where students are at the front of the research process. Both YPAR and a "theme" in the literary sense reflect the core values of the research questions I am posing for my action research study.

I hypothesize that in order to address social justice art pedagogies in art education, they must become an integral component of the art curriculum. An objective of this action research project is to incorporate social justice contexts throughout the year-long curriculum, so as to scaffold instruction for students from unit to unit. YPAR emphasizes the principle that a "theme" is something that

connects art to the everyday world and allows students to express their knowledge of daily life through art. By adopting a theme-based approach to art education, the target is to transform from a competency-based structure to one that focuses on the desired behaviors of our students taught through their artmaking experiences as outlined above by NAEA.

### **Themes in Art Education**

To introduce a theme-based art education curriculum, it is important to make clear what constitutes as a “theme.” Hubbard (2013) proposes:

the meaning of the term “theme” may refer to a human issue that an artwork is about (theme in the literary sense), to a motif or obvious topic that repeats and carries across artworks (theme in the musical sense), to an element or principle of design conspicuous across a series of works (theme in the Modernist sense), or to an aspect of the artists' creative process. (p. 95)

Hubbard (2013) is suggesting that there are four categories which themes for art education can fall into. There are literary themes that relate to everyday life, musical themes that reflect on topics such as people, places or things, Modernist themes that are based upon the elements and principles of design, and themes that revolve around questioning an artists' specific creative choices. Hubbard (2013) indicates how Raymond Obstfeld (2002) further explains a theme in the literary

sense, “may be about life, society, or human nature. [Literary] themes often explore timeless and universal ideas and may be implied rather than stated explicitly.” (p. 93). For the purposes of my action research study, the explanation of a theme in the literary sense best supports my intention to implement a “theme” based on arts for social change, incorporating community and global issues in the art classroom. Both Hubbard (2013) and Obstfeld (2002) relate the concept of a theme in the literary sense to connecting to the everyday lives of students and their local community. A theme-based approach to an art education curriculum will highlight both the suggestion to incorporate community issues into the curriculum through the use of the National Visual Arts Standards as well as the core beliefs of Youth Participatory Action Research detailed above.

### **Place-Based Art Education (PBAE)**

PBAE relates with YPAR in that it enables students to become agents of change through their research and understanding of local and global issues. PBAE supports student engagement in the form of evaluating student engagement and response to the world. Bertling (2015) noted, “Overall, this study demonstrated that a critical place-based art education curriculum is capable of promoting students’ ecological paradigms and empathy with the environment.” (p. 21). Bertling’s study revealed that PBAE data collection of student pre and post-test results demonstrated an increase in ecological paradigms and student surveys

supported these results. Data collection and analysis will be discussed in greater detail later in this paper.

The conclusions supported by Bertling's study are that a curriculum influenced by place-based art education centralizing on student relationships and interactions with the environment have the capacity to positively affect student ecological paradigms. Prior research, as done by Buckland and Lertzman (2008) suggests that students have the ability to interact emotionally with the environment when communicating their findings through the arts. PBAE also supports YPAR's structure that the arts can be used by student to express their self-generated knowledge. I plan to utilize PBAE's suggestion of finding ways to allow students to interact with local and global issues in the curriculum with the support of conveying their self-constructed knowledge through artmaking experiences.

There are several best practices in teaching and learning that are suggested by the framework of YPAR and methodology of PBAE. Kirshner, Pozzoboni and Jones (2011) developed the term "managing bias" within the YPAR framework to describe student ability to use personal life experiences to solve problems in their communities and the capability to accept unexpected data results. The managing bias aspect of YPAR challenges students to question their assumptions based on the collected data.

## **Managing Bias**

The concept of managing bias calls for evidence to be used to support student interpretations of data, and challenging those interpretations against those of their peers. According to Kirshner, Pozzoboni and Jones (2011) “Managing bias is also an important skill for working in teams, in which perspective taking and openness to alternative views enables groups to manage disagreements and find common ground” (p. 141, as cited in Zins & Elias, 2006). Managing bias promotes positive collaboration and open-mindedness, as opposed to theory-driven reasoning, where data may be selectively sought to support the researcher's opinion. Researchers need to embrace bias head-on, rather than attempting to push it aside. Students should begin by making their opinions clear, preferably to a group of people, so as to be able to challenge the data against them. Youth researchers should continuously challenge their opinions based on the found data and relate this back to their personal experiences in an attempt to challenge their preconceived notions. The basic concept of managing bias is to remain open to data that does not support your targeted findings and being willing to hear opposing opinions. The approaches to incorporating “managing bias”, as outlined by Kirshner, Pozzoboni, and Jones (2011) are crucial to conducting a YPAR project with students and ensuring that data is being interpreted based on facts and not opinions. The approach of managing bias challenges that of

scientific curriculum-making by supporting collaborative student learning experiences to develop self-generated knowledge not prescribed by a regimented curriculum. My curriculum will be directed towards this aim by incorporating assignments that encourage the comparing and contrasting of diverse opinions within student groups as outlined in the following section.

### **Best Practices in Teaching and Learning**

Additional best practices in teaching and learning to support the aim of students managing bias are referenced by Shim and Walczak (2012), who suggest that “instructors should use these practices complementarily by provoking students through questioning that challenges students to view issues from different perspectives, and then providing explanations to help them understand abstract concepts.” (p. 24). Shim and Walczak’s (2012) research implies that asking students challenging questions led to deeper critical thinking skills. If I can demonstrate that students are developing critical thinking skills in the art education classroom, then I can validate how the arts are an invaluable part of the education process during a time that “encore” courses are facing numerous cuts due to financial setbacks. I also need to utilize Shim and Walczak’s (2012) suggested practice of recapping content at the end of a unit in order to ensure student understanding of abstract concepts. This is particularly important when social justice themes relate to community or global issues that students are

confronting through newly explored YPAR research.

Shim and Walczak (2012) also suggest the use of comparing and contrasting diverse perspectives as an assignment style to maximize growth in critical thinking skills. This practice would be imperative in my action research study to prevent imparting my personal opinions on global issues to my students. This practice will also allow students to research opposing sides of an issue and develop their own conclusions, which they will then express artistically. Shim and Walczak (2012) further suggest that students should integrate interpretations from multiple sources to maximize their cohesive understanding of a topic. This practice is valuable for guiding students in recognizing the varied opinions of peers, families and community members on a single subject, which will become a crucial component of their ability to communicate with others.

An additional suggestion is from Bertling's (2015) study to incorporate assignments which encourage students to relate to nature and express their data through an artistic form. My aim is to utilize these best practices of teaching and learning to change how art education is approached. I am planning to monitor these best practices of teaching and learning of the curriculum by measuring student engagement in the method of producing concerned citizens.

### **Student Engagement as a Concept**

Bertling (2015) discusses how art education has the scope to accommodate

various opportunities to expose students towards empathizing with the environment as well as an interest in studying the current conditions of the environment. In contrast to student engagement as it has been previously defined by students paying attention to the instructor Bertling (2015) suggests,

In recognizing this capacity of art education as well as in responding to calls within the discipline for social relevance, scholars have proposed various ecologically-responsive art pedagogies...Despite this abundance of theory, research is needed to determine how students in ecologically-responsive art education programs experience ecological paradigms and empathy with the environment. (p. 2).

Providing students with an opportunity to interact with content based on local community issues and expressing their findings through artmaking will measure student engagement in terms of how students are engaged in the world instead of just the classroom.

### **Production of Concerned Citizens**

The approach of active citizenship in education supports the core concept of YPAR to involve researchers in the problems that affect their local communities. Higgs, Sheehan, & Currens (2012), show that “Active citizenship was defined by European Commission, 2005 as ‘empowering individuals, enabling them to feel comfortable in democratic culture, and feeling that they can

make a difference in the communities they live. This definition of active citizenship stresses three aspects. These are relationships between individuals and their community, democratic values, and involvement". I will utilize this definition of active citizenship to inspire the measurement of student engagement known in this review as the production of concerned citizens.

Both YPAR and active citizenship suggest that students will become legitimized by discovering and discussing local community problems and actively engaging in the community to bring light to the issue at hand. Higgs, Sheehan, & Currens (2012) note,

Osler and Starkey (2006) identified six key contextual factors that help explain the considerable growth in interest in citizenship education over the past decade. These are global injustice and inequality, globalization and migration, concerns about civic and political engagement, youth deficit, the end of the cold war and anti-democratic and racist movement. (p.19)

The core structures of YPAR and active citizenship emphasize the inequalities of marginalized communities. Both education structures focus on the importance of facing these global community problems in the classroom setting. The suggestion to incorporate the active engagement of students in choosing the problems they want to research and preparing them to manage their biases throughout the process are critical skills for producing concerned citizens.

In relation to YPAR, the production of concerned citizens will encourage students to embrace knowledge-driven reasoning, where students manage their biases when collecting and analyzing data to draw conclusions based on evidence. Higgs, Sheehan, & Currens (2012) argue, “The age of knowledge and democracy we live in needs citizens who can attain knowledge from different resources, evaluate the attained knowledge from a critical perspective, make accurate and logical decisions upon reasoning and put these decisions into action” (p. 36). The ability of students to conduct research and collect/analyze data based on evidence is a critical component of YPAR as well as a necessary skill for becoming an active citizen. Students will analyze their data based on the above mentioned best practices of teaching and learning to manage their biases on collected data. I intend to analyze the collected data of student engagement with the world through suggestions of Bertling’s (2015) PBAE study and Kirshner, Pozzoboni and Jones’s (2011) YPAR study.

### **Socially Aware Students**

The production of concerned citizens ties seamlessly into the importance of cultivating socially aware students. Dr. Mohsen Farmahini Farahani (2014) describes the desired skills to be obtained through citizenship education.

Educating global citizens is teaching those skills and attitudes that make them aware, active, critical and sociable citizens. Students need the

knowledge, skill, and attitudes which enable them to have an active role in different areas as a member of the world community. (p. 936).

Farahani supports the use of global citizenship education to foster socially aware students who will be prepared to confront the challenges of the community. There are a wide variety of knowledge development/understandings, skills, and values/attitudes needed to assess world problems.

For the purpose of my action research, I will define socially aware students as obtaining the understanding of “awareness of the destructive and harmful factors for the environment”, the skill of “participation and cooperation ability”, and the value of “concern for the environment safety.” (p. 936) The collaborative project I have put in place at the fourth and fifth-grade level curricula will focus on environmental rights and will gauge student ecological attitudes prior to beginning and after completion of the unit. The objective is to determine whether or not students feel as though they have gained interest in the current and future conditions of our global environment. This result could influence the formation of socially aware perspectives in students.

### **Empathetic Students**

Hollingsworth, Didelot, and Smith (2003) explain, “empathy encompasses compassion, understanding, assumption of another’s emotional state, and consideration.” (p. 144). To foster empathetic students in the art education

classroom, I plan to reveal several crises currently plaguing the environment. Students will have previously answered the Pre-NEP Scale (APPENDIX D) questions, aimed at determining their current ecological paradigms. I plan to reassess their views after completion of the project with a Post-NEP Scale (APPENDIX D). The comparison of scores from the pre and post exams will ascertain whether an increase has occurred in their empathetic attitudes towards nature.

Hollingsworth, Didelot, and Smith (2003) further explain the benefits of empathetic principles in students.

As students develop empathy, communication increases in several ways. They anticipate other's actions and reactions more accurately. They understand one another more accurately. Empathic students are less afraid, more trusting, more willing to self-disclose, and more open to tolerance. (p. 144)

The above mentioned values of being more open to tolerance in union with increased communication skills may emphasize the underlying aims of managing bias, as noted earlier in this review. Students will hopefully be able to confront their biases with a more understanding approach and be able to communicate their findings and opinions with their peers.

## **Conclusion**

To implement a change to the art education curriculum, a revision of the current pa state standards must occur. Incorporating aspects of the NAEA national standards will assist in the revamping of the state standards, however the national standards also have limitations in terms of a hierarchy of education. YPAR confronts the problems with both the PA and national art education standards. The underlying components of PBAE, managing bias, best practices in teaching and learning, and measuring student engagement in the form of producing concerned citizens, are crucial to the development of this research study. This research will provide the foundations for developing a critical place-based, YPAR implemented elementary art curriculum.

## **RESEARCH DESIGN AND METHODOLOGY**

### **Research Goals**

The purpose of my action research study was to determine whether or not implementing a theme-based art education curriculum could positively impacts students' learning and become a more enjoyable experience for my students. I wanted to determine if the theoretical frameworks of Critical Pedagogy, YPAR, and place-based art education could influence my teaching practice to become more successful than that which I have observed and partaken in during student teaching and substituting. My theory was that students would become more passionate about artmaking because they would have an opportunity to convey their personal life experiences that connect them to the content of environmental rights, as well as form new opinions based on research they have conducted in their chosen subtopic of environmental crises.

I strived to become more of a facilitator that encourages students to pursue their interests and guides them through research and a process-centered art medium exploration. In short, I wanted to know if the art classroom could be more than just how to make a coil pot or use oil pastels. I wanted to see if students would be receptive to engaging in something more meaningful where they have a say in their education. It is my hope that my thesis project will transform the art

education classroom into a valuable learning experience for students where they freely create and express their new-found knowledge through artmaking.

The project introduced fourth and fifth grade students to a theme-based art education that incorporated researching environmental rights. Student participant groups then chose a sub category to narrow in on, based on their personal experiences and interests. Student groups created engineering notebooks, which served as a location to store research information and ideas. As a cumulative assignment, participants created collaborative sculptures based on invention ideas to solve the environmental crises they chose to research. The study occurred during a 45 minute class period which occurs once in an eight-day art class rotation.

### **Setting and Participants**

The setting of my action research thesis project was in an urban elementary school in Pennsylvania. 89.1% of the families across the district are denoted as low income, and 100% receive free/reduced Lunch. There were 55 students across fourth and fifth grade classes that elected to participate in the study. The population of the participants varied and included English Language Learners, those with Individual Education Programs, and students with safety plans aimed at managing their verbal and physical behaviors in the classroom. All six classes that participated in the study were heterogeneous in academic and

artistic abilities. Students receive art class approximately 20 times per year on an eight-day rotation, and this unit occupied eight of those rotations.

### **Data Gathering Methods**

To monitor the effects of the curriculum, data were collected to measure student engagement in the form of active citizenship. Student engagement as “the production of concerned citizens” is how I intend to define engagement for data collection and analysis. Parsons, Richey Nuland, & Ward (2014) explain, “Traditionally, engagement has been conceptualized as time-on-task, which actually is only one important aspect of classroom instruction (Brophy & Good, 1986). Researchers recognize that student engagement is more complex than just observable behaviors.” (p. 24) Through Parsons, Richey Nuland, & Ward’s suggestion, I explored engagement as a concept and how it has been loosely defined as being on task, but could evolve into letting students be engaged with the world.

All data collection tools were provided to students in both English and Spanish due to the high amount of English Language Learners in my classes. Students were allowed to answer in either English or Spanish and their responses were translated back to English for the purpose of collecting and analyzing data for my action research thesis.

### **Pre- and Post-NEP Scale**

The structure of quantitative data collection began with the New Ecological Paradigm (NEP) Scale (APPENDIX D), suggested by Bertling's (2015) research of PBAE, to measure student placement on a scale determining student anthropocentric and ecocentric orientation of the environment. Students filled out a Pre-NEP Scale (APPENDIX D) prior to beginning an introduction to the unit plan. This scale was completed prior to collect data that reflected the students' knowledge and feelings towards the environment without having a chance to discuss their opinions with their peers or be exposed to any videos or research information that may have changed their positions. Additionally, a Post-NEP Scale (APPENDIX D) took place at the close of the unit to determine if a change had occurred in student orientations towards anthropocentric to ecocentric of the environment.

### **Pre- and Post-Content Survey**

A Pre-Content Survey (APPENDIX E) followed the Pre-NEP Scale (APPENDIX D) in order to determine the students' understanding of environmental rights before beginning the unit plan. The goal was to obtain how much prior knowledge students had about environmental rights before being exposed to research or information that would reveal the content meaning. Students were asked to circle a response indicated their knowledge level on

environmental rights and then draw a picture of what they thought environmental rights are. The same survey, to be referred to as the Post-Content Survey (APPENDIX E), took place at the close of the unit plan. These data determined student growth in the content area of environmental rights.

### **End of Day Enjoyment Surveys**

At the close of each lesson, Student Enjoyment Surveys were completed. These data informed the range of student enthusiasm towards the project at the end of each given lesson and allowed for a section of suggested changes to the unit. These data informed my teaching practice as a type of formative assessment by allowing me to uncover what components of the unit students were enjoying and which were being seen as tedious or unenjoyable. Students circled an emoji based on their feelings towards class that day. There options included loved, good, bored and confused. Additionally, students were also prompted on the survey with the open-ended question “Do you have anything else you would like to tell me about today’s class? Was there anything you LOVED or anything you HATED? What would you change and why?” A great deal of student responses collected in this section indicated student issues in groups or aspects which students were greatly enjoying such as the artmaking portion of the assignment.

### **Cumulative Survey**

At the close of the unit, a Cumulative Survey (APPENDIX F) was administered to ascertain the student participant groups overall feelings towards utilizing a theme-based art education, working in groups, and self-proclaimed knowledge growth. The survey contained 12 agree/disagree statements and two open-ended questions. I was extremely interested in collecting data that would gauge student enjoyment and their desire to continue theme-based projects in the art classroom setting.

### **Other Cumulative Projects**

Throughout the unit plan implementation, students created engineering notebooks to collect their own data. All research information and ideas were documented in these notebooks for students to record and reference and the unit plan evolved. The notebooks were collected at the end of the unit and are used in this action research thesis as data of student collected research and design-based thinking skills.

Additional data collected included observer notes, quotes from students, pictures of the engineering notebooks, and photographs of the completed sculptures. These qualitative data methods will be used in addition to the above mentioned quantitative/qualitative data methods, to determine student successes and pitfalls of the unit plan.

## **Research Design**

Students were introduced to the action research study and provided Student Consent Forms (APPENDIX C). Parent consent forms (APPENDIX B) were sent home and data collection methods in the form of observations, photographs, and surveys were discussed. The activities over the next eight weeks are as followed:

### **Week One:**

- Students filled out Student Consent Forms (APPENDIX C).
- Parent Consent Forms (APPENDIX B) were sent home.
- Students completed the Pre-Content Survey (APPENDIX E).
- Students completed the Pre-NEP Scale (APPENDIX D).
- Students discussed “What are Environmental Rights?”
- Students were shown a shark finning video from YouTube.
- Students used the Chromebooks and two pre-selected websites to begin investigating an environmental crises.
- Students completed an End of Day Enjoyment Survey (APPENDIX G).

### **Week Two:**

- Students learned about proper, valid resources and how to locate them on the Chromebooks.

- Students provided their understanding of what environmental rights are in their engineering notebooks.
- Students chose a subcategory of environmental rights and documented research in their group engineering notebooks.
- Students completed an End of Day Enjoyment Survey (APPENDIX G).

**Week Three:**

- Students continued to research their subcategory of environmental rights and documented research in their group engineering notebooks.
- Students participated in a Managing Bias Activity
- Students completed an End of Day Enjoyment Survey (APPENDIX G).

**Weeks Four/Five:**

- Students began to discuss ideas for inventions that they will design to help solve their environmental rights subtopic of choice.
- Students made a pro and con list for each invention idea to generate and discuss the outcomes of each and decide which invention idea (or combination of invention ideas) would be best to help solve the essential question “What can we do to help clean the planet earth?”

- Students worked on thumbnail sketches of the invention designed for their cumulative project.
- Students made lists of materials needed for their three-dimensional sculpture representations of their invention designs.
- Students completed an End of Day Enjoyment Survey (APPENDIX G).
- Students wrote in their engineering notebooks an explanation what the invention does and how it contributes to solving their environmental subtopic of choice.
- Students set goals for the objectives of their invention and determined who would work on which aspect of the invention design.
- Students collaboratively began sculpting their 3D representations.
- Students completed an End of Day Enjoyment Survey.

**Week Six:**

- Students worked on completing their engineering notebooks with all facts about their subtopics, a blueprint sketch of their design, and the three-dimensional sculpture.
- Students wrote group artist statements explaining why they have chosen this particular content area to research, what their personal belief about this content area is, and what medium they have chosen for their

artmaking process and why.

- Students completed an End of Day Enjoyment Survey (APPENDIX G).

### **Week Seven/Eight:**

- Students collaboratively set up their projects around the classroom.
- Students participated in a critique where each group presented their project. Each member of the group indicated their individual job and how they felt their project would solve the environmental subtopic that their group chose and why they chose that topic to research.
- Students completed the Post-NEP Scale (APPENDIX D).
- Students completed the Post-Content Survey (APPENDIX E).
- Students completed the Cumulative Survey (APPENDIX F).

### **Trustworthiness Statement**

To support the validity and trustworthiness of the results of this study, I adhered to particular ethical guidelines. Prior to beginning my action research study, I obtained approval from the Moravian College's Human Subjects Internal Review Board (HSIRB). Throughout my application for approval, I outlined the objectives, the design of the action research study, the procedures, and precautions that would be taken to minimize risk for my students.

The details of the study included the proposed data collection tools with

their intended purpose of measurement. Throughout the research study, data were collected in the form of student completed Pre- and Post-Content Surveys (APPENDIX E), End of Day Enjoyment Surveys (APPENDIX G), Cumulative Surveys (APPENDIX F), educator notes and observational logs along with photographs of the students completed art projects. Each of these documents were included in the HSIRB application.

The following risk reductions were utilized throughout the data collection and thesis writing processes. Students remained completely anonymous with no identifying characteristics in my research paper. All research participants were provided with a pseudonym in both data collection and the written paper. All data were kept on a personal laptop computer, which was password protected. The computer was kept in a locked drawer at all times in the classroom. All collected data were destroyed after the completion of the study. Students did, however, get to keep the artwork they create during the project. Students were permitted to withdraw from the study at any time without penalty. To withdraw, the students and/or their guardians were given the opportunity to no longer have their data collected by informing either me or the school. None of the students in this volunteer group were graded for this study.

To complete my application for HSIRB, I gathered and included the signed permissions from the principal, parents/guardians and students involved in

the study. Information included in both the principal (APPENDIX A) and parent consent forms (APPENDIX B) detailed the objectives, design, procedures and risk reductions outlined on the HSIRB form. The parent consent form (APPENDIX B) was sent home to parents/guardians, detailing the action research project as well as the data collection methods that were used. The parent/guardian consent form was sent home in both English and Spanish to optimize the understanding of my objectives, as my school has a high percentage of English Language Learners and parents/guardians that speak only Spanish.

Parents/guardians indicated their consent on the forms, electing to allow their child to participate in the project. Student consent forms (APPENDIX C) were then distributed and included a section that was scripted and read by myself to the students. McNiff (2013) explains, "Give a letter to those persons who have difficulties in reading and read it through with them." (p. 126). The process of reading through the assent form was critical for enhancing student understanding of my intended research project and their role in the action research process. Approval was granted by HSIRB based on the above mentioned details.

Students with disabilities were involved in the action research project. Information about troubled behavior and how it was overcome when implementing the curricular change was not recorded to use as data for the results of the action research project. The project took place on the school campus with

student access to a nurse and the main office to contact their parents/guardians at any time.

The intended measurements of the above mentioned data collection tools are as follows. The student completed Pre- and Post-Content Surveys (APPENDIX E) determined student understanding of the overarching social justice theme at the start and close of the unit, intended to classify their growth in understanding on the topic. The End of Day Enjoyment Surveys (APPENDIX G) were intended to gauge how students felt about performing research in the art education classroom. open-ended questions were included on this survey to allow students an opportunity to explain what they would have done differently in the class. Cumulative Surveys (APPENDIX F) were intended to reveal student attitudes towards working collaboratively, researching and participating in a multidisciplinary art curriculum unit. This survey also allowed students the opportunity to explain their feelings towards the project, what aspects they would alter and whether or not they would enjoy doing similar projects in future art classes. The interviews consisted of open-ended questions related to the research components of the class and how students felt about their final projects. Each of the printed surveys and interviews were translated into the native language of English Language Learners that required the additional support to decipher the information being asked. Educator notes and observational logs along with

photographs of the students completed art projects were used to triangulate the data and increase its validity. These forms of data collection also provided for formative assessments on my teaching practice to make necessary changes aimed to enhance the learning experience for the students. It was imperative to remain open to all forms of data throughout the collection process. McNiff (2013) explains, “Sometimes the data will show us disconfirming data, things we would rather not see, which will mean changing practices. These are important data because they point to more appropriate directions for your research and how you can strengthen it.” (p. 123). By embracing the need for change as a necessary component to the success of student learning, I as a researcher was able to remain open to what the data revealed.

Throughout the data collection and analysis process, I shared my materials and findings with my supervisors and fellow students in my thesis writing courses at Moravian College. I requested that these “validation groups” interpret the data for themselves in an attempt to look at data from a multiplicity of viewpoints. McNiff (2013) explains validation groups, “Their job is to meet at key stages of your project, especially at the reporting stage, to listen to your knowledge claims and scrutinize your evidence.” (p. 125). The validation group meetings provided an opportunity to challenge my beliefs throughout the study and analysis of my collected data by remaining open to alternative perspectives. The precautions

taken to ensure the validity and trustworthiness of my designed and implemented action research study were clearly outlined for the audience to determine if the results could be appropriately used in their own teaching practice.

## **RESEARCH NARRATIVE**

### **The Art Classroom Environment**

My art education classroom is located on the stage here in our Elementary School. This classroom is shared with the music teacher. The walls are adorned with posters from the Seven Habits of the Leader in Me Program, along with musical instrument posters next to my designated art walls. A mustard-colored fabric, temporary wall divides the stage from the gymnasium and is plastered with my art decor. Two sections are designated to the “What do I want to learn or do in Art?” board where students list activities and artmaking techniques they wish to learn throughout the year. Posters from art colleges and ideas for careers in art supplement this wall for a bit of inspiration.

To put it simply, students are met with a hodgepodge of decor between myself and the music teacher. Each time they visit the room, it is completely transformed based on the class they are attending. Students attending music come in to a room where all the furniture has been moved to the edges of the room, revealing a large empty space in the middle with the piano in the forefront. However, once the art rotation begins, tables return with colors in the center matching up to the job chart hung on the wall length chalkboard. Students sit four to a table with the people of their choice, or as I prefer it, “Choose a seat next to someone who will help you to succeed!”

Working on an eight-day rotation with first through fifth grade at this school makes for a challenging task to learn about my new students and begin to build relationships, all while implementing the thesis project. I teach six sections of fifth grade art and included a fourth grade class that expressed interest in the thesis study as well. In total, 55 participants gave permissions along with parental consent to participate in the study. Since we are a highly transient district, give or take one hundred and 45 students in fifth grade and 24 students in the fourth grade were exposed to the new curriculum instruction. Your average classroom teacher has 25 students for which they are responsible for providing instruction to throughout the school year, whereas my teaching load consists of nearly 1,200 students in total across the six grade levels.

### **Beginning the Study**

Students have had one art class prior to beginning the study, where expectations were discussed and students created portfolios for their artwork storage. As students filed into the room on rotation two of the school year, I greet them at the door and tell them that we are going to do something a bit unconventional today. I begin to explain how I still go to college, and let me tell you, this was met by quite a deal of shock from students. I tell them how I go to school to learn to become a better teacher but I feel as though what they, the students, have to tell me is more valuable than anything. I want to stress the

importance of being completely truthful in their responses on all data collection surveys in order to validate the results. I believe my exact phrase was “Don’t be afraid about hurting Mrs. Emili’s feelings, if you hate something about the project, I want to know about it.”

Students spent day one of the thesis being explained: the details of the study, what I was most interested in learning from them, filling out Student Consent Forms (APPENDIX C) and bringing home Parent Consent Forms (APPENDIX B). After the logistics were taken care of, I administered the Pre-Content Survey (APPENDIX E) and Pre-NEP Scale (APPENDIX D). I explained how we could not start the project until I had evidence of what students knew before beginning. Students appeared to be rather confused at this point, I observed a few students saying phrases along the line of “well, this is different.” The Pre-Content Survey (APPENDIX E) indicated that the vast majority of students, 34 in total, felt as though they knew “a little bit about environmental rights.” Their drawing responses to the prompt located at the bottom portion of the survey support the students self-proclaimed knowledge in the realm of environmental rights. In terms of the Pre-NEP Scale (APPENDIX D), most students seemed to have pro-ecological paradigms. However, when it came to statements involving the role of human beings on the conditions of the environments, students were split with their opinions. I was very curious to see if

any changes occurs in the Post-NEP Scale (APPENDIX D) at the close of the unit plan.

After these surveys were complete, I prompted the students with an inquiry question, “What are environmental rights? You just completed a survey about it, so tell me what you think it is.” Students began to become more engaged at this point by means of not showing fear to express their opinions. It surprised me that so many students were willing to offer up ideas in a classroom with a new teacher on the second week of school. Their willingness to participate did not however express enthusiasm about the project. Students offered up their opinions and personal life experiences such as “It’s when you help clean the playground” or “It’s taking care of the environment.”

All suggestions from students were written on our 22 foot wide black board opposite the mustard colored temporary wall. Each class created a definition for environmental rights that was written on the board for them to reference. Students then discussed with their table groups examples of environmental rights that they could come up with in the form of a crises that is plaguing our global community. I was surprised at the number of examples that students came up with. It was clear that many students are aware of the current state of our environment and how current policies are encouraging the depletion of our natural resource. Of course, their information on this was limited, but it

was interesting to see how perceptive they are of what is going on in the world around them, particularly in the realm of politics.

For example, one class offered up global warming as a crisis and asked more in depth questions in an attempt to discover what exactly global warming meant. Rather than providing them with specific answers, I told students to discuss what they thought global warming could be with their table groups. This process repeated itself across the classes and the topics of interest varied from global warming, forest fires, poaching, extinction and more. To have students explore outside of these topics, I showed a brief video on the crisis of shark finning demonstrating the removal of shark fins with the disposal of the body back into the ocean. I. It was clear from the start that students were highly engaged in the video aspect of the unit and how this would reveal more information and expose them to new global issues. Having a visual representation appeared to elicit more of an emotional response from students.

Students were then instructed to visit one of the pre-selected websites on the chalkboard to research several environmental crises of choice with their tablemates. The goal was to see if they could find answers to any of the questions they had during our classwide discussion. Students appeared to enjoy this portion of the assignment and were very excited to be working in groups. Their faces lit

up like Christmas morning when I said this entire project would be completed working in groups.

My initial reflection on the lesson was rather disheartening. Students in all classes did not appear to be overwhelmingly interested or engaged in the lesson content. They completed their surveys and participated in class without objection. However, I did not feel as though they expressed high levels of engagement until I had shown the YouTube video on shark finning towards the end of class. This left me feeling as though I needed to provide more visuals to engage students, as opposed to discussions. Additionally, students seemed very excited to be using the Chromebooks in the art classroom, as this is very against the norm of this environment. Revealing that the lesson involved working in groups also elicited much excitement. My reflections about the success of the lesson proved to be incorrect after reading the End of Day Enjoyment Surveys (APPENDIX G) that students completed at the close of day one of the unit plan. The content of the lesson seemed to evoke more interest than I had anticipated.

The majority of the results from this survey indicated that the emotional reactions to the lesson were good. 16 students circled “love”, three circled “love” and “good”, 13 students circled “good.” Students thought the new format was interesting and expressed great empathy towards animals with written responses such as “We should be much more grateful to be human and living.” Four

students did however circle “confused” on the survey and indicated “I Hated art class because it was a hard-working station and it was confusing to.” I can recall these students clearly, all were in the same group and were struggling to understand the objectives of the lesson. I suggested that at the start of the next class, they chose different groups or work alongside another group to see how they were approaching the project. In all of the classes taught in lesson one, these were the only students that appeared to struggle with the assignment. They were all in the first class that was exposed to the content, and I found myself wondering if it had been the way in which I introduced the lesson that had them confused at the end.

### **Student “Researchers”**

During rotation two of the unit plan, I introduced the research component to the fourth and fifth grade students. Students were informed that we were going to continue the process of researching our own questions, because “Mrs. Emili does not know everything. I may not know the answers to all of your questions, so it is important that you learn how to research on your own.” I asked the students, “Do you feel as though finding your own information makes you a researcher?” The answers were mixed, I feel do to confusion about the question, and I used this opportunity to hold a discussion about what a “researcher” does. I simply prompted students with “Who or what is a researcher?” Students responded with a

few variations of the same answer, “they are people who figure things out.” Then I asked, “So then does this project, where you find out your own information, make you a researcher?” The consensus quickly changed to “yes”, and I began to refer to students as “researchers” from that point on. I wanted to constantly remind students that the work they were doing, was that of a career researcher. I think it is important that students understand not only that teachers are not the all-knowing in the classroom, but that they too are capable of finding answers to their own questions.

In addition to the pre-approved websites from rotation one, students were given instructions on how to locate valid and reliable sources, as opposed to merely “googling” answers to their questions. I explained how finding valid resources will become a key skill to be used throughout their educational career, including middle and high school. We also discussed how valid sources provide accurate information, which is crucial to becoming recognized as “researchers.” I had previously collaborated with the school librarian to determine how she broaches this subject with students and how to best explain it. She explained how setting them up with websites to start with and giving guidelines such as using “.gov” websites would narrow things in for students. I put together a small handout with links to websites that were determined as valid for students to jump start their research process with.

Additionally, we discussed as a class how it is vital to utilize more than one website to research information. Based on Shim and Walczak's (2012) suggestion to have students compare various opinions from a variety of sources to enhance comprehension of the social justice theme and environmental crises subtopics (p. 14), it was determined that students must find information from at least three different sources in order to validate the research they had gathered.

Prior to diving into the research process, students were shown how to make their own data gathering tool, known as engineering notebooks, where they would keep all information found on their environmental crises of choice. A small template was given to each table group and students were given a 12" x 18" sheet of construction paper to make a larger replica of the template-on the front cover, student names are placed at the top along with any potential environmental crises that sparks the interest of the group members. This process ignited some interesting conversations. Students were observed changing groups to work with others in class who had chosen a topic that they too were interested in. Across all of the classes, five students changed groups based on their interests. This observation showed me that at times, students are more interested in their learning, as opposed to choosing groups of students to work with. On the inside of the engineering notebooks was space to record facts and information learned from

the researching process.

Overall, I observed students becoming very interested in the research process. Teams were working very well together and seemed passionate about their choices in subtopics to research for the assignment. More than several groups called me over with shock about the facts they were learning on the websites they were using to research. It became a common theme across the classes to want to share out information with the class as a whole. One group even asked for me to project the website they had found with an accompanied video about puppy mills. This sharing of information certainly led to increased observed engagement in the content and a presence of empathy. One student became visibly emotional during the video and stated “I would rather know how hard puppies’ lives can be. Now I will think more about them.” Statements like these also became a consistent motif throughout the unit plan. Students expressed great empathy towards the living conditions of animals.

Only a few students, primarily in one class, were observed being off task while using the Chromebooks. I believe this was due to the heavy content reading required and the group consisting solely of English Language Learner (ELL) students. When looking at their reading levels later on that week, it was clear that the content may have been too challenging to comprehend in English, so I provided translated, condensed content reading for them in the next rotation.

Additionally, the four students that were confused after the introduction of the unit plan in the last unit all changed their responses to “love” at the end of this lessons survey. These students were observed as being highly engaged in the process and no longer exhibited frustration after having the explanation of located reliable resources.

These observations made me feel much more confident in the unit plan. Students were excited about the research component, which was my primary concern about the project to begin with. Student responses on the End of Day Enjoyment Survey (APPENDIX G) demonstrated a great deal of enjoyment in the research process. “I loved it because we got to do research on a world problem.” I was shocked by the amount of open responses that referenced the research process. Overall, 35 students circled “love” and ten circled “good.” One class did not have an opportunity to fill out the survey as they ran out of time at the close of class. However, my observations of the class suggest that their responses likely would have been similar to that of their peers.

### **Managing Student Biases**

During rotation three of the unit plan, students continued to research and collect data in their student groups. Students completed the inner fold of their engineering notebooks by documenting all information found during the research process. Additionally, students participated in a managing bias sharing activity.

According to Shim and Walczak (2012), the use of comparing and contrasting diverse perspectives as an assignment style is imperative to maximize growth in critical thinking skills (p. 14). As a class, we discussed the importance of hearing both sides to an argument before rushing to have a reaction or form an opinion. I stated, “After all, not all sources will have the same point of view on a topic, it would be crucial to consider all sides to an argument prior to taking a position. You can’t rush to judgement when you don’t have all of the information on a topic.”

In terms of managing bias, several activities were put into place to challenge students to consider different perspectives. First, students had to "convince" me, with facts from the researched data documented in their engineering notebooks, not merely opinions, that the global crisis that had chosen was indeed authentic. A great deal of time was put into teaching students the skills needed to identify reliable resources at the beginning of the last rotation and the evidence of this process was required in their engineering notebooks in the form of referencing their sources. I conferenced with student groups and questioned information found in their engineering notebooks to challenge their understanding of the content, and ability to cite information in their data. Students had to reference the information they had found on their subtopics of choice and support the found data with that from alternative websites.

Students were also instructed to search for opposing information to their global crisis. I asked each group questions pertaining to their specific topic, for example, "are there any valid sources that claim that shark finning is *not* real? Or that this process is *not* negatively impacting our environment or the shark population?" I likened this particular example to that of deer hunting and how the population is so high that it is important to keep it under control. If students found examples of these data, they were instructed to document it in their engineering notebooks.

In the event that other groups in class were researching the same sub category of environmental crisis, those groups had to convene to compare and contrast the data from their engineering notebooks. This occurred on several different occasions throughout the numerous fourth and fifth grade classes, as it was common that multiple groups would be researching the same topics of interest in one class. I believe this was due to the sharing out of facts and information that took place in the last rotation, which in turn inspired to students to choose the subtopic that demonstrated new or shocking information. My observations reveal that on occasion, the only conflicting information found was slightly different data on specific numbers, such as how many sharks were being killed annually. The differences in data were quickly made clear to the students by

recognizing the differences in dates of the articles or publications of the information on their distinctive websites.

The End of Day Enjoyment Survey (APPENDIX G) indicated further enjoyment in the research process as indicated in the last rotation, “I loved that we get to do our own things and pick it out. And do it with our partners.” However, three participants expressed disappointment in the lack of technology and not having an opportunity to utilize the computer to research during this unit, as another student was manning the research process. Though students all worked together in a group, students were directed to make sure that each group member was able to use the computer during one of the class sessions. I believe that the use of technology is extremely exciting for these students, and those who had spent a great deal of time on the computer during a previous session were not as excited to document data in the engineering notebook, as this task was previously assigned to a different table member. Overall, 30 students circled “love”, 12 students circled “good”, and the above mentioned three students discussing technology in their open response question on the survey circled “bored.”

The continued and increased enthusiasm for the project suggested that students were enjoying the ability to have choice in their learning direction. Additionally, I felt as though the research component of the project was likely one of the most exciting for the students. It was easily a lesson that had high

engagement from most students. Further evidence of empathy towards living creatures occurred during this rotation as well. A student exclaimed in regards to researching puppy mills, “Can you imagine what it must be like to live in a cage? I want to help them all.” The expression on this student’s face when she made this comment emphasized her feelings towards the subject.

### **Student Designers**

In rotations four and five of the unit plan, a wide variety of activities occurred that brought students from the research phase of the project to the design process. Class began with a variety of short YouTube video clips of inventions created to help solve environmental crises, such as the “The Altered: Nozzle”, a sink faucet nozzle that cuts water use by 98% and, “The Seabin Project”, a floating garbage can that is put into water at locations such as marinas and docks, working 24 hours a day to collect floating garbage and liquid pollutants in the waters. I was very specific in choosing videos that did not correspond to any environmental crises studied by the class, so as to not stifle ideas with inventions that are already on the market.

In their groups, students began to discuss ideas for inventions that they will design to help solve their environmental rights subtopic of choice. Student began by reviewing the research and facts portion of their engineering notebooks and were prompted to begin thinking of ideas to solve the crisis at hand. Students

made a pro and con list for each invention idea to generate and discuss the outcomes of each and decide which invention idea, or combination of invention ideas, would be best to help solve the essential question “What can we do to help clean the planet earth?”

Students then worked on thumbnail sketches of the invention designed for their cumulative project. Students had to consider what materials would be used to create the invention, as demonstrated in the “Seabin Project” video, using recycled materials was the most efficient way to structure the design. We discussed as a group how the overall appearance of the invention was not as important as the task it was sent out to accomplish, “functionality over aesthetics.” Students made lists of materials needed for their three-dimensional sculpture representations of their invention designs and decided who would be able to bring in such materials. School wide emails were also sent to all faculty and staff asking for the recycled materials needed to complete the projects students were envisioning.

Once the final overall design was chosen, students completed eight and a half by 11 inch blueprint drawings of the invention. We discussed as a class how this process is done by all designers in order to fully think out the process and functionality of their inventions. This was done as a means of promoting design-based thinking skills as a part of the unit plan. A portion of the YouTube

video “IDEO Shopping Cart Project” about the development of product design was shown to students to emphasize how their processes of research, design, blueprints, and prototyping followed in line with what professionals in the field do.

In addition to the design process of the inventions, students wrote an explanation in their engineering notebooks of what the inventions purpose was and how it contributed to solving their environmental subtopic of choice. Students set goals for the objectives of their invention and determined who would work on which aspect of the invention design and creation. Students then began to collaboratively sculpt the three-dimensional representations of their invention designs.

My observations of these rotations reveal a great deal of enthusiasm, particularly in the artmaking portion that began. A student stated, “the old teacher never would have let us do this kind of project.” When I said, “Really? Why do you say that?” She explained, “She didn’t let us pick what we wanted to do. This would have been too messy.” Though I admit that clean up has been a struggle in many of the classes, I believe that this can be altered for a greater outcome. Seeing as this is my first real year of teaching not as a long term substitute, getting routines down, particularly at the beginning of the year for such an open project is something that I could certainly improve on in the future. The

enthusiasm was spread across classes, as another student stated, “I like how we can move around the class. I feel like we get to do more.” I believe the student was referring to getting more work done due to not being hindered by waiting for teacher directions.

However, two groups in one class were completely disengaged. I asked their teacher about their behavior and she explained that she is experiencing the same thing. She also told me that one student included in the study “Does not speak in class. Will not answer questions aloud. However, recently they did a writing assignment and he wrote more than any student. He decided to write about what he had learned about puppy mills during art class.” She told me that she felt as though this was proof that the content is getting through to students, despite their behavior. However, two students from the same class were observed bringing in additional materials they had made at home to the classroom to add to their projects demonstrating a great deal of motivation despite the eight-day rotation.

The End of Day Enjoyment Survey (APPENDIX G) revealed a great deal of enjoyment in the artmaking process. Written responses included, “I love that we got to create our own master creation”, and “I wish I could do this project forever. Your art class is the best!” However, there was numerous responses that indicated a need for more time to complete the project, “MORE TIME!” I can

distinctly recall how frustrating it was to have to stop students in the middle of something which they were highly engaged with. Often times, I kept students into my prep periods when able and allowed for more time to create. Overall, 35 students circled “love”, 14 students circled “good”, which suggests a high interest in the design and artmaking processes.

### **Winding Down**

Within rotation six of the unit plan, students worked on wrapping up the creation process in all aspects of the project from research to designing to artmaking. Students worked on completing their engineering notebooks with all the facts about their subtopics, a blueprint sketch of their design, and their three-dimensional sculpture. Since it was important to allow for individual group progress, groups were working at a variety of levels of completion.

When groups had completely finished each of the above mentioned aspects of the assignment, they collaboratively wrote group artist statements (FIGURE 4.1) explaining why they had chosen this particular subtopic to research, what their personal beliefs about the content area are, and what materials they had used for their artmaking process and why. The intention of this process was to provide students with an opportunity to express their learning and artmaking processes in written form. I wanted for students to be able to explain their reasoning for the various portions of the project to accompany their artistic

representations and to better prepare them for the following week, which would consist of presenting.

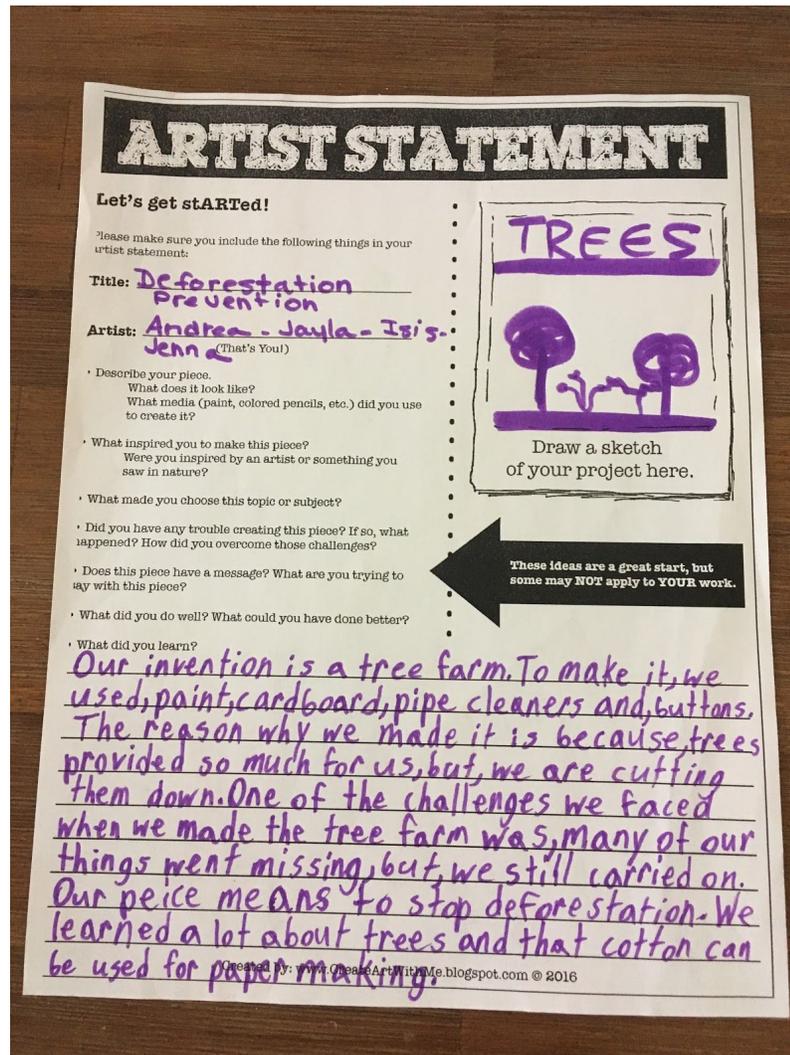


Figure 4.1. Artist Statement

We had a classwide discussion on how designers need to be able to present their ideas to a company, much like what was seen in the YouTube video

“IDEO Shopping Cart Project” that was shown in an earlier rotation. We reviewed the process that those designers encountered and how they needed to visually demonstrate their inventions along with an explanation of how they had reached this point in the process. The goal was to link everything the students had done up to this point back to actual functions and responsibilities performed by designers in the field.

My observations of this rotation indicate that students appeared to be highly motivated and excited to complete their projects. Two groups expressed concern about who would be taking the project home, as more than one student was interested. This observation suggests a sense of student pride in their work. A student explained, “We worked so hard on this project, I want to be able to put it in my room.” Groups appeared to settle these decisions on their own, as I informed them that projects would not be going home until after the critique and presentations.

Student groups that completed their artist statements (FIGURE 4.1) were observed as being highly interested in explaining the intricacies of their inventions. Students wrote more than I had expected about their inventions and the processes of their research, designing and artmaking. The majority of student groups added lengthy information to their artist statements while some merely wrote a sentence. This made me feel as though I should restructure the format of

the questions asked to provoke further responses. The format of the artist statements was altered after the first two rotations of classes, and evidence shows that written responses became more detailed with the additional questions asked.

One student did however indicate in class, “This is my favorite project we’ve ever done, but people keep messing it up during the week.” When I asked the class as a whole if they too were experiencing complications due to pieces of the project becoming damaged or going missing, most groups raised their hands. This was a question that I decided to ask all classes of students and the groups whose projects were not located on high shelves in the rooms were experiencing similar struggles. I would need to change the way in which projects are stored if I was to continue this type of project again.

Students did not complete an End of Day Enjoyment Survey (APPENDIX G) for these rotations, as class time was prioritized to allow for completion of the various aspects of the projects.

### **Critiques and Presentations**

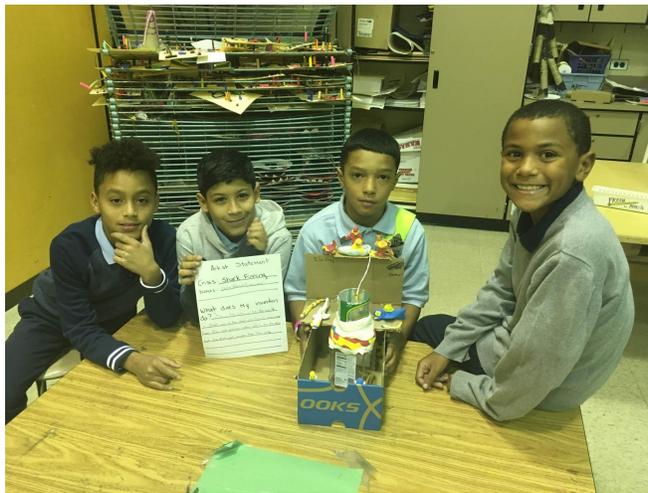
During rotations seven and eight of the unit plan, students presented their work to their peers, classroom teacher, and myself. Student groups collaboratively set up their projects around the classroom to create a “museum atmosphere”, as the presentation of their work is just as important as the creation process itself. An emphasis was placed on this process in order to fall in line with the National

Visual Arts Standards in the category of “Presenting”, which was a vital component to the curricular change I had put in place.

Students participated in a critique where each group presented their project. Each member indicated their individual job within the group and how they felt their project would solve the environmental subtopic that their group chose and why they chose that topic to research in the first place. Students elaborated much further in their presentations about the purposes of their inventions to solve their environmental crises that I had originally anticipated, particularly groups that had only given a short response on the artist statement as indicated above in rotation six. My observations, as well as conversations had with their classroom teachers who attended the presentations, suggest the strong passion that students demonstrated towards their environmental crises of choice, as well as their ideas to help create a change. A student group explained while presenting, “Our project made us realize how badly everyone treats animals. We need to show everyone what’s really happening so that they can care about it too.” Their drive to share their findings with the community evolved into the ideas currently in place for the mural being completed this year in the school.

At the close of their presentations, students were asked to receive questions from their peers and teachers, just as designers presenting an idea would need to eradicate any concerns that a company would have regarding their

product. Students provided their peers with an opportunity to view the sculpture (FIGURE 4.2) , engineering notebooks (FIGURE 6.1), and blueprints while they were presenting. Questions arose during one presentation where students were asked specifically how their design would solve the crisis of shark finning. The group explained their project further by relating their design for prosthetic shark fins to that which happens to people who lose limbs. A student commented, “My uncle was in the war and he lost his leg, so they made him a new one with metal and plastic. That’s the same thing was want to do, but for sharks.” The student’s ability to connect his learning and ideas to that of a personal life experience suggested a strong understanding for the new content as well as the design process.



*Figure 4.2. Sculptures*

### **Post-Content and Post-NEP Scales**

At the close of the presentations, I administered the Post-Content Survey (APPENDIX E) and the Post-NEP Scale (APPENDIX D). I explained how students would be completing the same surveys as they did prior to the study beginning and how the results would be compared in order to see if any students changed their thinking as a result of the unit plan. The Post-Content Survey (APPENDIX E) indicated, like that of the Pre-Content Survey (APPENDIX E), that the vast majority of students felt as though they knew “a little bit about environmental rights.” In terms of the Post-NEP Scale (APPENDIX D), most students seemed to have pro-ecological paradigms. However, when it came to statements involving the role of human beings on the conditions of the environments, students moved slightly towards con-ecological paradigms.

### **Cumulative Survey**

In addition to the Post-Content Survey (APPENDIX E) and Post-NEP Scale (APPENDIX D), I also administered a Cumulative Survey (APPENDIX F) that was aimed at gather data on how student participant groups felt overall towards utilizing a theme-based art education, working in groups, and self-proclaimed knowledge growth. The survey contained 12 agree/disagree statements and two open-ended questions. The results of the survey suggested an interest in continuing these types of projects in the future, however not during

every art class. These results are discussed in further detail in the Data Analysis section of this paper.

## **DATA ANALYSIS**

Throughout the study, I utilized various data collection tools to record and analyze student enjoyment towards a theme-based art curriculum and growth in environmental crises content. Students began and ended the study by completing a Pre & Post-Content Survey (APPENDIX E) to determine student previous knowledge on the topic of environmental crises and a Pre & Post-NEP Scale (APPENDIX D), intended to capture their ecological paradigms. Additionally, students completed End of Day Enjoyment Surveys (APPENDIX G) at the close of most rotations, aimed at allowing students to provide open responses about their satisfaction level towards that day's class activities. Ultimately, students completed a Cumulative Survey (APPENDIX F), intended to gather student reactions towards the various aspects of the unit, including research, data collection, and artmaking activities. These data collection tools were used in conjunction with my own personal journal observations, and student artifacts including engineering notebooks (APPENDIX -), Artist Statements (APPENDIX -), and completed artistic sculptures (APPENDIX -) to analyze the results of the study.

### **Pre-Content Survey**

Students completed Pre-Content Surveys (APPENDIX E) prior to the start of the unit. This survey revealed the prior knowledge students possessed on the

topic of environmental rights. The first question asked students to indicate their knowledge level in the topic of environmental rights by circling one of four responses, "I know nothing"; "I know a little bit"; "I know a lot", and "I know everything there is to know." The second part of the survey requested that students draw a picture of what they believed environmental rights to be.

Of the 55 participants, 14 students circled "I know nothing", however their written and illustrated responses, including images of a man cutting down a tree with an "X" through the image and a man watering trees, indicated a deeper understanding of environmental rights than students self-proclaimed. 35 students circled "I know a little bit" and illustrated responses included "No Cutting Trees" in a circle with an "X" through it and a tree, and numerous recycling symbols indicating an understanding of the word "environment", as well as some reflection of mankind caring for the environment. Four students circled "I know a lot", and written responses included "don't cut down so many trees." These responses suggested more connection to the environment and the need to protect it from human influences, indicated by the images of people cutting down trees and the other image of the trees standing together in unity.

Finally, one student circled "I know everything", these responses suggested student understanding of environmental rights in terms of harming animals and plants, indicated by images of animals crying and trees being cut down.

My overall reflection and coding of the Pre-Content Survey (APPENDIX E) indicated an overwhelming amount of responses that revealed a deeper understanding of environmental rights than students self-proclaimed.

### **Post-Content Survey**

On the Post-Content Survey (APPENDIX E), four students circled “I know nothing”, however a student accompanied this response with a picture of a person cutting down a tree with a “don’t” sign through it. These data conflicts itself, suggesting that the student knew more about the content than they believed they did.

The results are as follows: 35 students circled “I know a little bit” with accompanied images such as a trash collecting vehicle sucking up trash from the environment, a person saying “help our earth” with a recycling can and symbol, and people helping animals. These responses appeared to have an indication of an understanding of the word “environment”, as well as reflection of caring for the environment through the image of people watering plants and another image including the symbol for recycling.

Nine students circled “I know a lot” with imagines including people finning sharks with smiling faces and sharks being collected in a tank. These responses appeared to have more connection to the environment and the need to

protect it from human influences, indicated by images of people cutting down trees and another image of trees standing together in unity.

Four students circled “I know everything” and drew images of people holding hands circling the world and people in a boat that has a machine collecting trash from the ocean. These responses appeared to indicate student understanding of environmental rights in terms of harming animals and plants.

Overall, students decreased by ten in “knowing nothing”, students increase by one in “knowing a little”, students increased by five “knowing a lot”, and students increased three in “knowing everything.” These results suggested an increase in student self-proclaimed knowledge in the content area of environmental crises.

### **Pre-NEP Scale**

When taking the Pre-NEP Scale (APPENDIX D), students were instructed to agree or disagree with the sentences below.

In response to statement one, “Plants and animals have as much right as people to live,” 51 students selected agree, and four students selected unsure. These responses suggest that overwhelmingly, students believe that animals have as much right as humans to live.

In response to statement two, “People have the right to change the natural environment to fit their needs,” four students selected agree, 48 students selected

disagree, and three students selected unsure. These responses overwhelmingly suggest that students do not believe that people should change the environment to benefit themselves.

In response to statement three, "People are smart enough to not ruin the earth," 20 students selected agree, 24 students selected disagree, and 11 students selected unsure. These responses suggest that the majority of students do not believe that people are smart enough to not ruin the earth, however responses were fairly split on this particular statement.

In response to statement four, "People are treating nature badly," 36 selected agree, five students selected disagree, and 14 students selected unsure. These responses overwhelmingly suggest that students believe that people are treating nature badly.

In response to statement five, "When people mess with nature it has bad results," 46 students selected agree, three students selected disagree, and six students selected unsure. These responses suggest that students believe that people are negatively affecting the environment.

In response to statement six, "Nature will survive even with our bad habits on earth," six students selected agree, 47 students selected disagree, and two students selected unsure. These responses suggest that students believe that nature will not survive if people continue to treat it the way they currently are.

In response to statement seven, "People are supposed to rule over the rest of nature," nine students selected agree, 42 students selected disagree, and four students selected unsure. These responses suggest that students do not believe that people should rule over nature.

In response to statement eight "Nature is very delicate and easily harmed," 46 students selected agree, five students selected disagree, and four students selected unsure. These responses suggest that students believe nature is easily harmed and delicate.

In response to statement nine "People will someday know enough about how nature works to be able to control it," 19 students selected agree, 25 students selected disagree, and 11 students selected unsure. These responses suggest that students are split over their responses for whether or not people will one day be able to control nature for their own personal needs.

In response to statement ten "People could negatively change the environment forever," 22 students selected agree, 24 students selected disagree, seven students selected unsure, and two did not respond. These responses suggest that students are unsure if people will negatively change the environment forever.

Overall, most students appear to have pro ecological paradigms. However, when it comes to statements involving the role of human beings on the conditions of the environment, students were split with their opinions.

### **Post-NEP Scale**

During the Post-NEP Scale (APPENDIX D), two students were absent on the day of the survey and did not complete it. Students were directed to agree or disagree with the sentences below.

In response to statement one, "Plants and animals have as much right as people to live," 47 students selected agree, five students selected disagree, and one student selected unsure. These responses suggest that overwhelmingly, students believe that animals have as much right as humans to live.

In response to statement two, "People have the right to change the natural environment to fit their needs," five students selected agree, 46 students selected disagree, and two students selected unsure. These responses overwhelmingly suggest that students do not believe that people should change the environment to benefit themselves.

In response to statement three, "People are smart enough to not ruin the earth," 28 students selected agree, 19 students selected disagree, and six students selected unsure. These responses suggest that the majority of students believe people are smart enough to not ruin the earth, however responses were fairly split on this particular statement. The changes in responses on this particular question from the Pre-NEP Scale (APPENDIX D) indicated a shift to negative-ecological

paradigms in the realm of humans having enough intelligence not to harm the earth.

In response to statement four, "People are treating nature badly," 40 students selected agree, seven students selected disagree, and five students selected unsure. These responses overwhelmingly suggest that students believe that people are treating nature badly.

In response to statement five, "When people mess with nature it has bad results," 48 students selected agree, three students selected disagree, and two students selected unsure. These responses suggest that students believe that people are negatively affecting the environment.

In response to statement six, "Nature will survive even with our bad habits on earth," three students selected agree, 47 students selected disagree, and three students selected unsure. These responses suggest that students believe that nature will not survive if people continue to treat it the way they currently are.

In response to statement seven, "People are supposed to rule over the rest of nature," two students selected agree, 50 students selected disagree, zero students selected unsure, and one had no response. These responses suggest that students do not believe that people should rule over nature. Changes from the Pre-NEP Scale (APPENDIX D) indicate a pro-ecological shift in the concept of humans controlling nature.

In response to statement eight "Nature is very delicate and easily harmed," 45 students selected agree, six students selected disagree, and two students selected unsure. These responses suggest that students believe nature is easily harmed and delicate.

In response to statement nine "People will someday know enough about how nature works to be able to control it," 18 students selected agree, 29 students selected disagree, and six students selected unsure. These responses suggest that students are split over their responses for whether or not people will one day be able to control nature for their own personal needs.

In response to statement ten "People could negatively change the environment forever," 26 students selected agree, 25 students selected disagree, and two students selected unsure. These responses suggest that students are unsure if people will negatively change the environment forever.

Overall, most students appear to have pro ecological paradigms. However, when it comes to statements involving the role of human beings on the conditions of the environment, students were split with their opinions. Compared to the pre-test responses, the Post-NEP Scale (APPENDIX D) indicated that student ecological paradigms remained the same overall with marginal increases towards pro-ecological statements. However, in response to questions three and seven, students had a change to negative ecological paradigms, both involving the

interaction of humankind with planet earth. This could be due to the project centralizing on how to create a positive change in the environment, rather than solely focusing on the current conditions and how mankind has influenced these changes.

### **End of Day Enjoyment Surveys**

Students filled out an enjoyment survey at the end of most class periods indicating their level of satisfaction with the class (Confused, Bored, Good, Loved). Students also had an opportunity to provide suggestions for what they would have changed about the class and to offer comments on what they enjoyed/disliked most (“Do you have anything else you would like to tell me about today’s class? Was there anything you LOVED or anything you HATED? What would you change and why?”). These data informed the range of student enthusiasm towards the project at the end of each given lesson, along with student specific suggestions for modifications.

In rotation one, the majority of the results from this survey indicated that the emotional reactions to the lesson were good. 16 students circled “love”, three circled “love” and “good”, 13 students circled “good.” Students thought the new format was interesting and expressed great empathy towards animals. Four students did however circle “confused” on the survey and indicated confusion of the overall tasks involved.

In rotation two of the student, student responses on the End of Day Enjoyment Survey (APPENDIX G) demonstrated a great deal of enjoyment in the research process. Overall, 35 students circled “love” and ten circled “good.” One class did not have an opportunity to fill out the survey as they ran out of time at the close of class. However, my observations of the class suggest that their responses likely would have been similar to that of their peers.

During rotation three, the End of Day Enjoyment Survey (APPENDIX G) indicated further enjoyment in the research process. However, three participants expressed disappointment in the lack of technology and not having an opportunity to utilize the computer to research during this unit, as another student was manning the research process. Overall, 30 students circled “love”, 12 students circled “good”, and the above mentioned three students discussing technology in their open response question on the survey circled “bored.”

In rotations four and five of the study, students participated in the same activities that continued from one session to the next based on their personal speed of learning. The End of Day Enjoyment Survey (APPENDIX G) at the end of rotation five revealed a great deal of enjoyment in the artmaking process. However, there were numerous responses that indicated a need for more time to complete the project. Overall, 35 students circled “love”, and 14 students circled “good.”

## **Cumulative Survey**

During the Cumulative Survey (APPENDIX F), two students were absent and did not complete it. Students were directed to agree or disagree with the sentences below.

For statement one “I enjoyed learning about topics other than art during the project.” 41 students agreed, 11 disagreed, and one said unsure.

These responses suggest that the majority of students enjoyed learning about topics other than art.

For statement two, “I LOVED to do research in the art classroom,” 45 students agreed, five students disagreed and three were unsure. These responses suggest that the majority of students loved the research portion of the assignment.

For statement three, “I liked having my own job in my group,” 37 students agreed, 14 disagreed, and two were unsure. These responses suggest that most student enjoyed working in groups and having individual responsibilities.

For statement four, “Everyone in my group got along well,” 34 students agreed, 15 students disagreed, two students were unsure and two did not answer the question. These responses suggest that most students got along well with their groups.

For statement five, "Doing research is boring," six students agreed, 45 disagreed and two were unsure. These responses suggest, with the support of statement two, that students enjoyed the research process.

For statement six, "Having my own job in the group made making art more fun," 41 students agreed, nine students disagreed, two students were unsure and one did not respond. These responses suggest that the majority of students enjoyed having their own roles and responsibilities within their groups.

For statement seven, "I do not like working in groups," seven students agreed, 43 students disagreed, two students were unsure, and one student did not answer. These results suggest that most students enjoyed working in groups.

For statement eight, "I liked making an art project to explain my research," 46 students agreed, four students disagreed, and three students were unsure. These responses suggest that the majority of students enjoyed using the artmaking process to explain their research.

For statement nine, "There was not enough time to make art in class," 21 students agreed, 30 disagreed, and two were unsure. These responses suggest a split in whether or not the allotted time for artmaking was sufficient for students.

For statement ten, "My group did not get along," 13 students agreed, 39 disagreed and one was unsure. These responses suggest, along with support from statement four, that the majority of students got along with their group members.

For statement 11, "I like how my final project turned out," 37 students agreed, 14 disagreed, and two were unsure. These responses indicate that the majority of students were happy with the results of their project.

For statement 12, "I am a researcher," 30 students agreed, 18 disagreed, and four were unsure. These responses suggest that three-fifths of the student participants self identified as "researchers" at the close of the unit plan.

In response to the open-ended response question "Describe something about the project that you would change. Why would you change it?", students provided a variety of answers. The majority of students indicated that there is nothing they would change, "Nothing I like the effort we put in it." A handful explained details such as the color or size of their projects, "What I would change is the color and the middle because we didn't put as much effort and time." And some students expressed a desire for more time to complete the artmaking portion of the assignment, "I think next time we shouldn't have to rush also, we shouldn't have a time limit."

In response to the open-ended response question, "We learned about a topic that wasn't related to art, but used our artmaking abilities to explain the research we did on that topic. How would you feel about doing this kind of project in the art classroom all the time?", students again had an assortment of responses. A large amount of responses indicate positive reactions to the question,

“Yes, learning about different stuff to give me a reason to go against puppy mills. Forest fires, endangered animals and sharks”, and “I would like to do it again because it was fun to work in groups and research things.” However, a large number of students also indicated that they would do the project format again, however not during every art class, “I would feel fine but I wouldn’t want to do this type of project every time we are in the art room.” Overall, the majority of responses indicated a positive reaction, however perhaps not during each class. Three students indicated no primarily for group disagreements, “I don’t want to do this again because the people in my group didn’t like it, so, it was a waste of time.”

### **Other Cumulative Projects**

A final review of the engineering notebooks indicated an overwhelming surprise at just how much information students included on their environmental crises. Many groups filled the research pages of their notebooks with facts, while others had bulleted points of information they found key to their projects. A summative assessment of the engineering notebooks indicated the students’ abilities to utilize valid resources to collect and document vital information needed to complete the research component of the project.

A summative assessment of the Artist Statements indicated that some groups elaborated thoroughly on their learning and artmaking process in this

written component, and others were more expansive during their presentations. When comparing the written work to that of their oral presentations, it was clear that students who did not write lengthy responses were more than capable of explaining themselves and defending their work when asked detailed questions about their projects. As detailed in the above in the “Critiques and Presentations” section, the student group that defended their shark prosthetics simply wrote: “It’s shark fins made from plastic and metal that helps sharks who had their fins cut off.” On the other hand, their verbal responses indicated a much deeper understanding of the content and design process. I took this into consideration when evaluating their artist statements, however it would have been ideal to have students create artist statements which matched that of their ability to explain their project orally. The lack of written responses could have been due to limited time in student groups, as they were encouraged to work at their own pace in order to not rush any aspect of the design process. Responses on the Artist Statements that were limited also included expressions of pride by students, “I never had to do anything like this before and it was really good. I feel like an artist. I couldn’t have done this without my group. It was amazing.” This evidence further suggests pride taken in student work, as supported in the above mentioned discussion about students wanting to keep their projects.

Students were observed as being very involved throughout the process of creating their sculptures. When conferencing with student groups, they explained how every small addition to their sculpture had a purpose. A summative assessment of the sculptures indicated the students' abilities to demonstrate their learning through a visual element of the project that aligns with their documented research.

### **Codes and Bins**

After the collection and recording of data based on the gathering methods described above, I began to code all field notes, reflections, student surveys and artifacts. This process involved reading each line of data collected and taking note of topics that were common occurrences. I then selected a color for each recurring subject and color coded each item of data. This process allowed for persistent motifs to stand out amongst the vast amount of collected data.

I then sorted all of the recognized codes into bins of similar topics. As you can see from the graphic organizer (FIGURE 5.1) below, the topics developed into the categories of Positive Engagement, Collaboration, Cross-Curricular Interest Empathy, Interest in Research and Knowledge Development. All of the topics listed in the bins below the categories are the recurring codes that appeared within the data analysis process that related to one another. For example, I utilized the color green to highlight each piece of evidence that suggested positive student

interest or engagement in the research process. I then looked at all of the color-coded topics, seen in the bins below, and made connections to all possible alternative codes. After the process of color coding and grouping similar or related codes into bins, I began the process of utilizing the bin categories to develop theme statements relevant to the collected student data and observations from the study.

# Graphic Organizer

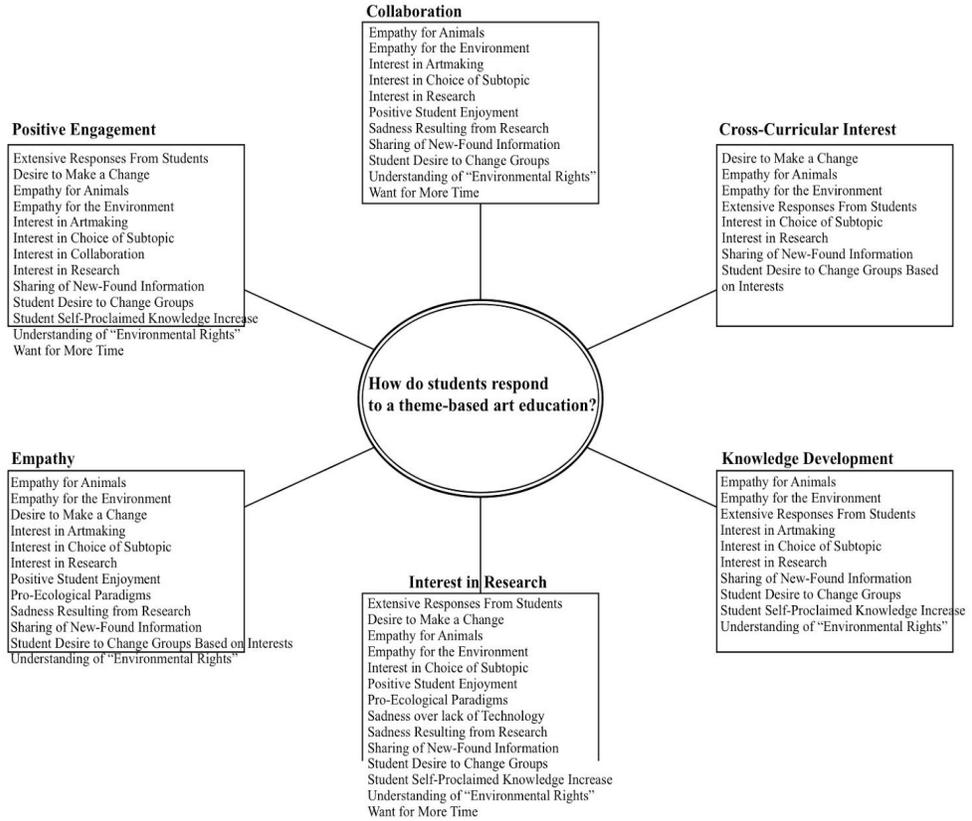


Figure 5.1. Graphic Organizer

## THEMES

### **Empathy**

*Students demonstrated empathy towards animals, the environment and concern for the sustainability of human life.*

Throughout the study, students exhibited signs of empathy in a multitude of measures. As discussed in the data analysis section of this paper, students overall had pro-ecological paradigms based on the results of their Pre- and Post-NEP Scales (APPENDIX D). On their open-ended responses on the End of Day Enjoyment Survey (APPENDIX G), students indicated how the current treatment of animals was disheartening, “I was searching puppy mills and the puppies were sick and starving”; “I feel very bad for the dogs in puppy mill. We should be much more grateful to be human and living.” My field observations also note multiple statements from students indicating their empathy towards dogs in puppy mills, “I would rather know how hard their lives are. Now I will think more about them.”

Paulo Freire (1970) believed in the power of education to transform the traditional conforms of society. Freire (1970) stated,

Who are better prepared than the oppressed to understand the terrible significance of an oppressive society? Who suffer the effects of oppression more than the oppressed? Who can better understand the necessity of

liberation? They will not gain this liberation by chance but through the praxis of their quest for it, through their recognition of the necessity to fight for it. (p. 45)

The questions presented above support Freire's theory that the oppressed are best suited to make a change in their society. By raising the attention of the oppressed to conditions that are plaguing their local and global communities, Freire (1970) regarded the oppressed as having the ability to challenge these circumstances. By confronting these challenges openly, Freire (1970) believed that the oppressed, through practice, would strive for transformation.

In relation to my action research study, Freire's (1970) belief in the abilities of the oppressed to research and challenge community issues supports my use of the pedagogical approach YPAR. A core belief of a YPAR approach to education supports research by students to learn about local and global community issues to question the current structures of society. My students worked towards solving problems that are currently facing the local and global conditions of our environment. Students conducted their own research with the choice to explore any sub category of environmental crises. My students then began to come across challenges outside of those we had discussed in class. Student researcher groups discovered and investigated crises of their own interest, including animal cruelty cases such as shark finning and puppy mills.

Through classroom observations, it became evident that students were more involved and demonstrated strong concerns about their subtopics of choice. The constant reference in my field notes on the desire to share out facts about their sub categories indicates high level of student interest and student concern for the information they were learning. “One group came up with the idea to research puppy mills and located the ASPCA website. They asked for me to project the information during class for other groups to see. Students across the study were very excited to share information with each other. Two students cried simply from hearing the facts about puppy mills. However, they both indicated that they were glad they knew about the current conditions of puppy mills.” The process of their research suggested, through my observations, that students increased their awareness and in turn became invested in their chosen subtopics.

In addition, the End of Day Enjoyment Surveys (APPENDIX G) produced extensive responses from students. When answering the open-ended question about how they felt about the day’s art class, students provided insight to their emotions and learning. Many students expressed their sadness to learn about the environmental crises plaguing the global community in addition to how this new-found knowledge has inspired them to desire a transformation. “I loved art today because we learned about shark fins. It felt good to look at things that we want to change.” The evidence which suggested an increase in empathy for

animals and the environment also demonstrated a self driven aspiration in students to make a change in their local and global communities. The artmaking assignment which followed the research process centralized on students developing inventions and processes geared towards solving their chosen crisis. Students were observed as being highly engaged in working out the details of their solutions with their researcher groups, as demonstrated in their engineering notebooks (FIGURE 6.1) and artist statements which detailed the intricacies of their prototype designs.

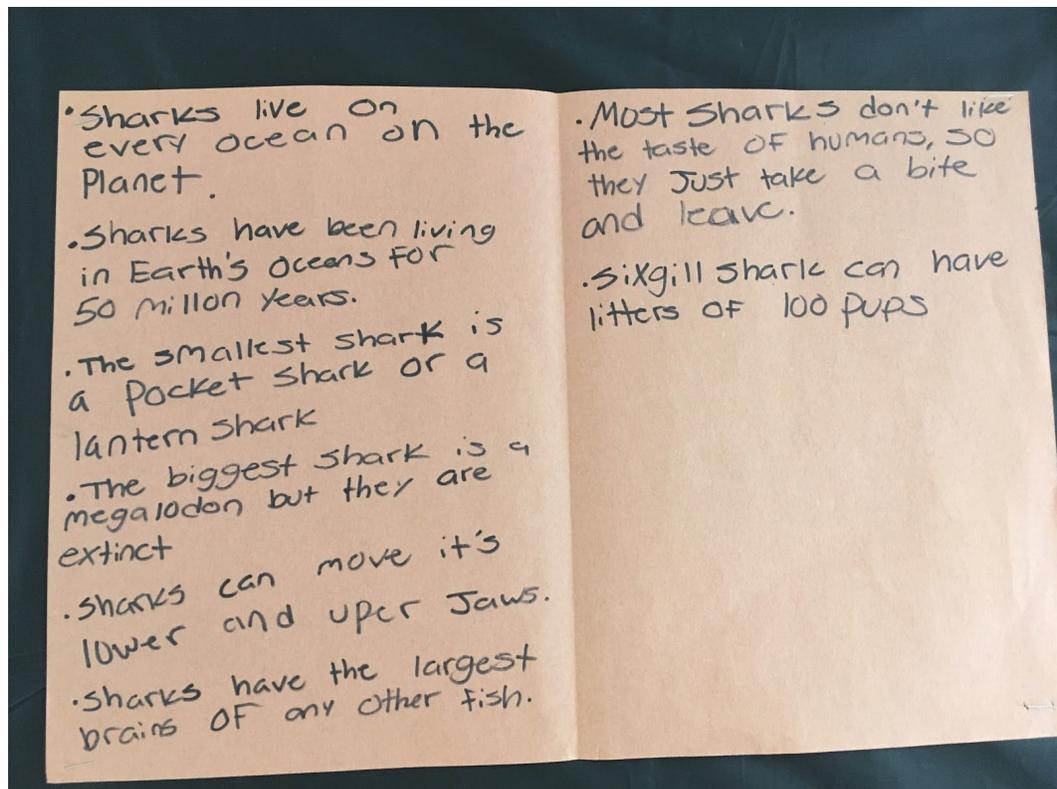


Figure 6.1. Engineering Notebook

As a result of the above mentioned collected data, indicating increased empathy in students, the theme statement formulating around empathy was developed. The related codes included empathy for animals, empathy for the environment, sadness as a result of research findings, and a desire to make a change. These codes were linked to one another through the overarching theme of empathy, as seen in Figure 5.1.

### **Knowledge Development**

*Students showed evidence of slight increases in pro-ecological paradigms, high interest in research for increased comprehension, and extensive written/verbal responses based on self-proclaimed increases in knowledge.*

As a result of the action research study, students demonstrated a desire to continue researching and an interest in conveying their new-found understanding with their peers, homeroom teachers, and myself. As noted earlier in this paper, students developed additional questions to drive the direction of their research, as indicated by their personal interests.

Students also demonstrated high levels of interest in researching in both observed conversations, “One group asked if they could share an environmental crisis that they had learned about with the class. They proceeded to share the website and read facts about shark finning. This created a lot of interest in this class to begin researching this topic.” Additional evidence was present on the End

of Day Enjoyment Surveys (APPENDIX G), “I loved it [art class] because we got to do research on a world problem.”

A marginal increase in ecological paradigms concerning the conditions of the environment was indicated in the Data Analysis section of this paper from the Post-NEP Scale (APPENDIX D) results. In all but two questions, a slight change towards pro-ecological paradigms occurred as a result of the unit plan.

For statement 12 on the Cumulative Survey (APPENDIX F), “I am a researcher,” 30 students agreed, 18 disagreed, and four were unsure. These responses suggest that three-fifths of the student participants self identified as “researchers” at the close of the unit plan.

Furthermore, my field notes indicated extensive written responses from students on the themes of their subcategories of choice. “A classroom teacher told me that a student included in the study ‘Does not speak in class. Will not answer questions aloud. However, recently they did a writing assignment and he wrote more than any other student. He decided to write about what he had learned about puppy mills during art class’. She was shocked at the length and details included in the students’ written response.” This evidence suggested a strong indication of self-proclaimed knowledge as well as interest in research and a shift in opinion from the student.

Dewey (1938) notes the importance of including students in the direction of their learning.

There is, I think, no point in the philosophy of progressive education which is sounder than its emphasis upon the importance of the participation of the learner in the formation of the purposes which direct his activities in the learning process, just as there is no defect in traditional education greater than its failure to secure the active co-operation of the pupil in construction of the purposes involved in his studying. (p. 67).

Dewey (1938) implies in this quote that a lacking component of traditional education, which is supported by that of progressive education philosophies, is the incorporation of students in the direction of their learning. In addition, Dewey advocates for students to inform the content of their education.

It was my intent to utilize YPAR's component of interest-driven research as a means for boosting student-driven interest mentality. By applying Youth Participatory Action Research (YPAR) as the framework for my study, I challenged the notion that research can only be conducted by collegiate adults. I wanted for my students to embrace the construction of their own knowledge through researching topics of personal interest. It is one of my strongest epistemological beliefs that students can be the source of their own knowledge. I do not consider an educator to be the all-knowing being in a classroom. I have a

strong desire for my students to develop their own means of knowledge development through self-driven interests. I supported this progression of skills through implementing YPAR's core belief of including students in the research process, thus encouraging learning based on their interests and construction of their own knowledge.

### **Positive Engagement**

*Students exhibited a desire to make a change in the environment and to share their knowledge with their peers, their homeroom teacher and the art educator.*

The sharing out of information throughout the project by students was a huge motivator to continue the research process and to develop solutions to the crises they were investigating. Students were highly motivated by their self interests in subtopics of choice, "Students are fully engaged in the research process and have continued to delve into various environmental crises to focus on for the assignment. Some students in this class have changed groups in order to research something that is of more interest to them." Having choice in the direction of their learning also provided a drive for students to dig deeper than the surface questions surrounding the facts of their chosen crises, but also how this crisis formulated and ways in which they could contribute to making a change in the global community.

Additionally, the sharing out of facts was a learning experience for myself. By providing choice in their subcategories to research, I put myself into a position where I would not be able to answer questions students had about the content at all times. Students needed to have the motivation and skills to research the answers to their own questions. By providing the knowledge needed to obtain these skills, I gave students the power to steer the direction of their learning and not rely on the educator as the all-knowing being in the classroom. Further, I stressed how their new-found knowledge was also educating myself in the content areas that I was unfamiliar with, such as shark finning.

The evidence of the students' desires to share out newly found information is abundant. My field log notes, "Students were again calling out facts to their peers and one group asked to share their findings to the whole group at the close of class"; "Students began to shout out facts they were learning such as "Shark specialists estimate that 100 million sharks are killed for their fins, annually." The students questioned the meaning of 'annually' and were shocked by the answer they found online. Not all groups are doing shark finning, but the sharing of information appeared to be exciting for all students." Rather than turning to me for answers, students utilized the valid sources they had been provided with as well as additional ones they had located to answer their own inquiries. This provided an opportunity to discuss with students how this process was likened to

that of researchers in the field and in turn transformed students into researchers themselves.

Freire (1970) expresses his viewpoint on the teacher transforming from the all-knowing being in the classroom to a learner alongside the students.

The teacher is no longer merely the-one-who-teaches, but one who is himself taught in dialogue with the students, who in turn while being taught also teach. They become jointly responsible for a process in which all grow.

(p. 80)

Freire (1970) is engaging with the concept of the teacher as a learner with their students through conversations. There is a great deal of knowledge that students bring to the classroom through their previous experiences and by allowing for an opportunity to share these experiences, they in turn educate their teacher. I believe this quote also underscores the importance of students having the ability to educate themselves, their teacher, and their fellow peers. Through this dialogue, students are acting as educators in their realm of their personal experiences.

By sharing our experiences with our students and vice-versa, teachers become educated not only on the prior life experiences of their students, which would help to develop further content lessons, but on how the perceptions of others can influence their thinking. Many students shared previous experiences as well as facts and information they had obtained with me and their fellow

classmates. This activity increased student awareness on a topic, as well as my own personal understanding of multiple crises plaguing the global environment. It was the purpose of this action research project to facilitate and work alongside my students to discover answers to their questions, as opposed to choosing a single crisis that I am fairly educated on and directly teaching it to my students. The intention was to allow for student choice and self generation of knowledge with myself serving as a resource on *how* students could answer additional questions that arise. Many of the additional questions that students had were out of my realm of knowledge. Together we worked to research these questions and students shared their findings with the other research groups. This increased my own awareness, as well as educating students beyond the domain of the crises their group had chosen to investigate. Students left the art classroom with knowledge on a multitude of environmental crises outside of their primary choice. They also developed the skills to research questions appropriately through valid sources, which will undoubtedly help in other content areas.

### **Cross-Curricular Interest**

*Students were driven by inquiry-based questions from curiosities developed through researching subcategories of interest.*

The initial opening to my action research process began with the question “What is an environmental crisis?” It was the intent of this project to guide

students to develop their own knowledge. As discussed in the theme statement above, I as the educator am not the all-knowing in the classroom environment. A key component of this project was for students to develop motivation to research the answers to their own self developed questions based on their subcategories of choice.

Evidence of this theme is again located in the engineering notebooks where students developed lists of additional questions they acquired through the research process, as seen in Figure 6.1. Students had to follow the direction their learning was taking based on the answers they were finding to their questions, as well as additional inquiry questions that I was posing to individual groups throughout the process such as, “How does this crisis affect our community?”, and “What is the cause of the crisis, was it developed as a result of human actions?”

Furthermore, my field notes indicated, “Students appear highly concerned about the ways in which their inventions will function. They seem consistently fascinated by the facts they obtained during the research portion of the assignment and reference their engineering notebooks frequently to make sure their invention is fulfilling the tasks they had originally set out for it to do.” Additional evidence from the field log notes, “Students are fully engaged in the research process and have continued to delve into various environmental crises to focus on for the

assignment. Some students in this class have changed groups in order to research something that is of more interest to them. I believe this demonstrates a great deal of increased interest by the students in the unit plan.” My observations indicated a great deal of motivation by students driven by the inquiry questions of the unit plan, as well as their own self developed inquiries.

A pertinent quote from Freire (1970) explains the approach of problem posing education,

In problem-posing education, people develop their power to perceive critically *the way they exist* in the world *with which* and *in which* they find themselves; they come to see the world not as a static reality, but as a reality

in process, in transformation. (p. 83)

Freire (1970) illustrates how problem-posing education develops a sense of realization within students. It challenges them to think critically about themselves and their position in the current structures or challenges facing their society. It forces them to look at the role they currently play in the world as an individual concerned citizen. Freire (1970) also explains that problem-posing education demonstrates the challenges facing the world as a constant work in progress. I believe that Freire (1970) is underscoring how problem-posing education can

encourage students to continue to challenge the conditions of society beyond the school walls or project parameters.

In relation to my action research project, Freire's (1970) quote about problem-posing education related directly to my curricular change. The current curriculum in place for grades kindergarten through fifth is formulated on the objectives based standards. They plan very loosely on the elements and principles of design and support Freire's (1970) explanation of banking education and its goal of deposit making. This concept instills the idea of students as vessels to be filled with knowledge that is deemed most important by policy makers and educators, as opposed to allowing them an opportunity to reflect on themselves as individual beings and the role they play in society.

The intention of my action research study was to implement a theme-based art education with an overarching theme of sustainability that would lead students to recognize the current environmental conditions of their local and global communities. In addition, I provided opportunities for students to reflect on how they individually contribute to the conditions of the environment as a component of the collaborative project. Reflecting on their current role in the conditions of the environment ignited a will to make a transformation in their communities. I observed students discussing the work they are doing in the art room outside of class. On several occasions, I was been pulled by students in the

lunchroom and after school hours on the playground to discuss how they had been thinking about the project with their group members during their free time. This evidence suggested that students developed a sense of responsibility for the environmental crises they investigated beyond the confines of the art classroom.

### **Collaboration**

*Students are highly interested in working with groups who have the same interests as them and sharing their new-found knowledge.*

As noted in the cross-curricular knowledge theme statement above, students greatly enjoyed the sharing out of new-found information with their peers and myself. Additionally, students exhibited strong interest levels when it came to collaborating with their peers on the project. This in turn increased student engagement, as noted in the positive engagement theme discussed earlier in this section of the paper.

As demonstrated in the collected data for my action research study, evidence of student motivation created by collaboration is indicated numerous times on the Cumulative Survey (APPENDIX F). Student responses to the open-ended question asking about repeating this type of project again in the future are as follows: "It would be fun because I liked working in the group we worked well together. It was very good"; "Yes because working in groups is fun. Also, you spend more time with art"; "I would love to have these kinds of group

projects all the time!"; and "I would like to do it again because it was fun to work in groups and research things."

At the close of the unit, the Cumulative Survey (APPENDIX F) asked numerous times about how students felt towards working collaboratively and whether or not this format assisted them in the learning process. For statement seven on the Cumulative Survey (APPENDIX F), "I do not like working in groups," seven students agreed, 43 students disagreed, two students were unsure, and one student did not answer. These results suggested that the majority students enjoyed working in groups.

Vygotsky (1978) addresses the importance of students working collaboratively to contribute to the zone of proximal development.

We propose that an essential feature of learning is that it creates the zone of proximal development; that is, learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers. Once these processes are internalized, they become part of the child's independent developmental achievement. (p. 90)

Vygotsky (1978) expresses that students require the opportunity to interact and collaborate in order to solidify their learning. Through this collaboration, students are activating the developmental processes which are possessed within them. By

participating in these learning activities, students are embodying the skills learned, leading to their developmental growth.

Vygotsky's (1978) recommendation to incorporate collaborative experiences for students was a foundational component within my action research study. Many art class projects are centralized on individual artmaking activities. However, it is one of my core beliefs that students can learn alongside and from their peers, as opposed to learning solely from the educator. Often times, if a student is struggling to understand my directions, I will have a peer explain or demonstrate for them. Never in my teaching experience have I had a student who did not respond better to an explanation that a peer has given them. Based on this experience, I began to wonder how students would respond to working collaboratively on a project in the art classroom. This collaboration is also a key component of the processes involved with YPAR.

Through a combination of observations, one-on-one conferences with students and groups, and recording students' responses from their End of Day Enjoyment Surveys (APPENDIX G), it became evident that students in and outside of the study responded positively to working in groups. A majority of students indicated strong enjoyment for working in their groups, despite me never asking specifically on their surveys about the collaborative process of the project.

“I loved it because I totally loved working with my partner and making our sculpture.”

### **Interest in Research**

*Research is a motivator for new questions about environmental rights and how students can work collaboratively to make a positive change for planet earth.*

My action research study encompasses the theme of students having interest in research. By far, the most data collected throughout the project was indications of interest in utilizing technology to answer self generated questions that students had about content. The End of Day Enjoyment Survey (APPENDIX G) results included the following open-ended responses: “I loved sitting and giving info”; “The thing I loved was I got to do fun projects and do research about stuff like sharks, dogs, and many more. This is why I liked it!” My field log also indicated, “Students were again sharing out facts with one another and I did not observe any students off task while researching on the Chromebooks.”

Additionally, for statement two of the Cumulative Survey (APPENDIX F), “I LOVED to do research in the art classroom,” 45 students agreed, five students disagreed and three were unsure. This evidence indicated a strong desire to do research in the art classroom setting.

Often times, students brought in prior knowledge about a content area that they were researching to share with their peers. A student described their prosthetic shark fins to that of their uncle's prosthetic limb, as discussed in the presentation section of this paper.

Through classroom observations, it became evident that students are interested in researching a subtopic which they have interest or prior knowledge about. More than one student expressed a desire to switch groups in class in order to investigate a topic of personal enthusiasm. I was admittedly surprised by this response, as students were given choice to select their original groups and work with friends from class. This evidence suggested that student involvement in groups which are of increased curiosity to their passions is of more importance than having an opportunity to work with friends in class. I interpreted these observations as students taking ownership of their learning.

Dewey (1938) recognizes the importance of educators to recognize the influences of past experiences on student learning and how collaborative experiences can contribute to evolving ideas for content.

The way is, first, for the teacher to be intelligently aware of the capacities, needs, and past experiences of those under instruction, and, secondly, to allow the suggestion made to develop into a plan and project by means of

the further suggestions contributed and organized into a whole by the members of the group. (p. 71-2)

This quote notes the importance of recognizing each student's current abilities and background knowledge in order to develop learning experiences that will enhance and challenge their current understanding on a topic. It also addresses the teacher's ability to allow students to have control of their own learning process. It can be difficult at times to let go of the reins and allow students an opportunity to take charge of their own education. However, Dewey emphasizes the importance of student collaboration to continuously develop the direction of learning.

By working together, students have an opportunity to look at situations from a multiplicity of viewpoints. This allows for the sharing of personal experiences that have contributed to prior knowledge on a topic. Educators must be flexible in allowing a project to change based on the current needs of the student.

In relation to my action research study, allowing for student choice in the selection of their subtopic within the theme of environmental crises allowed for students to guide the direction of their learning. By utilizing collaboration as a main component of the project for the curricular change, I provided students with an opportunity to share their experiences with one another. This process contributed to the direction that student learning takes. In addition, I had interest

in determining how students felt about this process. Within the design component of my approved HSIRB proposal form, I noted the way in which I collected data to determine student enjoyment of the collaborative research and artmaking processes.

The Cumulative Survey (APPENDIX F) measured their enjoyment of the course as a whole and how they felt about the aspects of: research, working collaboratively, using their art to express the knowledge they obtained through research, and what they would change about the course. □ (Emili, 2018)

I used this survey as well as the End of Day Enjoyment Survey (APPENDIX G) as a type of formative assessment to determine the successes of each class and to make changes as necessary to increase student enjoyment of the class.

## **NEXT STEPS**

Several aspects of the study will help to structure the art scope and sequence which my district currently utilizes for my curriculum next year. This study was conducted as my first unit for fourth and fifth grade during my first year teaching in the district. I did not have prior relationships with the students and the process of implementing the study along with introducing the rules and expectations of the classroom likely influenced the results. I believe that by providing a more appropriate amount of time to developing positive relationships with students, in addition to the expectations of the classroom being in place for an entire year, will likely assist in the implementation of the unit as well as the selection of an umbrella topic that is of interest to my particular student population.

In looking ahead, I would likely conduct this format of unit plan, utilizing research techniques, collaboration, and an umbrella theme topic towards the end of the year. The district's art scope and sequence currently plans for four rotations at the close of the year for collaborative, team building lessons. I would likely need to bump this up slightly to accommodate for the length of time that was needed to complete this study, however the reduction of time needed for survey completion could change the overall time needed to complete the project.

Since the study ended, it has become increasingly clear that students at these grade levels are highly engaged in projects that involve collaboration. My reflections of the study and the unit plans following all indicate the highest student engagement during lessons where students may partner with each other in class. Implementing more collaboration in next year's curriculum may not only increase positive student engagement, but also allow for more team building skills which will be crucial for their education at the middle school level.

The study has also revealed that students are highly motivated by the use of technology. Additionally, I have observed that students are more often on task when utilizing technology in the art and general education classrooms. By incorporating additional units which utilize technology to research information, I could possibly increase student engagement and building of content area skills and knowledge. It is my hope that this technique would also build self confidence in students to take ownership of their learning and expand on the proper research and citing skills needed at the middle school level. However, I would need to find a way to access additional accessibility to technology, perhaps in the form of unused desktop computers that could be moved to my classroom for projects that incorporate research. If I was still limited to seven Chromebooks for class, students may continue to exhibit signs of frustration when not being able to access information that is necessary to their research.

Further, I have found through the study that students are interested in utilizing recycled and found objects in their artmaking endeavors. Aside from the use of paint, scissors, and glue, students did not request any additional supplies for their sculptures that would require purchasing outside of the district's budget. I have already begun to collect all recyclable materials that the school and faculty can provide such as water bottles, paper towel and toilet paper rolls and other found objects to utilize for future projects. It is my plan to implement an arts recycling initiative in the school in April, as currently there is no recycling done on school grounds. Recycling buckets for paper and plastics will be created by students along with signs explaining what items are acceptable and those which are trash. Students that are responsible for the program will then sort the materials in the art classroom to make for easy accessibility in the future. A mural is also planned to be completed by the end of the school year where students will utilize recycled fabrics and plastic bags to create a large scale weaving, demonstrating their learning of these items polluting the environment and how artmaking can be used as a catalyst to exhibit their new-found knowledge.

## REFERENCES

- Anyon, J. (1981). Social Class and School Knowledge. *Curriculum Inquiry*, 11(1),3. doi:10.2307/1179509
- Bertling, J. G. (2015). The art of empathy: a mixed methods case study of a critical place-based art education program. *International Journal Of Education & The Arts*, 16(13).
- Brophy, J. & Good, T. (1986). Teacher behavior and student achievement. In M. Wittrock (Ed.), *Handbook of research on teaching*, 3, 328-375).
- Caraballo, L., Lozenski, B. D., Lyiscott, J. J., & Morrell, E. (2017). YPAR and critical epistemologies: rethinking education research. *Review of Research in Education*, 41(1), 311-336.
- European Commission. (2005). Learning for active citizenship: A significant challenge in building a Europe of Knowledge. Retrieved from <http://europa.eu.int/comm/education/archive/citizen/citiz.en.html>
- Gude, O. (2013). New School Art Styles: The Project of Art Education. *Art Education*, 66(1), 6-15. doi:10.1080/00043125.2013.11519203
- Higgs, J., Sheehan, D., & Currens, J. (2012). *Schools, curriculum and civic education for building democratic citizens*. Rotterdam: Sense.

- Hubard, O. M. (2013). What counts as a theme in art museum education?. *Journal Of Museum Education*, 38(1), 90-102.
- Kliebard, H. M. (1975). The Rise of Scientific Curriculum Making and Its Aftermath. *Curriculum Theory Network*, 5(1), 52-61.  
doi:10.2307/1179327
- Kirshner, B., Pozzoboni, K., & Jones, H. (2011). Learning how to manage bias: a case study of youth participatory action research. *Applied Developmental Science*, 15(3). 140-155.
- London, J., Zimmerman, K., & Erbsstein, N. (2003). Youth led research and evaluation: Tools for youth, community and organizational development. *New Directions for Evaluation*, 93, 33–45. DOI: 10.1002/ev.83
- National Visual Arts Standards. (n.d.). Retrieved from  
<https://www.arteducators.org/learn-tools/national-visual-arts-standards>
- Obstfeld, R. (2002). *Fiction first aid: Instant remedies for novels, stories, and scripts*. Cincinnati, OH: Writers Digest.
- Osler, A., & Starkey, H. (2006). Education for democratic citizenship: A review of research, policy and practice 1995– 2005. *Research Papers in Education*, 21(4), 433– 466.

- P. (2016, January 29). Artist Statement Form for Middle School. Retrieved from <http://createartwithme.blogspot.com/2016/01/artist-statement-form-For-middle-school.html>
- Perkins, D., & Blythe, T. (1994). Putting understanding up front. *Educational Leadership*, 51(5), 4-7.
- Parsons, S. A., Richey Nuland, L., & Ward Parsons, A. (2014). The ABCs of student engagement. *Phi Delta Kappan*, 95(8), 23-27.  
doi:10.1177/003172171409500806
- Sharkey, J., Clavijo Olarte, A., & Ramírez, L. M. (2016). Developing a deeper understanding of community-based pedagogies with teachers: learning with and from teachers in Colombia. *Journal Of Teacher Education*, 67(4), 306-319.
- Shim, W., & Walczak, K. (2012). The impact of faculty teaching practices on the development of students' critical thinking skills. *International Journal Of Teaching And Learning In Higher Education*, 24(1), 16-30.

- Soganci, I. O. (2016). Instruments of change: an action research study of studio art instruction in teacher education. *International Education Studies*, 9(7), 47-56.
- Stewart, M. G. (2014). Enduring Understandings, Artistic Processes, and the New Visual Arts Standards: A Close-Up Consideration for Curriculum Planning. *Art Education*, 67(5), 6-11. doi:10.1080/00043125.2014.11519285
- Standards Aligned System. (n.d.). Retrieved from <https://www.pdesas.org/>
- Zins, J. E., & Elias, M. E. (2006). Social and emotional learning. In G. G. Bear, & K. M. Minke (Eds.), *National Association of School Psychologists*, 1–13.

## APPENDIX A

To Whom It May Concern,

As you know, I am a graduate student at Moravian College working on my Masters degree in Curriculum and Instruction. As part of one of my courses this coming fall, I need to conduct an inquiry project in my classroom.

I would like to conduct an inquiry-based project with the students on art-making through a theme-based curriculum. Students would focus on a subtopic of sustainability, (whichever most sparks their personal interest). Students would then conduct collaborative research on the topic, and demonstrate their learning through an art-making project. My overall goal is to determine whether or not this format of Youth Participatory Action Research creates more student involvement in the art education classroom.

The nature of an inquiry-based project requires the collection of data, based on student participation. Students would remain completely anonymous with no identifying characteristics in my research.

Students will fill out surveys, indicating their personal level of enthusiasm towards the project each week, as well as how their understanding of sustainability and art-making materials has increased. Students will also answer interview questions about how they felt towards conducting research in the art education classroom. Parents would need to sign a release for me to be allowed to observe their students during the class as well as to use the data collected, in the form of the surveys and interviews mentioned above, for my research. Please indicate your permission below:

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Signature

---

Date

Thank You,  
Angela Emili

## APPENDIX B

Dear Parents & Guardians,

My name is Angela Emili, and I am your child's art teacher. I am also a graduate student at Moravian College working on my Master's degree.

In art class, all students will participate in a collaborative project about the environment. All students will complete surveys and interview questions during class about how they enjoyed class that day, as well as how their understanding of the environment has changed. Students will get to keep the art they create during the project.

The surveys and interviews mentioned above will be used to help me write my thesis for my masters degree. Student names will not be used in the project. All notes I take will be kept in a secure, locked location outside the classroom and will be destroyed after the completion of the study.

Parents/Guardians, you will need to sign the release below for me to observe your child during the class as well as to use their surveys and interviews for my thesis paper. Please indicate your permission below.

Student's Name:

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Parent/Guardian Signature:

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Thank you,

Angela Emili

## APPENDIX C

Dear Fourth-Fifth Grade Students,

As you know, Mrs. Emili is a student at Moravian College. Currently, I am learning how to be a better art teacher. During this art class, I am going to collect information to determine whether or not the class was successful.

During the week, you will be completing surveys and answering interview questions about how you have enjoyed the class, as well as how your knowledge about sustainability and art has developed.

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Please circle the appropriate box below and sign your name:

**YES!** Mrs. Emili may collect my data to use for her action research project.

**NO!** Mrs. Emili may not collect my data to use for her action research project.

Signature:

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Name:

Date:

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## APPENDIX D

Name: \_\_\_\_\_

Do you **agree** or **disagree** with the sentences below.

1. Plants and animals have as much right as people to live.
2. People have the right to change the natural environment to fit their needs.
3. People are smart enough to not ruin the earth.
4. People are treating nature badly.
5. When people mess with nature it has bad results.
6. Nature will survive even with our bad habits on earth.
7. People are supposed to rule over the rest of nature.
8. Nature is very delicate and easily harmed.
9. People will someday know enough about how nature works to be able to control it.
10. People could negatively change the environment forever.

## APPENDIX E

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Please **circle** the correct response for how **YOU** feel.

1) How much do I know about **Environmental Rights**?

I know **nothing**  
about Environmental Rights.

I know **a little bit**  
about Environmental Rights.

I know **a lot**  
about Environmental Rights.

I know **everything there is**  
**to know** about Environmental Rights.

2) Draw something that reminds you of the phrase **Environmental Rights** in the space below.

## APPENDIX F

Student Name: \_\_\_\_\_

Date: \_\_\_\_\_

		AGREE	DISAGREE
1.	I enjoyed learning about topics other than art during the project.		
2.	I LOVED to do research in the art classroom.		
3.	I liked having my own job in my group.		
4.	Everyone in my group got along well.		
5.	Doing research is boring.		
6.	Having my own job in the group made making art more fun.		
7.	I do not like working in groups.		
8.	I liked making an art project to explain my research.		
9.	There was not enough time to make art in class.		
10.	My group did not get along.		
11.	I like how my final project turned out.		
12.	I am a researcher.		

Describe something about the project that you would change. Why would you change it?

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We learned about a topic that wasn't related to art, but used our artmaking abilities to explain the research we did on that topic. How would you feel about doing this kind of project in the art classroom all the time?

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**APPENDIX G**

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Please **circle** the correct response for how **YOU** feel.

1) How did I feel about today's art class?

**LOVE**



**GOOD**



**CONFUSED**



**BORED**



2) Do you have anything else you would like to tell me about today's class? Was there anything you **LOVED** or anything you **HATED**? What would you change?

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