ECO-ART EDUCATION: SUSTAINING OUR COMMUNITY

By

REBECCA GILMARTIN

A PROJECT IN LIEU OF THESIS PRESENTED TO THE COLLEGE OF FINE ARTS OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS

UNIVERSITY OF FLORIDA

April 2014
Acknowledgements

I am grateful to the many people involved throughout my effort during this project. I would like to give a special thanks to my committee chair, Dr. Michelle Tillander. Her resoluteness challenged me to deliver a thorough investigation during my research. I would also like to thank my committee member, Dr. Craig Roland, for his realistic viewpoints and dedication to the advances in art education. He has been an inspiring educator to follow. I would like to thank Lisa Iglesias’ creative inspirations, propelling me forward in the project preparations and website. Likewise, my ceramic professors Anna Holcombe and Charlie Cummings were essential in fostering the development of meaningful expression in my artwork. I would like to give a special thanks to Bonnie Bernau, education curator for the Samuel P. Harn Museum. She was a major contributor to the organization and implementation of the research project, “Personal Adornment”. I would like to thank my classmate Carrie Grunnet for her outstanding photography skills and encouragement throughout the research process. I would like to thank Mike Myers, founder of the Repurpose Project, a local center promoting sustainable practices in the community. In addition, I am grateful for the enthusiasm and detailed input from the teachers that I interviewed for this study. Lastly, I would like to thank my family for my life experiences and an inspiration to create a better world for future generations.
ECO-ART EDUCATION

ABSTRACT OF PROJECT IN LIEU OF THESIS PRESENTED TO THE COLLEGE OF FINE ARTS OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS

ECO-ART EDUCATION: SUSTAINING OUR COMMUNITY

By

Rebecca Gilmartin

April 2014

Chair: Michelle Tillander
Committee Member: Craig Roland
Major: Art Education

Abstract

This research project was based on a desire to examine connections between environmental literacy, sustainability, and art education. My research explored current ecological art education methodologies, sustainable classroom practices, and art making promoting ecological stewardship. Based on action-oriented research, I discovered that effectively introducing environmental education in the art classroom practice requires thoughtful consideration in how it is implemented. Based on my findings, I created an online website resource (http://rebeccagilmartin.com/green-art-room-) that promotes Eco-art education, categorized into Eco literacy, Sustainable Classroom Practices, Projects, Artists, and Resource Links. This curriculum resource is housed in my personal website at rebeccagilmartin.com.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title Page</td>
<td>1</td>
</tr>
<tr>
<td>UF Copyright page</td>
<td>2</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>3</td>
</tr>
<tr>
<td>Abstract</td>
<td>4</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>5</td>
</tr>
<tr>
<td>Introduction</td>
<td>7</td>
</tr>
<tr>
<td>Statement of Problem</td>
<td>8</td>
</tr>
<tr>
<td>Purpose and Goals of the Study</td>
<td>10</td>
</tr>
<tr>
<td>Research Questions</td>
<td>10</td>
</tr>
<tr>
<td>Rationale and Significance of the Study</td>
<td>10</td>
</tr>
<tr>
<td>Assumptions</td>
<td>11</td>
</tr>
<tr>
<td>Limitations</td>
<td>11</td>
</tr>
<tr>
<td>Definitions of Terms</td>
<td>11</td>
</tr>
<tr>
<td>Literature Review</td>
<td>13</td>
</tr>
<tr>
<td>State of the Environment</td>
<td>13</td>
</tr>
<tr>
<td>Environmentalism and Sustainability in Art Education</td>
<td>14</td>
</tr>
<tr>
<td>Place-Based Pedagogy</td>
<td>15</td>
</tr>
<tr>
<td>Methodology</td>
<td>16</td>
</tr>
<tr>
<td>Data Analysis Procedures</td>
<td>18</td>
</tr>
<tr>
<td>Findings</td>
<td>19</td>
</tr>
<tr>
<td>Critical Place-Based Community Education</td>
<td>19</td>
</tr>
<tr>
<td>Sustainable Community and Classroom Practices</td>
<td>20</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Artists Promoting Ecology</td>
<td>23</td>
</tr>
<tr>
<td>Summary Across all Findings</td>
<td>24</td>
</tr>
<tr>
<td>Discussion and Conclusion</td>
<td>25</td>
</tr>
<tr>
<td>Discussion and Interpretation of Findings</td>
<td>25</td>
</tr>
<tr>
<td>Significance, Implications, and Recommendations</td>
<td>28</td>
</tr>
<tr>
<td>Conclusion</td>
<td>28</td>
</tr>
<tr>
<td>References</td>
<td>31</td>
</tr>
<tr>
<td>Appendices</td>
<td>35</td>
</tr>
<tr>
<td>List of Figures and Figure Captions</td>
<td>45</td>
</tr>
<tr>
<td>Author Biography</td>
<td>46</td>
</tr>
</tbody>
</table>
You may be aware of the growing social movement of people concerned about the environment. Companies use labels such as *eco-friendly, nature friendly, and green* to make environmental marketing claims when promoting their products. However, many recyclable products require appropriate action by the consumer to fulfill reprocessing claims. For example, during my past teaching experience as an art educator, my school location did not have a recycling program. Plastic bottles, paper products and other materials were discarded each day in the classroom. I can still recall the time at the end of the school year when I was left with many recyclable paint bottles that needed to be cleaned and placed into a recycling bin. Because of the lack of accessibility to a recycling company and knowledge of recycling requirements, sadly, they ended up in a nearby trash container filled with paper and plastic drinking bottles. I believe that educational institutions need a paradigm of responsible behavior toward environmental concerns that engage responsible material practices and stewardship of our planet.

My research explores eco-art education as it integrates art education with environmental education as a means of developing awareness of environmental concepts and issues, such as conservation, preservation, restoration and sustainability (Inwood, 2008 para. 3). According to Wallen (2014), at a time when the world is beset by ecological crises, art that aims at addressing environmental issues is worth examining to find solutions to the many problems facing the planet. Wallen argues specifically that artistic and scientific roots of the practice can demonstrate the significant role that art can play in the initiation, development, and endorsement of a culture of sustainability. For example, seeing images of birds with plastic contents in their stomachs and understanding the data on quantities of materials being consumed daily can be very revealing. There is a great necessity for educators across disciplines to examine the human connection to
the environment and examine educational strategies that will foster a greater possibility of promoting change of consciousness toward environmental issues (Wallen, 2014).

**Statement of the Problem**

Recent reports about climate change and environmental destruction show the urgent relevance for attention to the environment. On a global scale, a report by The Guardian (2013), the IPCC states that climate change is human induced and that world leaders must now respond with policies to cut greenhouse gas emissions. If action is not taken, the consequences will be the rise of sea levels, heatwaves, and changes to rainfall. Prof David Mackay, chief scientific adviser of the Department of Energy and Climate Change said, “We need to take action now, to maximize our chances of being faced with impacts that we, and our children, can deal with” (Harvey, 2013). Another concern is plastic waste. According to *Campaign for Recycling* (2013), plastic litter is the fastest-growing component of the waste stream because plastic never biodegrades. Locally, communities are seeking to take action. New policies are currently being created to deal with the increasing amount of plastic polluting the earth. For example, the city of Los Angeles adopted an ordinance to ban plastic bags beginning the year 2014 (Dpw.lacounty.gov, 2014).

Now more than ever there is a need to integrate environmental literacy in education. Yet, our current educational system promotes a disconnection of the current issues in our world. According to Smith (2002) the disconnection between children’s lived experience and school learning has been exacerbated by our national preoccupation with standardized test scores (p.586). Additionally, Gruenewald (2003) describes the standards and testing dominating today’s educational discourse as a curricula that discourages empathy and exploration of local places. He states, “classroom-based research is inadequate to the larger tasks of cultural and ecological
analysis” (Gruenewald, 2003, p. 4). Education programs do not prepare future teachers to create curricula designed to allow actual experience with the phenomenal world so teachers largely accept and follow the mandates of standardization (Gruenewald, 2003).

Historically, artists have supported community efforts by promoting awareness of environmental issues, transforming their concept over time. According to Krug & Siegenthaler (2006, para. 1), during the 1950s and 1960s, artists helped connect art with life-centered issues. A change in views happened from 1960 to 1990. Environmental artists in the 1960s to 1980s were less concerned with environmental issues and more concerned land being a resource to create earthworks or land art (par. 3). Since the late 1970s, and continuing today, artists are creating ecologically sound art intended to heal the environment (e.g., Alan Sonfist and Joseph Beuys). In the 1990’s artists attempted to heighten people’s awareness of the need for ecological sustainability through problem solving, shock, humor, and educational documentation (e.g., Chris Jordan and Lynne Hull). Today, contemporary ecological artists are actively involved in local and global advocacy (para. 5).

Additionally, art educators have promoted eco-art education, however, struggled to embrace the practice. Art educators such as McFee (1961) stressed the connections that needed to be made between art, culture, meaning, and the environment. Later, a modern environmental movement called Earth Day began on April 22, 1970. According to Blandy & Hoffman (1993), during this movement, scholars proposed an art education response to the problem and proposed that individuals that value aesthetic experience can also be sensitive to the environment. It was not until 1992 that the National Art Education Association addressed environmentalism at a national convention, “the land, the people, the ecology of art education” (Blandy & Hoffman,
1993, p. 31). However, according to Blandy & Hoffman, it was disappointing that the conference organizers did not provide ecological alternatives to the usual convention practice (p. 31).

**Purpose and Goals of the Study**

My research aims to reveal ways of successfully implementing eco-art education focused on methods of teaching, sustainable practice, and art making that promote ecological stewardship. My goal is to propose a new model for art education that aims to build meaningful, empathic, connections between humans and the environment. As a tool for professional development, my website resource promotes *Eco-Art Education*, categorized into sustainable classroom practices, eco literacy, projects, artists, and resource links.

**Research questions**

The following questions direct my research toward environmental art education, sustainable classroom practice and ecological stewardship.

1. How can art educators effectively teach eco-art education?
2. How can art educators implement a sustainable classroom practice?
3. How can art practices promote ecological stewardship?

**Rationale and Significance of the Study**

As environmental issues rise, developing values associated with taking responsible action are suggested ways of teaching, and need to be further explored. Educational textbooks of the 19th century present the view that humans should dominate nature. For example, students were instructed to re-imagine and re-design nature through their art (Krug, 2003, para. 18). In contrast, as a contemporary approach, Graham (2007, p. 375) suggests a critical place-based pedagogy. A critical place-based pedagogy recognizes the experiences of a community grounded in shared understandings. A critical pedagogy of place strives to critically rethink our relationship to the
environment. Research is needed in exploring effective art teaching methods that promote understanding of the complexity of the environmental problems.

**Assumptions**

This project assumes that art teachers are interested in a human connection to environmental ethics, sustainability, and stewardship through art education. According to Lankford (1997), because of the complexity of ecological topics, teachers must be willing to plan interdisciplinary lessons, which connect art to science, social studies, economics, and community related topics. I assume that teachers will undertake the challenges of introducing art that integrates a study of other subject areas that may involve collaboration with other teachers and experts in the community. Thirdly, I assume that art teachers are open to pedagogical practices that encourage art student investigation of places and engagement in critical thinking skills.

**Limitations**

This project included collecting a small set of data through personal journaling of responses from interviews with a limited number of participants in a localized geographic area. The questions for the interview focused on recycling. Questions did not specifically address energy conservation, however, interviewees volunteered this information. The time allowance for completion of the project limited the analysis of its impact in promoting environmental stewardship, but conclusions may prompt further research.

**Definitions of Terms**

**Environmental education.** According to the *United States Environmental Protection Agency* (n.d.), *Environmental education* is a process that allows individuals to explore environmental issues, engage in problem solving, and take action to improve the environment. As a result, individuals develop a deeper understanding of environmental issues and make

**Environmental art.** According to Sam Bower, executive director of greenmuseum.org, environmental art is an umbrella term to encompass the most common terms, “ecological art” (shorter version eco-art), “land art”, “earth art”, “earthworks”, and “art in nature” (A profusion of terms, greenmuseum.org, para. 3, 2010).

**Ecological art.** According to Sam Bower, executive director of greenmuseum.org, ecological art or “eco-art” is a contemporary art movement that addresses environmental issues and often involves collaboration, restoration and eco-friendly methodology (A profusion of terms, greenmuseum.org, para. 8, 2010).

**Eco-art education.** Hilary Inwood (2010), a university based art educator, defines environmental art education (or eco-art education) as education integrating “art education with environmental education as a means of developing awareness of and engagement with concepts such as interdependence, biodiversity, conservation, restoration, and sustainability” (para. 4).

**Sustainability.** According to the United States Environmental Protection Agency (n.d.), sustainability is everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social economic and other requirements of present and future generations. (What is Sustainability?, EPA website, para. 1).

**Environmental stewardship.** According to the United States Environmental Protection Agency (n.d.), environmental stewardship is the responsibility for environmental quality shared
by all those whose actions affect the environment (Environmental Stewardship, EPA website, para. 1).

**Recycle.** According to Oxford Dictionaries (2014), To *recycle* means to convert waste into usable material.

**Repurpose.** According to Oxford Dictionaries (2014), To *repurpose* means to adapt material for use in a different way.

**Critical place-based education.** Gruenewald (2003) describes *critical place-based education* as an educational approach encouraging teachers and students to reinhabit their places to pursue the kind of social action that improves the social and ecological life of places, near and far, now and in the future (p. 7).

**Literature Review**

Research for this project began with a scholarly literature review on the current state of the environment. The literature review researched art education journals, which examined key phrases such as *environmental art education*, *sustainable classroom practice*, and *environmental stewardship*. There are scholarly articles written about the importance of environmental art education and connections to art practice and stewardship. However, I found that more research could be explored in affective ecological art teaching methods promoting sustainability.

**The State of the Environment**

Literature sources for this research ranged from science articles, government agencies such as the *International Panel on Climate Change*, to recent reports in news articles. According to Kerry (2013) the top ten environmental concerns are related to climate change. Looking into the future, however, a recent report from *The Guardian*, expert, C. Tickell (2011) states that the one of the top environmental concerns for the next forty years is the proliferation of our own
species. The report further states that the health of humans is highly connected to our ocean that is being polluted with toxic contamination from industrial runoff, plastic pollution, and acidification. All of which pose threats to the health of the world’s population. Plastic pollution is now affecting every waterway, sea, and ocean in the world (Natural Resources Defense Council, 2014). According to the Environmental Protection Agency (2012), the amount of waste produced continues to rise. Between 1960 and 2007, the amount of trash generated in the U.S. nearly doubled from 2.6 to 4.6 pounds per person per day. This waste has found its way to oceans. Plastic does not biodegrade in the ocean. It breaks up into small pieces. According to the California Department of Toxic Substances Control, this is what we have to stop. In essence, the world population eating fish that have eaten other fish, which have eaten toxin-saturated plastics, are eating their own waste (Lytle, 2014).

Ocean pollution can be managed on a local level by changing human behavior. The Environmental Protection Agency (EPA) in 2012 reported that three of the top five types of marine litter are plastic bottles, plastic bags, and cans. These items are recyclable, however, lack of knowledge and infrastructure in municipalities may be limiting the best efforts to reduce, reuse, or recycle. Lytle (2014) further adds that the undeniable behavioral propensity of increasingly over-consuming, discarding, littering and thus polluting are a major cause of the problem.

Environmentalism and Sustainability in Art Education

How can we connect environmental issues and sustainable actions to art education? According to Capra (2004), teachers can nurture the knowledge, skills, and values essential to sustainable living. According to Inwood (2008), environmental education is traditionally linked to science-based approaches, however, sensory subjective orientation typically found in art
education may prove to be more effective in changing behaviors towards the environment because art offers a dynamic way to increase the power and relevancy of learning about the environment. Art education has the ability to stimulate learners’ minds and also touch their hearts, which can be a powerful approach in fostering ecological literacy (Inwood, 2010).

Likewise, Anderson & Guyas (2012), add that we need a paradigm shift in our relation to the Earth from a consumptive, dominating model to one embracing the idea that life has intrinsic value. This shift can be made through art and art education, which may be the most meaningful tool for influencing beliefs and values (Anderson & Guyas, 2012).

Scholarly researches on sustainable classroom practices were found using key phrases such as “environmental sustainable art practice” led to topics about classroom material. According to Taylor (1997) in the art room, trash continues to be a problem. As a result, the issue of sustainability will be central. There are also some incentives for recycling materials such as Crayola® markers (Perry, 2014). Schoolsrecycle.planetark.org (2014) provide a guide for setting up a recycling system in schools. In addition, my research revealed ways in which sustainable practices can be encouraged in the classroom. For Example, Elliott & Bartley (1998), describe ecologically based art activities designed for a high school curriculum. The course content is about exploration of materials, creation, and re-creation as part of the ongoing human ecosystem. Building on this research, I interviewed local teachers to find out what sustainable methods are practiced in the art room.

Place-Based Pedagogy

In the past, traditional environmental art experiences, such as having learners making nature drawings or using found materials, have fallen short of fully developing ecological literacy (Inwood, 2010). Recent scholars have begun to address place-based methods in
promoting environmental education. Over a decade ago Blandy and Hoffman (1993) encouraged “an art education of place” (p. 23) in its practices, which acknowledge that art can significantly contribute to how people live by influencing their perceptions and actions. More recently, Gruenewald (2003), suggests a critical pedagogy of place to challenge the assumptions, practices and outcomes taken for granted in dominant culture and conventional education.

Scholars promote diverse ways of implementing a place-based approach in education. Because our current education system promotes a detachment of our world, Smith (2002) encourages place-based learning as an investigation of local natural phenomena. Additionally Sanger (1997) describes the importance of history of place so that if students see themselves as part of a continuous line from the past they visualize their role in the future. Furthermore, Kushins & Brisman (2005) explore place by describing how teachers can foster awareness and respect for the environment by using the classroom as a learning space.

The scholarship of Gruenewald (2003) and Kushins & Brisman (2005) are particularly important to this Project In Lieu Of Thesis as their research captures the importance of building art curricula that involve critically place-based education that promotes action specific to the classroom and intrinsically connected outside to the local community. These scholars explore critically place-based methods promoting environmental education; however, I found more experimentation and documentation of practical approaches as well as its effectiveness could be explored.

**Methodology**

I conducted two studies for my Project In Lieu Of Thesis. Both studies were conducted within a local community within an approximate twenty-mile radius. I conducted the first study with fifty-three participants involved in an art project. The ages of the first study ranged from
age two to adult within a three-hour time frame. As Graham (2007) stated, education that ignores issues of ecology and community becomes complicit in their erosion. The first strategy in my research was to explore sustainable practices in the local community. I visited the Repurpose Project, in Gainesville, Florida, a local non-profit organization that gathers items from the community that are headed for landfills. I discovered that they were amassing large numbers of plastic bottle caps because they are not recyclable by the local services. I thought that it would be an interesting challenge to repurpose the bottle caps as material for an ecological art project. I also envisioned the project being a vehicle for promoting the Repurpose Project efforts as well as an opportunity to engage families in a critical dialogue, which promoted action about recycling. At the same time, I discovered that a compelling project needed to be developed and implemented for the February 2014 Family Day event, Kongo Across the Waters at the Samuel P. Harn Museum in Gainesville. Combining my sustainable research and inspiration from the museum needs, I developed a workshop (see Appendix A) for the family day event at the Harn museum.

The preparation for the event included coordination with the museum education curator, interns, and staff. There were several requirements for material preparations. The materials for the event needed to accommodate up to two hundred participants. I estimated that nine bottle caps would complete one personal adornment. Sixteen hundred bottle caps as well as two hundred larger caps were needed for the workshop. Because of the three-hour time allowance for the workshop, an art process that did not require drying time was necessary so that participants could take their artwork with them. Additionally, a primer and black paint needed to be applied and dried onto the larger caps prior to the day of the event so that participants could decorate them with oil pastels. Yarn was pre-cut and used for connecting the materials. I wanted the final
art product to be recyclable as well. If materials were connected with yarn without any gluing processes, the final art piece could be disassembled for reuse or recycling. The research for this project included observations of the participants of the event and a survey (see Appendix B) filled out by the participants as an indicator of the achievement of the project.

In the second study, I collected input from government agencies and art teachers. The second study occurred within a four-week time span in which I gathered information within forty-minute interviews consisting of nine questions. I interviewed a total of seven art educators and five government agents about the effectiveness of environmental sustainable practices in the community and classroom. I submitted and received approval for the research from the Institutional Review Board (IRB) protocol for documentation of the community workshop and interviews (see Appendix C). Participants’ identities are protected through the use of pseudonyms. The workshop and interview insights along with continued research informed my website resource.

In addition, my research focused on environmental education in the art classroom. I used a combination of research methods, including historical and philosophical in reviewing science and educational resources. According to authors Koroscik, J., & Kowalchuk (1997), historical inquiry involves collecting, evaluating, and interpreting data related to past events. For this project, I not only reviewed the historical connection of environmental education and art, I also collected information on current approaches to eco-art education, sustainable classroom practices, and ecological contemporary artists.

**Data Analysis Procedures**

During both studies, I gathered data by a method of action-oriented research. According to May (1993), action-oriented research is the study and enhancement of one’s on practice.
Action research is used to support democratic principles, giving a voice to the teachers in practice. The primary purpose of action research is to gain a better understanding of one’s beliefs and practice and pay closer attention to what students say and do in class so as to understand what sense students are making of their learning. After collecting the interviews, images, and journal notes, the data was analyzed by looking for patterns, similarities, disparities, trends, and other relationships in interpreting their meaning.

**Findings**

This section addresses the findings and is divided into three sections. The first section articulates my observations from a community workshop using a critically place-based method of teaching. The second section compares and contrasts findings from government agencies in the local community and teachers in the classroom setting. The third section highlights artists focused on ecology of place and a description of the website I created for disseminating the results of this project.

**Critical Place-Based Community Education**

My findings show that a critical place-based method of teaching promotes ecological awareness of the local community. During my academic studies, I enrolled in a sketchbook course emphasizing a place-based approach to learning. I was required to create sketchbook entries from observations of various places in the local community. This local investigation of the community informed me about the local ecology and resources promoting sustainability. Additionally, this investigation led to my creation of the eco-art project for a community workshop that I will later describe. The workshop created a unique opportunity to join several community entities, a local business, the university and the community at large. Within this diverse group, an opportunity was created to engage in a critical dialogue about recycling.
Sustainable Community and Classroom Practices

My findings revealed that the local community I investigated strives to implement sustainable practices; however, I discovered some ongoing issues that hinder the programs in place. According to my research, the issues lie in the process, functionality, community culture, and informational resources. As a case in point, the findings revealed that teachers and government agencies reported problems and suggestions in each of these categories. The next few paragraphs further discuss these findings.

The local schools follow a single stream recycling system, meaning that all recyclable materials are put into one bin to be separated by the city service. Within this recycling process there are problems with purchasing and disposal of material. For example, Melinda a teacher from local high school, shared that her school promotes recycling, however, the school purchases juice containers that are not recyclable (personal communication, 2014). Also, teachers were uncertain about how to dispose of materials such as plastic paint bottles. Several teachers were troubled about the one-stream recycling program that their current school promotes. Laura from a local high school turned her recycling container upside down so the students would not throw food into the container (see Figure 1). She resorted to this tactic after experiencing a bug problem from the waste put into the recycling bin (personal communication, 2014). In addition Paul, a local county waste alternatives manager, reported that the single stream recycling system is the least effective method of collection of recycled goods because the material inside can become contaminated with items that do not belong in the recycle bin, such as food waste (personal communication, 2014). Secondly, Paul reported that there are false claims about what is actually recycled. He stated that often contaminates enter the single stream system that obstruct recycling capabilities, however, processors claim that single stream contaminates are low to keep business
contracts in place.

![Figure 1. Upside down recycle bin](image)

Functional dilemmas ranged from improper labeling of classroom recycle containers to lack of motivation from the students and community. Sarah, a Professional Health and Environmental Communicator and former community liaison for the EPA from 2006-2013, reported that the public needs to be informed of the 3Rs, first reduce, second reuse, and thirdly recycle. In addition she states, “communities need to be clearly informed of what is recyclable and what is not. The system needs to be kept simple and easy for people to understand. Good signage is important” (personal communication, 2014). Her statement aligned with a response from, Jose, Director of the Office of Sustainability at a local university. He revealed that at the last football game 78% of waste was recycled inside the stadium, however, 50% of trash outside
the stadium was recycled. He states, “The problem is that people don’t know what is recyclable in our community” (personal communication, 2014).

Interviewees expressed the need for cultural change in the community. Jane, Executive Director for a local county beautifying program, involves kids in cleanup so they become aware of problems trash causes to the environment; however, sometimes this effort is diminished because of lack of family education (personal communication, 2014). She once observed a child picking up a can in an effort to recycle only to be told by a parent to throw the can down. Similarly, Jose suggested that a cultural change can be a determining factor in the success of sustainable practices. He states, “If people take a message of one small behavior that they take forward, the vast majority will adhere to the social norm” (personal communication, 2014). Furthermore, art teachers expressed a need for cultural change and reported that children get a lack of reinforcement from home.

My research showed that the teachers that are most successful at implementing sustainable practices within the classroom enlist parent volunteers to assist with the program, but need additional resources (personal communication, 2014). One of the teachers, Karen, an elementary education teacher for a local charter school, successfully created a compost for her classroom with support from parents (personal communication, 2014). From my interviews, one hundred percent of the educators interviewed reported that information on environmental education is needed and that a website or community resource would be helpful. The teachers wanted to access a website that would contain links to artists and lesson plans that would be child friendly and relatable to the student’s lived world experiences. Books or visual reminders would also be important to their teaching practice (personal communication, 2014).
Artists Promoting Ecology

I further focused my research on ecological contemporary artists that critically examine places. According to Roland (2009), artists’ work can serve as catalysts for encouraging students to come up with creative ways to recycle. The following section showcases several artist that are notable for making art for viewer contemplation about human activities that are unharmonious to nature. Their artworks promote care for our natural world through documentation and sustainable art practices.

Artist, Chris Jordan, uses photographic images to show how human behavior has an impact on the environment. The images in his work show the horrors of global mass-consumerism, reminding us of the consequences of our unchecked actions. He photographed the catastrophic effects of plastic pollution. His latest project “Midway: Message from the Gyre,” (see Figure 2) Jordan explores a remote cluster of islands more than 2000 miles from the nearest continent. His photographs reveal nesting chicks that were fed lethal quantities of plastic by their parents, who mistake the floating trash for food as they forage over the vast polluted Pacific Ocean (Chrisjordan.com, 2011).

Figure 2. Albatross, victim of plastic ingestion Photo by Chris Jordan (Chrisjordan.com, 2009)
Similarly, Robert Adams (Art 21, 2014) documents the impact of human activity on the wilderness and open space. Adam’s photographs capture the physical traces of human life such as garbage along a roadside, a clear-cut forest, or half-built house. Adams’ photographs expose the belief that the west represents an unlimited natural resource for human consumption. He specifically focuses on trees in the book “Turning Back,” which illustrates deforestation in the West a practice that Adams describes as “not just a matter of exhaustion of resources, I do think there is involved an exhaustion of spirit” (Art 21, 2012 Segment: Robert Adams in “ecology”). He adds that if humans have not experienced the mystery of the tree they have missed something in their life (Art 21, 2012).

Another artist, Nancy Judd, strives to change the way people live on earth by showcasing sustainable fashion designs made from trash. Judd installs traveling exhibitions of the *Recycle Runway Collection* in locations such as museums, shopping malls, and airports. For example, a design, called Jellyfish Dress is made from plastic bags. The message is to put plastic in the recycling bin, not the ocean.

El Anatsui, one of Africa’s most influential contemporary artists, creates colorful and densely patterned work that is assembled from discarded liquor bottle caps. In contrast with previous artists mentioned in this paper, Anatsui uses discarded materials to promote environmental change, representing new life and hope. Anatsui describes destruction as a prerequisite for new growth. He gives a new life to objects that serve as an art piece to contemplate (Art 21, 2012).

**Summary Across all Findings**

The main research question of this paper asked how to effectively intersect environmental education with art. The findings are an investigation of how place-based education is an
effective approach to teaching, what teachers and local agencies are experiencing in their efforts to promote sustainability, and how artists promote care for the environment. In analyzing the project for the family day event at the Harn museum and interviews of community leaders and teachers, I found ambiguity exists in public perceptions of the process of recycling, functionality of existing programs, and resources promoting cultural awareness. The local community that I investigated is making great effort to promote sustainable practices, however, communication about environment and sustainability could be improved. The differences in the findings were that each group came from a different perspective of practice: the consumer, government agent, and educator.

Discussion and Conclusion

The goal of this research was to explore how to effectively introduce eco-art education into the classroom to promote ecological stewardship. The project and interviews were prompted from the recent reports about the environmental concerns, specifically about overconsumption and waste, combined with needing additional research in place-base methodology that promotes ecological stewardship. The following will describe my interpretation of using a critically place-based approach when combining environmentalism and art education.

Discussion and Interpretation of Findings

My research shows that critically place-based methods of teaching bring a unique opportunity for combining eco-literacy and art education. According to Lankford (1997), because of so many warnings about the environmental concerns, a numbing of the psyche may exist in order to cope with the frequency and horror of events. Not everyone can lobby Congress, yet everyone can take a position of ecological stewardship that involves self-awareness of our existence in and with the world (Lankford, 1997). Place-base methods of teaching inform the
participants of matters in their local community in which they live so that they have an opportunity to contribute to a positive change.

The museum project workshop was an example of using a critically place-based method of teaching by helping one become aware of one's surroundings. In a fun way, individuals immediately became involved in the possibility of promoting sustainable practices in the community. The art project became a vehicle that reflected an environmental message about recycling and repurposing material. Participants were able to leave the museum informed about the Repurpose Project and immediate actions they could take to benefit their local surroundings.

During my research, interviewees mentioned the lack of parent involvement that led to student pervasive negative attitudes about recycling. The museum project again, showed families together actively engaged in the art project and dialogue about recycling practices (see Figure 3). Additionally, my interview responses revealed that educators, municipalities, and individuals have similar needs and could benefit from collaborative communication about sustainable practices within the community. The museum project workshop created an opportunity for collaborative communication, by joining several community entities (see Figure 4), a local business, the university, and community at large.
Figure 3. Families working together creating art

Figure 4. The museum curator, university students, local business owners, and myself
Significance, Implications, and Recommendations

Twenty first century curriculum topics and projects should relate to an overarching theme connecting to an enduring idea that enhances the making of connections and understanding of concepts that prepare students for life in today’s world. Furthermore, topics should involve “real life” issues, problems, and skills that encourage active participation in meaningful activities (Stewart, M., & Walker, S. 2005). Along with giving students an opportunity to make connections to real life issues, art can empower the individual psyche. Anderson & Guyas (2012, p. 241) state that art can present complex matters in ways sensitive to the individual to promote understandings and show the possibilities for taking action. Eco-art education provides an opportunity to explore community problems and initiate change. Within this context, I recommend that teachers use place-based teaching strategies because this method of teaching allows for an interchange of ideas in solving problems. Additionally, I recommend that teachers use the classroom as a critically place-based method in promoting a sustainable classroom. Following the research of Kushins & Brisman (2005), teachers can use the physical space of their classroom to critically engage students in using sustainable art practices.

Conclusion

My discoveries during this project assisted in deciphering recommended strategies for introducing eco-art education. An art pedagogy practice centered on continuing investigation of local places fulfills a missing component in conventional educational standardization practices. In a critical pedagogy of place, art educators are able to foster ecological literacy by engaging the learner in art projects and dialogue about local community concerns, creating an opportunity to promote actions that contribute to the well being of human life. Secondly, successfully implementing sustainable practices in the classroom requires community support, continued
education about sustainable art materials, and systems for recycling. Thirdly, art curriculum connecting with eco-artists can foster critical thought and empathy about environmental issues. Ultimately, I desire for educators to work together in creating art lessons that promote awareness of the beauty of nature as well as address issues and concerns of the local places. Additionally, I see eco-art education as a way of greening the practice within the discipline by sharing information that will reduce production toxicity. I concur with Walker & Salt (2006 p. 147) who believe that a resilient world would place an emphasis on learning, experimentation, locally developed rules, and embracing change. I welcome teachers to share in the blog at greenartroom.wordpress.com to add further conversation about project ideas, sustainable practices, and eco-artists. The results of my findings were made into a website resource at http://rebeccagilmartin.com/green-art-room-, promoting Eco Art Education, categorized into Sustainable Practices, Eco literacy, Projects, Artists, Resource Links, and Blog. The links are housed within my personal website under Teaching.
With today's ecological challenges, now more than ever there is a need to integrate environmental literacy in education. Recent research shows that art education can offer a unique opportunity in promoting eco-literacy. The Green Art Room is a resource guide for art educators who are interested in introducing eco-art education in the classroom and community.

---

**Figure 6. Green Art Room Website Page**

---

**Figure 7. Green Art Room Website Community Events Page**
References


Environmental Protection Agency, (2012). Retrieved from

http://water.epa.gov/type/ocb/marinedebris/prevention_solid.cfm


http://www.jstor.org/stable/25475843

Greenmuseum.org (2010). What is environmental art? Retrieved from

http://www.greenmuseum.org/what_is_ea.php


http://greenmuseum.org/c/aen/Earth/Changing/index.php#intro


Smith, G. (2002). Place-based education: Learning to be where we are. *Phi Delta Kappan, 83*(8), 584–594


Appendix A

Workshop Announcement

Personal Adornment

What are personal adornments?

Personal adornments are things we wear like hats, rings, or other objects to decorate our body. Sometimes these adornments are used to make a person more attractive. Other times, these adornments are used to identify who a person is or to show that a person is special in some way. Adornments can tell you how important a person is, what kind of job they do, where they live, or how they want to be known.

Personal adornments will often have bright colors and patterns, use special materials, or are very valuable.

WORDS TO KNOW!

- **adornment**: an object that decorates you, like jewelry, hats, or other accessories
- **pattern**: decorative design with repeated elements
- **medallion**: a large, pendant that hangs on a chain or string, like a medal
- **recycle**: to change waste into usable material
- **transform**: to change in form, appearance, or structure
- **repurpose**: to change something so it can be used for a different purpose.

People in different cultures from all around the world wear personal adornments and they all have their own unique style! Use the Venn Diagram below to compare the *African Koranic Amulet* to the *Ivory pendant*. 
Create your own personal adornment!

You can make your own personal adornment by repurposing materials. Artist El Anatsui, image below, creates art with materials that people throw away. Instead of recycling the materials, El Anatsui says that he transforms them into a piece of art! You can do the same thing to create a personal adornment for yourself.

**Step 1** Go to the Repurpose Project on 519 5 Main st. (www.repurposeproject.org) to get your materials. We have brought the materials to you today!

**Step 2** Gather your materials! You will need one 42 inch length of yarn, one yarn needle, 1 large lid, and 8 other pieces from the provided options (small lids, bamboo, napkins rings etc.).

**Step 3** Thread your yarn through the yarn needle. We did this step for you today. Use the needle to thread on your 8 smaller materials. We have predrilled holes into the lids using a large drill bit.

**Step 4** Now, decorate your 1 large lid with bright oil pastels. This will be the medallion of your personal adornment and placed in the center. We prepared these lids with a primer and black acrylic paint.

**Step 5** Cut 6 inches off of the yarn with the 8 threaded pieces. Leave the needle threaded into the yarn. Pull the 6 inch yarn through your medallion. Remove the needle. Tie the ends of the medallion yarn around the yarn of your adornment in the center.

**Step 6** Position all of the caps in the center of the yarn. Remove the needle. Then, tie the ends of the yarn together with knot. Wear your completed personal adornment around your neck!

Old Man’s Cloth was made in 2003 by El Anatsui, who was born in Ghana. It is made from bottle top disks and strips from bottle wrappers tied together with wire.

**To Do At Home:**
You can seal the oil pastels onto your medallion by spraying a layer of non-aerosol hair spray on to the surface. Spray a total of 3 layers, allowing the hair spray to dry in between each coat.
Appendix B

Survey Questions

Harn Museum of Art
Family Day Survey Summary
February 15, 2014: Personal Adornment (Kongo and Cosmopolitan)
(total 9 surveys received; Attendance 53)

1. Age Levels Participating and how many in each age group:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Survey Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-4</td>
<td>3</td>
</tr>
<tr>
<td>5-8</td>
<td>6</td>
</tr>
<tr>
<td>9-12</td>
<td>3</td>
</tr>
<tr>
<td>13-15</td>
<td>2</td>
</tr>
<tr>
<td>16-18</td>
<td></td>
</tr>
<tr>
<td>19-21</td>
<td></td>
</tr>
<tr>
<td>22-25</td>
<td></td>
</tr>
<tr>
<td>26-35</td>
<td></td>
</tr>
<tr>
<td>36-50</td>
<td></td>
</tr>
<tr>
<td>51 and above</td>
<td>1</td>
</tr>
</tbody>
</table>

2. How did you hear about this Harn Family Day?

<table>
<thead>
<tr>
<th>Source</th>
<th>Survey Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harn website</td>
<td>3</td>
</tr>
<tr>
<td>Walked into museum</td>
<td>3</td>
</tr>
<tr>
<td>Newspaper</td>
<td>1</td>
</tr>
<tr>
<td>Word of mouth</td>
<td></td>
</tr>
<tr>
<td>Previous Family Day event</td>
<td></td>
</tr>
<tr>
<td>InForm</td>
<td>2</td>
</tr>
</tbody>
</table>

Other responses:
- Radio
- Tennis Coach
- Facebook

3. How many times have you attended Family Days?

<table>
<thead>
<tr>
<th>Attendance</th>
<th>Survey Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is my first time:</td>
<td>7</td>
</tr>
<tr>
<td>2-4:</td>
<td>1</td>
</tr>
<tr>
<td>5 or more:</td>
<td>1</td>
</tr>
</tbody>
</table>

4. Why did you attend this Family Day program?
- We enjoyed the last one
- Fun earning activity for children
- Good way to spend the day with my child
- For fun
- Arts and craft for my children
- Good times
- Learn about Africa

5. The gallery tour was informative and useful and the selected art objects were appropriate, engaging, and meaningful.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

6. Rate the over all gallery tour experience: (Five being the highest)

<table>
<thead>
<tr>
<th>Experience</th>
<th>Survey Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
7. **Rate the over all hands-on classroom experience: (Five being the highest)**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

8. **The day's experience was enjoyable and educational.**

   Strongly agree : 5   Agree: 4   Disagree:   Strongly Disagree:

9. **We plan to try to attend future Family Days**

   NO: 0   YES: 9

**Additional comments:**

- The volunteers are very helpful and great with children
- We stumbled into the museum and learned about family day. Neat experience. Will come back.
- Very nice people, welcoming, creative, organized, friendly.
## Appendix C

### Institutional Review Board Protocols (IRB)

#### UFIRB 02 – Social & Behavioral Research

**Protocol Submission Form**

<table>
<thead>
<tr>
<th>Title of Protocol:</th>
<th>INTRODUCING ENVIRONMENTAL EDUCATION INTO ART (workshop)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator:</td>
<td>Rebecca Gilmartin</td>
</tr>
<tr>
<td><strong>Degree / Title:</strong></td>
<td>Masters Art Education</td>
</tr>
<tr>
<td><strong>Mailing Address:</strong></td>
<td>School of Art &amp; Art History, University of Florida, PO Box 115801, Gainesville, FL 32611</td>
</tr>
<tr>
<td><strong>Email:</strong></td>
<td><a href="mailto:rebecca_gilmartin@ufl.edu">rebecca_gilmartin@ufl.edu</a></td>
</tr>
<tr>
<td><strong>Department:</strong></td>
<td>College of Art/ Art History</td>
</tr>
<tr>
<td><strong>Telephone #:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>UFID #:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Co-Investigator(s):</strong></td>
<td>Michelle Tillander</td>
</tr>
<tr>
<td><strong>Date of Proposed Research:</strong></td>
<td>February 15, 2014</td>
</tr>
<tr>
<td><strong>Supervisor (if PI is student):</strong></td>
<td>Michelle Tillander</td>
</tr>
<tr>
<td><strong>Degree / Title:</strong></td>
<td>Assistant Professor</td>
</tr>
<tr>
<td><strong>Mailing Address:</strong></td>
<td>School of Art &amp; Art History, University of Florida, PO Box 115801, Gainesville, FL 32611</td>
</tr>
<tr>
<td><strong>Email:</strong></td>
<td><a href="mailto:michelle_tillander@ufl.edu">michelle_tillander@ufl.edu</a></td>
</tr>
<tr>
<td><strong>Department:</strong></td>
<td>School of Art and Art History, College of Fine Arts</td>
</tr>
<tr>
<td><strong>Telephone #:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>UFID #:</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Source of Funding:** (A copy of the grant proposal must be submitted with this protocol if funding is involved): NA

**Scientific Purpose of the Study:**
Participants make cultural connections in art practices and will be introduced to the concept of using repurposed materials for creating art.

**Describe the Research Methodology in Non-Technical Language:** (Explain what will be done with or to the research participant.)
The research is to record through observational journaling and photographing of the participant’s engagement and response during and after creating an art project using repurposed materials. Participation will be no longer than two hours.

**Describe Potential Benefits:**
In participating in this research, students will receive the benefit of creating art with repurposed materials. By participating in the workshop, students will be contributing to research that will advance learning and education on the topic of arts and environmental issues within the field of art education.

**Describe Potential Risks:** (If risk of physical, psychological or economic harm may be involved, describe the steps taken to protect participant.)
There are no potential risks associated with this research. Students who volunteer to participate in the Ham workshop will remain anonymous in any data (photographs and journal entries) that are collected about art and environmental issues.

**Describe How Participant(s) Will Be Recruited:**
The art workshop will be held at the Family Day event at the Ham Museum on February 15. The event is advertised through the visitor mailing list. A content form will be provided.

| Maximum Number of Participants (to be approached with consent) | 200 | Age Range of Participants: | 2 years to adult | Amount of Compensation/course credit: | NA |

**Describe the Informed Consent Process.** (See attachment)
All students/parents will be given a copy of the informed consent document during the workshop. Signed and returned permission forms will be required before their voluntary participation will be allowed within my research.

**(SIGNATURE SECTION)**

| Principal Investigator(s) Signature: | Your signature | Date: |
| Co-Investigator(s) Signature(s): | Date: |
| Supervisor’s Signature (if PI is a student): | Date: January 15, 2014 |
| Department Chair Signature: | Richard Signature | Date: |
Dear Parent/Guardian,

I am an art education graduate student in the Department of Art and Art History at the University of Florida, conducting research on finding the relationship between environmental issues, recycling, and art education. My research will investigate ways of implementing a sustainable classroom practice that promote ecological practices. The results of the study may help art educators better understand ecological practices and allow them to design instructional practices accordingly. These results may not directly help your child today, but may benefit future students. With your permission, I would like to ask your child to volunteer for this research.

Children will listen to a presentation about using repurposed materials to make art. They will then create an art project, using repurposed materials. With your permission, your child and their art will be photographed during the instructional period. The photographs will be taken for educational purposes and students will not be identifiable. At the end of the study, the images will be used in an educational website to promote ecological practices.

You and your child have the right to withdraw consent for your child's participation at any time without consequence. There are no known risks or immediate benefits to the participants. No compensation is offered for participation. Results of this study will be available in May of 2014 upon request. If you have any questions about this research protocol, please contact me at Rebecca Gilmartin, University of Florida, Box 112250, Gainesville, FL 32611, (352) 392-0433.

Rebecca Gilmartin

I have read the procedure described above. I voluntarily give my consent for my child, ________________________, to participate in Rebecca Gilmartin's study of the relationship between environmental issues, recycling, and art education. I have received a copy of this consent form for my records.

Printed Name of (son/daughter) ________________________ Age ________________________

Signature of Parent(s) or Legal Guardian ________________________ Date ________________________

Signature of Investigator/ Rebecca Gilmartin ________________________ Date ________________________
**UFIRB 02 – Social & Behavioral Research**

**Protocol Submission Form**

This form must be typed. Send this form and the supporting documents to IRB02, PO Box 112260, Gainesville, FL 32611. Should you have questions about completing this form, call 352-392-0433.

<table>
<thead>
<tr>
<th>Title of Protocol:</th>
<th>INTRODUCING ENVIRONMENTAL EDUCATION INTO ART (Interview)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator:</td>
<td>Rebecca Gilmartin</td>
</tr>
<tr>
<td>Degree / Title:</td>
<td>Masters Art Education</td>
</tr>
<tr>
<td>Mailing Address:</td>
<td>(If on campus include PO Box address):</td>
</tr>
<tr>
<td>Email:</td>
<td></td>
</tr>
<tr>
<td>Department:</td>
<td>College of Art/ Art History</td>
</tr>
<tr>
<td>Telephone #:</td>
<td></td>
</tr>
<tr>
<td>Co-Investigator(s):</td>
<td></td>
</tr>
<tr>
<td>UFID#:</td>
<td></td>
</tr>
<tr>
<td>Email:</td>
<td></td>
</tr>
<tr>
<td>Supervisor (If PI is student):</td>
<td>Michelle Tillander</td>
</tr>
<tr>
<td>Degree / Title:</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Mailing Address:</td>
<td>School of Art &amp; Art History, University of Florida PO Box 113801, Gainesville, FL 32611-3801</td>
</tr>
<tr>
<td>Email:</td>
<td></td>
</tr>
<tr>
<td>Department:</td>
<td>School of Art and Art History, College of Fine Arts</td>
</tr>
<tr>
<td>Telephone #:</td>
<td></td>
</tr>
<tr>
<td>Date of Proposed Research:</td>
<td>Between February 1 and March 30, 2014</td>
</tr>
<tr>
<td>Source of Funding (A copy of the grant proposal must be submitted with this protocol if funding is involved):</td>
<td>NA</td>
</tr>
</tbody>
</table>

**Scientific Purpose of the Study:**

The purpose of the study is to learn about how art educators are implementing environmentally sustainable practices in their classrooms.

**Describe the Research Methodology in Non-Technical Language:** *(Explain what will be done with or to the research participant.)*

Interviewees will be asked to participate in an interview lasting no longer than 45 minutes. The research will be conducted electronically by email, by phone or at an office location. Interviews will be recorded for the purpose of...
Describe Potential Benefits:
In participating in this research, Teachers will receive the benefit of contributing to research that will advance learning and education on the topic of arts and environmental issues within the field of art education.

Describe Potential Risks: (if risk of physical, psychological or economic harm may be involved, describe the steps taken to protect participant.)
There are no potential risks associated with this research. Teachers who volunteer to participate will remain anonymous in any data that is collected about art and environmental issues. The results of this research will be available to each participant.

Describe How Participant(s) Will Be Recruited:
I am going to recruit a selection of teachers from Alachua county, Seminole county, Art Education 2.0 (http://arted20.ning.com), and UFARE 20 (http://ufare20.ning.com) UF Art Education Alumni, to see if they would like to volunteer to participate. In addition, I would like to interview UF art faculty, who I know from classes that I have taken in the past.

<table>
<thead>
<tr>
<th>Maximum Number of Participants (to be approached with consent)</th>
<th>5-25</th>
<th>Age Range of Participants:</th>
<th>21-65</th>
<th>Amount of Compensation/ course credit:</th>
<th>NA</th>
</tr>
</thead>
</table>

Describe the Informed Consent Process. (See attached)
All teachers will be given a copy of the informed consent document via mail, email. Signed and returned permission forms will be secured and in hand before voluntary participation will be allowed within my research.

(SIGNATURE SECTION)

Principal Investigator(s) Signature: Your signature Date:

Co-Investigator(s) Signature(s): Date:

Supervisor's Signature (if PI is a student): Date: January 15, 2014

Department Chair Signature: Richard Signature Date:
Dear Educator:

I am an art education graduate student at the University of Florida. As part of my Capstone research I am conducting an interview, the purpose of which is to learn about how art educators are implementing environmentally sustainable practices in their classrooms. I am asking you to volunteer to participate in this interview because you have been identified as a highly successful educator. Interviewees will be asked to participate in an interview lasting no longer than 45 minutes. The schedule of questions is enclosed with this letter. You will not have to answer any question you do not wish to answer. Your interview will be conducted electronically, by phone or at your office after I have received a copy of this signed consent form from you in the mail. Interviews will be recorded for the purpose of transcription only. Recordings will be destroyed once reviewed by my supervisor and me for the purpose of accuracy of the transcripts. The excerpts of the transcripts will be documented in a final manuscript. Identities will be protected and pseudonyms will be used for reference to statements in the interview.

There are no anticipated risks, compensation, or other direct benefits to you as a participant in this interview. You are free to withdraw your consent to participate and may discontinue your participation in the interview at any time without consequence.

If you have any questions about this research protocol, please contact me at or my faculty supervisor, Dr. Tiliander, at or Questions or concerns about your rights as a research participant rights may be directed to the IRB02 office, University of Florida, Box 112250, Gainesville, FL 32611; (352) 392-0433.

Please sign and return this copy of the letter in the enclosed envelope. A second copy is provided anonymously in the final manuscript to be submitted to my faculty supervisor as part of my course work.

Rebecca Gilmartin

__________________________________________________________

I have read the procedure described above for the School Curriculum Interview assignment. I voluntarily agree to participate in the interview and I have received a copy of this consent form and questions for my records.

Signature of participant Date

I would like to receive a copy of my final "interview" manuscript.

☐ YES (print your email ____________________________)

☐ NO

3 Revised August, 2009
List of Figures and Captions

Figure 1. Upside down recycling bin

Figure 2. Albatross, victim of plastic ingestion Photo by: Chris Jordan

Figure 3. Families working together creating art

Figure 4. The museum curator, university students, local business owners and myself

Figure 5. Green Art Room Blog

Figure 6. Green Art Room Website Page

Figure 7. Green Art Room Website Community Events Page
Author Biography

I was born in and grew up in the Midwest region of the United States. Many of my experiences growing up related to activities involving nature and in many ways became an inspiration for my studio work and teaching. Currently, I live and work in Gainesville, Florida. I am a graduate assistant teacher in Art Education at the University of Florida. My research involves historical and contemporary educational perspectives, along with expertise in a variety of art media, specifically ceramics, drawing, and collage. In addition, my education in teaching focuses on developing art curriculum around enduring ideas that will connect students to real world experiences.

Similarly, my studio practice reflects real world experiences. Most recently, my work explores the anthropocene, offering a space for thought about environmental concerns, sustainable art practice, and the human connection to nature. Additionally, my work represents a response to personal autobiography, location, and topography. Within this context, I explore textures on surfaces. Many times this involves investigations into unconventional techniques and materials.