Addressing ecoanxiety through the lens of children's literature in the elementary art classroom

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ADDRESSING ECOANXIETY THROUGH THE LENS OF CHILDREN’S LITERATURE IN THE ELEMENTARY ART CLASSROOM

by

DARA ANDRE

Under the Direction of Melanie Davenport, PhD

ABSTRACT

The purpose of this thesis is to investigate the how as an art educator I can incorporate environmentalism into my art lessons without furthering ecoanxiety in my elementary classroom. Through looking into the many years of research behind the field of eco-art education I found that there were many teachers already finding ways to make their classrooms environmentally conscious. I chose to further explore this topic through the medium of illustrated children’s literature in an attempt to uncover new ways to address environmentalism in the classroom without causing further harm to student mental health. Through the process of writing and illustrating a story about young environmentalists, I made personal discoveries about myself as an artists and teacher, and developed my identity as an eco-art educator.
INDEX WORDS: Eco art education, Ecoanxiety, Children’s literature, Art education
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DARA ANDRE

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of
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August 2023
DEDICATION

This is dedicated to my wonderful students of the past, present, and future, who have shaped me into the teacher I am today, and have taught me almost everything I know. Thank you for inspiring me to learn and grow alongside you, to become the best teacher that I can be. I promise to never stop learning.
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Thank you endlessly to my committee members, Dr. Melanie Davenport, Dr. Kevin Hsieh, and Professor Pamela Longobardi for their patience, wisdom, and willingness to help me grow. Your support and compassion along the way is what helped me to finish this work, and be proud of what I have done. I would also like to thank my wife Jasmine for her constant support over the past two years. While the process wasn’t always easy, having you by my side through the many ups and downs made all the difference.
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1 INTRODUCTION

As I entered my first year of teaching in the elementary art classroom, I was surprised by the excessive amount of waste being produced by my classroom. It began with a single observation, how much paper was used up every single day. Paper, a resource that is seemingly in an endless supply within the school building, can be seen flying past our eyes in the form of worksheets, homework, secret notes and flyers sent home day after day. In my classroom, I noticed how frequently students would request another sheet of paper quickly after beginning a project, often because they felt that they had made an error or drawn a line out of place. Initially I felt a twinge of guilt for having to say no, hand them an eraser, or instruct them to turn their paper over. Carelessness with classroom materials became a thorn in my side as I started to notice other ways in which materials would be left to waste. Caps to markers and glue sticks lost, paintbrushes left uncleaned to dry and harden, and erasers thrown around like bouncy balls. Initially it was difficult for me to not fault the students themselves for being so wasteful. Admittedly, for a time I wondered if it was a sense of entitlement that led them to treat materials this way, or perhaps this was just the nature of children to not think twice, and act carelessly. As I struggled to try and change this behavior, I found myself at a loss. I understood that while I might care deeply about conserving materials, from both an environmental and a practical standpoint, to my students I just sounded like another teacher harping on them about rules and trying to put an end to their fun. Despite this I continued to struggle in understanding why my students were not “getting it.” Looking back, I now realize that I was failing to consider my own background, and how my worldview shaped the way I thought about something as simple as a wasted sheet of paper.
I was raised by a very eco-conscious family, the type to save every plastic bag, recycle every store bought container, and hold onto every viable scrap of wrapping paper at Christmas and birthday parties. Even if I rolled my eyes at their efforts as a kid, my family's eco-friendly habits became a part of my subconscious, and theirs was not the only influence I would be subjected to. My high school art teacher had similar habits, and most of our projects were created using recycled materials: we painted old ballet shoes and ties donated from dance students and teachers, collaged with discarded sheet music from the choral department, and painted on the cardboard backings of sketchbooks. It was her ingenuity, and ability to transform almost anything into art which shaped my way of thinking as I made my way through various studio art classes in college. Class after class of purchasing everything on the supply list and using about half of it I began building a stockpile art supplies, and by the time my friends and acquaintances caught wind that I was soon to begin my career as an art teacher, I became a repository for all of their old art supplies that were otherwise slated for the trash. The stockpile grew, and my refusal to waste even the slightest amount finally gained a purpose: future classroom supplies.

Reflecting on my own personal history helped me to discern why I was so shocked when I finally entered the classroom and witnessed the irreverence for the use of paper and other materials. I had to take a step back and acknowledge that my students may not have been exposed to the ideas like conserving and reusing materials, or even recycling. Even if they had some understanding of these ideas, it would be a stretch for them to make a connection to what happens in the art classroom.

1.1 To Sustainability and Beyond in the Classroom

I began to wonder how I might weave my own environmental consciousness into how I taught about using classroom materials. As I began to consider other questions pertaining to
environmentalism and my classroom practices, I initially thought a lot about sustainability, and in preparing to take on the work of this Thesis project, I thought sustainability would be my main focus. I had a vision for a sustainable classroom that championed the importance of reducing waste, the magic of reinventing recyclable materials, and the necessity of safely disposing of paint, glue, and other substances that can be found in an art classroom. However, before beginning my research on sustainability in schools, or environmental education generally, I had a realization that changed my perceptions of sustainability, and personal responsibility.

I encountered this shocking new insight, not on the search for reliable, peer reviewed research, but rather as I was perusing social media, as many of us do daily. Despite being bombarded with news, facts, and information from all angles, I came across yet another post about the environment that really captured my attention. “Just 100 companies responsible for 71% of global emissions” it stated. Unnerved by this, I searched for more information, and found that this wasn’t just clickbait designed to grab readers attention. This statistic was actually based on years of research released in a 2017 report entitled “The Carbon Majors Database" wherein researchers listed the companies and state owned entities which had up unto that point emitted the most greenhouse gasses (Griffin & Heede, 2017). Reading this report made me feel as if I had fallen for a ruse, and I began to think about all of the other ways in which our present environmental disaster was in large part fueled by large corporations and governments. The notion that saving the environment was an individual task that we could conquer one paper straw, and reusable shopping bag at a time fell flat. It wouldn't be enough to analyze the minutiae of my own habits, and make changes on an individual level. I want to be transparent with my students, and I felt that teaching a half truth would be entirely disingenuous. If I were to draw the line at teaching about personal responsibility for sustainability, I would be omitting a huge piece
of the puzzle. I don’t want to set my students up to fall into the same trap that I did, spending years feeling like you are doing what is right for the environment only to find out that the true source of the problem is much greater than anticipated. This is what pushed me to want to take a more comprehensive approach to teaching about the environment through art. Although sustainability (both in a personal, and systemic sense) might play a part, it is certainly not the only topic I want to cover.

1.2 Incorporating Environmental Education

Lacking formal environmental education training I was on the lookout for reliable resources, and I was faced with information overload. I found very few guardrails to help guide me towards the most accurate and useful information, and my initial search led me down many fruitful yet disconnected paths. It became evident that there is no shortage of information available, but if I wanted to incorporate this information in a meaningful way I would need to do more than just introduce topics at random. I began to look for existing resources designed specifically for young learners, keeping in mind that teaching the sensitive nature of topics like climate change can be quite upsetting to many adults, and young learners are even more sensitive. I was pleased to discover a plethora of illustrated children's literature about all manner of environmental issues ranging from recycling to the climate crisis. For quite some time I found myself gravitating to the children's section of book stores, again and again, each time finding a new treasure. This excitement conjured up feelings of nostalgia as I began to reconnect with my childhood love of picture books, and I found myself drawn to elaborating upon the work of the authors that preceded me. I began to imagine what I could accomplish, and just what I might learn through the process of writing a book. Through the process of creating and illustrating a story that focused on environmental justice and art, what additional insights might I gain in my
quest to become a better eco-art educator? Might I be able to effectively convey the significance of environmental justice to young learners through a story that simultaneously challenges their perceptions, while also addressing their concerns and anxieties about their future? How can I create a story intended to inspire learners to be environmental advocates in every aspect of their lives? These are some of the questions that have guided my decision to work on a children’s book for this thesis project. In preparation for creating a children's book about the environment I will have to balance narratives about personal responsibility versus societal responsibility, while remaining truthful about the realities of climate change and environmental detriment without creating nor fostering eco-anxieties. If successful, I will be better prepared to broaden students' understanding of their own environment, and ideally inspire them to be participants and advocates for environmental protection without leaving them feeling hopeless.

The following chapter will serve to define terminology related to environment education, discuss the intersection of art and environmentalism, and identify artists whose practices address environmental concerns as sources of inspiration. I will also evaluate how environmental education has been presented in popular children's literature thus far in order to identify areas in the literature where a story about art and environmentalism would add value and enhance understanding.
2 REVIEW OF LITERATURE

In this chapter I will reiterate what I have learned from researching a variety of topics that are pertinent to environmental education, as well make the connection to how I became aware of such ideas, many of which were new to me. While I have already established that sustainability will not be the only topic I will be focusing on, I felt the need to take the time to fully understand the concept, as it was my own personal entry point for environmentalism. Stemming from my desire to better understand sustainability, I found the work of David Orr, which introduced me to environmental literacy. Now interested in how I could incorporate environmental literacy into art teachings, I discovered eco-art education, a concept spearheaded by educator and researcher Hillary Inwood. Finally, based on my own personal relationship with our environment, I wanted to explore eco-anxiety. All of these ideas will inform what themes I choose to include in my story, and I conclude this chapter by considering what makes for an effective children’s book, as well as the ways in which children’s literature impacts learning outcomes for young readers.

2.1 Terminology

The ways in which politicians, scientists, and the general populace talk about our environment has shifted through the years. From appreciation of nature and a desire to preserve the natural beauty of our world, to a general awareness of threats to the environment which have encouraged activism, a new vocabulary has spawned in successive waves over the years. Words and phrases like greenhouse gasses, carbon footprint, and deforestation have emerged from the scientific community, and worked their way into the popular vernacular quite successfully. Sometimes these words can even become disconnected from their original meaning due to overuse. In the following chapter I will define some key terms that frame how the various facets of environmentalism, art, activism can be understood.
2.1.1 Sustainability

The term *sustainability* has a long history and its meaning has gone through many evolutions, although the notion of sustainability predates the modern usage of the word. As human beings, we have always had concerns about how to sustain ourselves with enough food and adequate shelter, but the concept of environmental sustainability as it is now understood is rather recent. Since the 1970’s sustainability has been used in reference to natural ecosystems, development, agriculture, economics, and population growth to name a few (Kidd, 1992). Previously relegated to scientific researchers and ecologists, it has since made the jump into popular vernacular, and some argue that its meaning has been watered down to nothing. By 2008 Sustainable development researcher Robert J. Fuller had already concluded the use of the word had become a cliché, however the popularity of the phrase has only risen since then (Fuller, 2010). It has continuously been tossed around by corporations and governments who put the word to use in signaling their commitment to environmentalism and the fight against climate change, often with little action to follow. I came to realize that what I considered to be “sustainability” were just a series of actions with the intentions of creating a more sustainable environment. Although my intentions were to be as environmentally responsible as possible, sustainability would require that the systems I rely on were also complicit in my scheme. Sustainability is not a hobby, but a state of being which can only be achieved through the coalescence of individual responsibility, governmental oversight, and perhaps most importantly, a deep and true understanding of the limitations of our environment, which we must learn to respect (Heinberg & Lerch, 2010). My intention is not to discount the importance of personal responsibility entirely, but to acknowledge that my own efforts to be sustainable in my classroom will be just one facet of my intended work.
2.1.2 **Ecoliteracy**

While searching for connections between sustainability and education, I wanted to learn more about how as an educator I could foster a better understanding of our environment. *Ecoliteracy*, or ecological literacy, a concept first articulated by environmental scholar David Orr and physicist Fritjof Capra, seeks to increase humanity's understanding of the environment and the systems of ecology upon which all life on earth is reliant, with the goal of encouraging environmental stewardship (Orr, 1992). An eco literate world would be one in which individuals use their knowledge of the environment to live sustainably in the best interest of people and the planet. One barrier to eco literacy today is the fact that modern life exists on the inside. Our occupations, our homes, where we gather, and where we learn all exist in controlled inside environments which we have carefully crafted to fit our own needs. Approximately 85% of the world's population can be found residing in an urban area, where nature has been pushed out in favor of fitting more people in (Ritchie & Roser, 2018). Ecological literacy first requires that we remind ourselves of the existence of the world outside beyond our control, filled with things we don’t fully understand. One of the foundational tenets of ecological literacy is a personal connection to nature. Once we have developed this connection we can begin to understand the intricacies of our natural world, and the impact of humanity upon it.

2.2 **Environmental Education**

A conversation about eco literacy would be incomplete without mentioning *environmental education*. Like all other domains which fall under the umbrella of science education, environmental education is a subject which can fit into the curriculum like any other, while eco literacy is the framework for understanding our relationship with the environment in
all that we do. Therefore, eco literacy and environmental education can be taught through the arts as much as it can be through a science or social studies curriculum.

The United States Environmental Protection Agency (US EPA) defines environmental education as “...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 have the skills to make informed and responsible decisions.” (EPA, 2022). Although environmental education has many proponents, very few teachers in the elementary setting feel that they have an adequate amount of time and preparation to provide specific environmental education as a part of their science curriculum (Sukma et al 2020). One way that teachers might work environmental education into their teachings is through STEM (science, technology, math, and engineering) education, occasionally referred to as STEAM education, with the addition of “A” for art. The demand for STEM in schools has increased dramatically in the past decade, and today schools in Georgia often offer STEM as its own elective, and or become “STEM Certified” through state run or approved certification programs (Holmlund et al 2018). While STEM as an elective remains popular, it is also being integrated widely across subjects. The ways in which this integration happens vary widely from school to school, but emphasis continues to be placed on the important benefits of teaching in an interdisciplinary manner (English, 2017). This opens the door for a wider acceptance of environmental education across subjects, particularly in art, as teachers, students and administrators become more familiar and comfortable with the idea of cross-curricular instruction.
2.2.1 **Environmental Art, Eco-Art**

Eco-Art, unlike environmentalism or sustainability, has a much more ephemeral definition. Like any art form, it means different things to the various different practitioners of the craft, and can come in many forms, and can not be defined by style, medium or specific aesthetic quality. For many practitioners of eco-art, it is a form of activist art which highlights the importance of protecting natural environments, and railing against the destruction of the environment at the hands of corporations and governments. Vik Muniz is an example of one such artist, using his work to expose the realities and highlighting the real human cost of overconsumption and waste (Walker, 2010). Muniz is not alone, there are countless other artists whose artwork is created with waste products diverted from polluting the environment, or ending up in landfills. Others see eco-art as specifically having to do with the creation of art which is *eco-friendly*, meaning art that utilizes material created or derived from environmentally friendly processes.

*Environmental art* is a subsidiary of eco-art art which takes advantage of its surroundings to create art based on the terrain or other geographical characteristics of the area, and is often intended to comment on the relationships between people and nature. Environmental art is not necessarily environmentally friendly, as it can vary widely in its message and impact. It may include artwork that is explicitly rooted in environmental activism, as well as pieces with more subtle or esoteric messages about finding harmony with nature. Patricia Johanson whose large-scale installations aim to enhance the natural environment while actively functioning promotes ecological health, serves as an example of a more activist approach (Wu, 2013). On the other hand, artist Andy Goldsworthy’s *Land Art* (another term used to describe environmental art) neither expressly promotes environmentalism nor does any harm; his work has a symbiotic
relationship with its environment, and “leaves no trace” once it has been photographed, with some being completely take over by nature in the end (Blumberg, 2022). However, some environmental art has been found to actively harm the environment in which it is created or displayed. The work of Jean Claude and Christo uses the environment as a canvas with little consideration for any potential negative impact on the surrounding landscape, ecosystem, and ecology, and even facing off with environmentalists in court at times (Schoberg & Scott, 2020).

The work of the aforementioned artists represents merely an iota of what is a continually growing and evolving artistic movement. Art created for the purpose of bringing attention to environmental issues, or in celebration or reverence for our environment is not new, and has only grown in its relevance and prevalence in recent years.

2.2.2 Eco-Art Education

Eco-Art education is an interdisciplinary method of teaching environmental education through the lens of art education with the goal of increasing students' environmental literacy. Eco-art educators are guided by a desire to instill environmental stewardship unto their students, and their work runs parallel to, and sometimes overlaps, the work of environmentalists and activists. Art educators have been grappling with how to address the environment through their art curriculum for as long as the environment has been a part of public discourse. In 1970, as a response to the first annual Earth Day celebration, art educator Ralph Smith wrote about how he foresaw a future in which a conscientious humanity acted on their desire to limit their consumption, and lessen their negative impact on the natural world. Therefore, he theorized, the arts would be a prized commodity due to their ability to entertain us without having to be mass produced, and without the need for excessive material consumption. While unfortunately his
vision hasn’t yet come to pass, he was one of the first of many art educators to deliberate how art and the environment might interact in the future (Smith, 1970).

As the creation of environmental art, or eco-art, gained popularity, it had an impact on art educators who were keeping abreast of the trend, and incorporated some of these ideas into their own teaching practice. Beginning in the early 1990s, there was an uptick in interest around teaching environmental art education, as it was more often referred to as then, and while some of the language we use today has changed over time, many of the core themes that interested art educators back then are still very relevant today. One of the most common themes discussed was how to foster a personal connection with the environment. Ana Mae Barbosa, one of Brazil’s most well known art educators, was one of the early advocates for environmental art education, and her personal experiences with the destruction of the Amazon Rainforest played a role in her activism. As the people of Brazil faced blame for the destruction of the rainforest Barbosa knew the issue was deeper. Her communities' dire economic conditions led to the need for logging, and co-opting forest land for agriculture, and much of this demand was coming from Europe and the West. Barbosa wanted educators to look deeper into the social and political facets of fighting for the environment, and take the people who live there into account as well, they were after all a part of the environment (Barbosa, 1991). This exemplifies the ways in which ecoart education strives to transform the concept of the environment from an abstract idea to something more tangible through the creation of art which focuses on a personal connection between the artist and their environment. For those living and working within the Amazon Rainforest, this connection might be innate and subconscious, those who work in the forest are acutely aware of the natural world around them. For learners living within dense cities, their conception of the natural world might be what they have experienced in Zoos, natural history museums, or local
parks, or what some refer to as the built environment. In order to create artwork about one's own environment, the artist must have the ability to identify with, and to discern what their environment actually is, as well as being able to identify with the natural world as it exists around them.

Place based art education is another predecessor of today's iteration of ecoart education, and in a way these two pedagogies share a lot of the same ideas. Place based art education, which is sometimes referred to as community based art education, urges art educators both within schools, and the community, to connect learners with their local environment by highlighting the ecosystems and wildlife of the area as a part of their community, and create art in response to, and in service of their community (Blandy & Hoffman, 1993). While some refer to place based art education as synonymous with environmental art education, it is not entirely beholden to environmentalism. Some communities face more pressing socio-cultural issues, while others are facing the direct impacts of climate change in the form of natural disasters and pollution. This accounts for the different responses to place based art education we might encounter, some communities might want to address their environment while others might view societal problems as a more imminent issue. Place based art educators may be inclined to guide students towards a particular set of concerns or issues facing that community, but might stop short of making the demand about what issues students address through their work. Even if the educator focuses on environmental literacy as a part of their curriculum, the students' passions might lie in social justice issues which don’t directly address the environment, and therefore lead to projects which are reflective of their concerns. This is part of what makes place based art education an effective pedagogy, as it is flexible, and can allow students to discover where their passions lie when it comes to their own communities and their lived experiences J. Ulbricht put it succinctly when he
wrote “Community-based programs and projects have a continuum of purposes.” (Ulbricht, 2005).

Early environmental art education and place based education laid the groundwork for today's eco art education, and many educators still utilize many of the methods of place based education today. However, as the decades pass and our understanding of the environment and we gain a better understanding of the role we play as a part of it, educators have to continually adapt what eco art education looks like in the modern classroom. One of the educator-researchers whose work has inspired me to pursue the path of eco-art education is Hillary Inwood, an art educator who has dedicated her career to eco-art education, and written extensively on the interweaving of environmental education and art education. This union allows exploration of all facets of environmental education and advocacy within the context of the art classroom. Inwood agrees with, and expands upon the thoughts of environmentalist David Orr, who suggested that in order to change student perceptions about the environment, exposure would need to come from a wide variety of subject areas, and Inwood sees art as a natural choice (Inwood, 2008).

Motivation, a necessary component in learning, is driven by a personal interest in what one is learning about. The impact of learning is deepened when learners make connections to personal interests and understandings of the world, and the same is true for eco-art education. Focusing on environmental concerns at a local, rather than global, level can help to make understanding big ideas more approachable, especially for younger learners. Here, Inwood is harkening back to the importance of place-based education as a method of increasing environmental literacy. Inwood also makes a point to express how varied eco art education outcomes may look depending on the location of the students. The environment is ever changing, and can mean different things to different learners, even those who attend the same school. Therefore, we should expect that the
forms of art which emerge from various different eco art classrooms will look different, and address the environment in different ways (Inwood, 2008).

In the present day, many educators are looking at eco art education in tandem with activism, and questioning how they can support their learners in advocating for their generation's demands. Kim Cosier has discussed this idea in “Art Education When the World is on Fire” for Studies in Art Education, where she considers the idea of tackling the problems of the world which teachers and students face together as inherited issues which we all must address and take responsibility for despite the fact that we might not have been the ones to create these problems (Cosier, 2020). This applies not only to climate change but to all other issues pertaining to equity and justice which we face today, many of which overlap inextricably. Youth activism in the past decade has led to the usual backlash and dismissal from certain adults, but ignoring the collective power of youth activists is just a denial of the obvious: young people are demanding change, and they are steadfast in their dedication and beliefs (Eide & Kunelius 2021). One unfortunate reality is that much of this passion for activism, environmentalist and otherwise, comes from a deep seated and genuine fear for the future affecting many young people.

### 2.3 Ecoanxiety

Awareness and concern for environmental destruction, climate change, and other ecological destruction has grown in the past few decades. As the physical manifestations of climate change continue to materialize, so do the fears for our collective future. Psychologists and researchers have coined the term *ecoanxiety* to describe these fears. These feelings can range from mild fear to existential dread about the impending climate crisis, becoming yet another impediment for those already suffering from anxiety disorders (Panu, 2020).
Ecoanxiety has had a noticeably larger impact on younger individuals, Millennials and Gen-X most notably. Younger generations are also more likely to identify climate change as one of their top concerns, and experience more feelings of climate related anxiousness when compared to older generations (Funk et al, 2021). As a part of the millennial generation, it is not surprising that I have had my own experiences with eco-anxiety which in a way led me to consider how my own actions impact the environment. Young adults seem to be the most vocal about their experiences with eco-anxiety, through social media and community engagement, but just because we don’t have the digital footprint to indicate the concerns of today's adolescent population this does not mean their experiences are any less real. While much of what we know about young adult eco-anxiety can be generalized and applicable to young children, the distinct psychological and cognitive needs of adolescents must be taken into consideration. We know that while the adolescent mind is still developing, instances of anxiety and traumatic events can have a lifelong impact on the developing mind.

2.4 Children’s Literature about the Environment

All of the aforementioned concepts will inform me as I work towards my goal of writing and illustrating a children's book that brings together Eco Art and Environmental Education, but it was time to turn my attention towards research on children's literature itself. Adult-led picture book reading in the early childhood years of education is a standard practice which students, parents, and teachers have come to accept as an integral part of learning, but it is still worth revisiting the evidence that supports this beloved tradition. Research continues on ways in which reading picture books to children at an early age helps them retain more information when compared to reading books without images, and has a direct impact on future literacy as the child grows into an independent reader (Dowdall et al, 2020; Jones et al 2015). As an educator
concerned with the overall success of my students, this is reason enough to use picture books as a way to teach eco-art and eco-literacy. As I continued to explore this path, I learned more about how educators focused on environmental education have already taken up using children’s literature in the classroom to try and effect a change in student behavior. In one study of preschool students, conservation-focused story time through the introduction of children’s literature focused on environmental stewardship in conjunction with class lessons had a positive impact on student behavior at home when it came to things like recycling, conserving water, and turning off lights when exiting a room (Hsiao, Shin 2016). While this study was small, and fallible in the sense that researchers have yet to analyze student behaviors after the study ended, it is still a positive indicator for using literature to support environmental education.

Picture books might also be able to help teachers increase overall student engagement and motivation when it comes to learning. As a former student with an aversion to math and sciences, I can empathize with students who might come to art class and feel a twinge of disappointment upon learning that the topic for the day was learning about the environment. A young learner might find it difficult to relate to a scientist; the thought might conjure up ideas of someone in a white coat, holding an exploding beaker, and working away in a laboratory, but picture books have proven useful tools in helping students make the connection. Educators read and discussed biographical picture books with their students as a way to introduce new science concepts, and found that students were better able to empathize with the scientists when presented characters in a story (Heisey & Kucan 2010). This is thought to be because the books they read included narratives about the scientists as children. Fueled by childhood curiosities about the natural world, these stories showed how scientists like Wilson Bentley and James Audubon began their journey as children, fascinated with the world around them, and never
stopped asking questions. These narratives about scientists as children seemed to help students connect with them on a deeper level, and increase their overall interest in what they were already learning in class.

As I reviewed children’s literature about the environment, I attempted to categorize them by theme or approach, to try and decide where a book about art and the environment might fit in. First, there are many books which are set in specific environments or ecosystems such as the ocean, rainforest, or arctic. In these books, endangered species might also be discussed. Next I noticed individual biographies such as stories about activists. There are a number of books on Greta Thunberg who young readers might already be familiar with, and several that I found about Rachel Carson, author of Silent Spring and one of the first well known environmental advocates. There are also a number of books about personal responsibility, which teach readers about what can be done by individuals in their own homes or communities to help the environment. These books usually focus on recycling, gardening composting, planting trees, or conserving energy and water. Finally, there are the books which cover the broad strokes, addressing climate change as a global phenomenon which is caused by a number of different factors. These books might include a variety of the topics discussed above, in a concise manner. While these were just my casual observations, I felt validation when I encountered the work of researchers studying the qualities of a variety of EE picture books from the past decade and a half which identified the following recurrent themes in their study: Ecosystems/life cycles, Destruction of habitats, Environmental activists/biographies, Recycling Going green, and Endangered animals (Martín et Al 2019). All of the topics discussed in these books are valuable for what they can teach readers about the global environment, and their ability to transport students to places they may never get the chance to experience first hand.


3 METHODOLOGY

In the previous chapter, I reflected on my initial ideas about how I might include sustainable practices into my classroom as a way to model environmentalism and encourage students to take an interest in their environment. As I dove into the aforementioned literature, I became aware of the field of eco-art education, and the practitioners who are already addressing these issues head on. Going beyond the personal responsibility narrative, eco-art educators are introducing students to the broader systemic problems we face, and encouraging their students to use art as a form of activism. Inspired by the uncompromising work of both eco art and environmental educators, I began to consider the limitations of discussing only sustainability and personal responsibility in the classroom and realized that I want to continue to research how I can build eco literacy in the art classroom through broader eco art principles. Personal relationships with the environment, recognizing sustainable practices, awareness of environmental threats, and empowering activism are themes often referenced as markers of environmental literacy by environmental education advocacy groups, and environmental educators alike (NAAEE, 2011; UNESCO, 1994). I will be taking a closer look into how I might encourage delivery of these ideas to young learners in a digestible, and age appropriate way, through the research questions guiding my study 1. How can I effectively convey the significance of environmental justice to young learners through a story that simultaneously challenges their perceptions, while also addressing their concerns and anxieties about their future? 2. How can I create a story intended to inspire learners to be environmental advocates in every aspect of their lives? My research will seek to answer the following questions: How can the process of creating a children's book that addresses eco-anxiety, while also promoting environmental advocacy, serve as a means for me to better understand my own experiences with
eco-anxiety and my role as an environmental advocate? What strategies for inspiring readers to become environmental advocates in all areas of their lives can I effectively convey through storytelling?

3.1 Procedure

For this project, I intend to plan, write, and illustrate a mockup of a children's book which focuses on environmental activism and embraces a sustainable mindset, drawing from what I have learned thus far about eco-art education. I have no prior experience with writing narratives for children, and therefore becoming deeply familiar with current and former works that pertain to environmental education will be an important part of my process. Already, I have identified some characteristics which seem to reappear in much of the literature I have investigated thus far. In preparing to write yet another story about young people and their environment I need to keep in mind what subjects have already been covered at length, and avoid adding another voice to an echo chamber. My goal is to write a book which exposes readers to the idea of advocating for their environment with their art, while simultaneously acknowledging the reality of eco-anxiety. Through the story of a young person facing an uncertain future I want to convey the importance of persistence even in the face of seemingly insurmountable challenges, and how we can use art as a tool for advocacy and healing.

While I have no shortage of ideas and inspiration for this story, I lack any formal experience when it comes to creative writing, and specifically writing stories for young readers. Therefore, editing will be integral to my success. I am well aware that as a first time author, I will need a lot of support in shaping this story, and luckily I have a fellow educator and library media specialist who has agreed to assist me in editing my work. Outside of my personal professional community, I will also be participating in virtual group critiques held by the Society
of Children’s Book Writers and Illustrators [SCBW] Southern regional chapter, an organization for current and prospective children's book authors to network, share ideas, and resources. I will also be referring to many of the online guides and resources provided by the SCBW before and during the writing process.

As the characters begin to develop through the writing process, I will simultaneously begin to capture their essence with illustrations. Once I feel confident in my character design and narrative, I will begin the process of creating a storyboard for the entirety of the book. The storyboard will be one of my main artifacts, approximately half the size of the final illustrations, and done in graphite and colored pencil. These storyboard illustrations will be utilized in the creation of another artifact as well, a dummy book. Dummy books are created by authors for the purpose of providing publishers with a preview of their proposed book ideas, and can either be presented as a physical or digital copy. I will utilize the storyboard drawings, and several completed illustrations compiled to create the dummy book using the online digital design tool Canva. The completed illustrations I will be creating will consist of four full size works of art that would serve as the actual illustrations to be used in a published version of the book. These four illustrations will be 10” x 20” watercolor paintings. To document my progress, I will be keeping an accompanying visual journal where I will sketch, take notes, and draft out each phase of my process. I will also be using this space to journal my thoughts and feelings, questions, and other notable pieces of this experience as it progresses. Additionally, I will take photographs of all of my work to create a chronological record of my progress.
3.2 Timeline

Beginning in March, I will start the process of writing, editing, and character design. By the end of March I hope to have the character designs finalized, and the storyboard completely illustrated. Beginning in April the final illustrations for the selected pages, and the front and back cover should be under way. Starting in May, I will begin the process of uploading images and making necessary edits. Finally, by the end of May I will complete a mock-up of the book including both final images and story boarded pages in Canva, a free to use online digital design site which allows users to create a variety of different kinds of presentations, documents, and graphics. I intend to complete the process of writing about this learning experience and defending my work for graduation in Summer 2023.

3.3 Limitations

While I am confident in my experience as an art educator, attempting to incorporate environmental education into the art classroom will require that I familiarize myself with the current scope of what is being taught in the realm of environmental education today. As I move forward with embracing the interdisciplinary nature of eco-art education, I want to ensure that the environmental education aspect of my teachings are just as accurate, age appropriate, and relevant as the art education I provide. A 2017 meta-analysis of student outcomes in environmental education points out that while the demand for environmental education has increased in the past 25 years it still exists on the fringes as a subject woven into the curriculum more often than it is taught as a stand alone course (Ardoin et al, 2017). For teachers like me this provides an opportunity to incorporate environmental education into our respective curricula wherever we see fit, but unfortunately this can also result in educators having a difficult time knowing what exactly they should be teaching. I see here a unique parallel between the ways in
which environmental education and art education exists within traditional schooling. While still meeting the requirements of the curriculum, what gets taught and how it is taught is dependent on the interests and understandings of individual teachers. It is often left up to individual teachers to decide what is most important for students to learn and what topics are considered “appropriate” to introduce. In both art and environmental education, the material which is deemed appropriate might change depending on the community or audience.

This sort of unspoken censorship highlights the added layer of politicization of climate science which exists in many southern states, Georgia being no exception. Just as each state sets its own standards for all other topics, the implementation of environmental education within the science curriculum is highly dependent upon regional interests. Direct and intentional environmental education is much more prevalent in states where public opinion leans more towards believing in the existence of climate change, meaning climate science being taught in the classroom is more widely accepted (Khalidi & Ramsey, 2021). Some states are moving full steam ahead with environmental education, finally seeming to recognize popular cultural awareness of climate change and environmental advocacy; after many decades, the teaching of climate change or environmental education in such certain terms has become much more prevalent in to K-12 classrooms in the past five years. As is the nature of any new idea, the actual implementation of environmental education within schools is still evolving, and teachers are still in the process of figuring out where environmental education fits.

Additionally, as I take on the task of creating a prototype for a children's book, I recognize that producing a dummy book does not guarantee that it will reach publication. I feel that it is important to note that while that would be a welcome outcome, that is not my immediate goal, and I will not be seeking publication contracts as a part of this project.
Publication is a long and laborious process, and in this period when much content is being generated by Artificial Intelligence, there is almost an over abundance of children’ literature being published. I intend to focus on my own creative license in the creation of this story, and the illustrations, and forgo the pressures that may come from editors or publishers. In the future, this work may very well change to meet those demands, but for now I would like to present my own unadulterated version. Ultimately, the measure of my success in this endeavor will be how much I have learned through the process, and what lessons I might take into my classroom in the future.
4  PROCESS

In taking on the task of writing and illustrating a children's book, I knew that I was entering into the unknown. While I understood that the task ahead of me would involve quite the learning curve, I underestimated just how much I had to learn about not only the process of writing children's literature, but myself as an artist as well. I approached the tasks I set forth for myself aforementioned in chapter three in a way that felt intuitive to me, and inevitably there were times that I should've relied more on research and less on my intuition. Although this was not a linear process (nothing in my life is) looking back, I can identify three main phases of completing this process: writing the story, illustrating the dummy book, and creating four completed illustrations in color. In this chapter I will discuss how I worked my way through each of these phases.

Before writing a single word of the story, and throughout the duration of the writing process, I looked to my own favorite picture books for inspiration. There were the renowned titles such as *Madeline* and *Eloise*, fairy tales such as *The Twelve Dancing Princess* (I had the hauntingly beautiful version illustrated by Errol Le Cain) and *Rumpelstiltskin*, and lesser known titles like *Mrs. Spider's Tea Party* or *A Book of Shadowboxes*. I spent hours trying to track down some of these, whose titles had escaped me over the years. I searched dutifully relying on vague but vibrant memories of colorful books with fantastical illustrations, stringing together whatever it was I could recall, such as “Children's story about sisters who dance in secret at night” or “Children's book with the marshmallow tree that smiles” until I finally found what I was looking for. Upon revisiting these books and many more I was delighted by so many emotions; excitement, nostalgia, and a whisper of the wonder and awe I felt when I experienced these
stories and illustrations as a child. Revisiting these books helped to remind me of my purpose, not only to tell a story and teach a lesson, but to bring forth joy and wonder as well.

4.1 Telling the Story

Sitting down to actually write the story I wanted to tell seemed to be an impossible task until I actually made an attempt to do so. I had many concerns about my abilities, having never made any attempt to write fiction in a serious manner, let alone fiction geared towards children in such a specific way. To aid me in this process I utilized a great number of resources provided by the Society of Children's Books Writers and Illustrators. Before I began to write, and throughout the process of both writing and illustrating, I attended several virtual meetings with other authors and illustrators and gained valuable information about everything from page layout to writing empathetic characters. I must admit I spent more time than I needed researching and reading up on the process, and finally I had to accept that I couldn’t procrastinate by daydreaming over my old childhood favorites any longer. I knew the research couldn’t hurt, but the only way to truly improve would be by sitting down to actually write, but I was scared. Therefore, it came as a surprise when the words came easily. I’m not sure if I can attribute this to beginner's luck, or if all of my time spent planning really paid off, however in the beginning stages of writing, I seemed to have no shortage of ideas.

In discussing how I might find a story that I wanted to tell, I was advised to spread out my ideas in all directions and see what felt right, so I created four different story lines with the intention of eventually narrowing it down to one, and further expanding upon it once it was chosen. The first was a story following a narrator and main character who invited the reader to learn about the environment alongside her as fellow “earthlings”. The following is an excerpt from the beginning of the story:
Hi! My name is Eden, and I live here, on planet earth. Chances are, you live here too, and that means we have one thing in common: we are earthlings, that means we both live on planet earth. Hello Fellow Earthling! I LOVE being an earthling, and even IF us humans could survive on other planets I would still choose earth. Earth is the ONLY planet that has everything I need to survive, fresh air, water, food, and (insert quirky reference to music/pop culture here). It’s like this planet was designed to be perfect for humans to live on!

...and from the middle of the story where the protagonist reviews some of the basics...

Oh, by the way, do you know what that word means, recycling? Well it’s a verb (an action word) that means to take something that has been used and it is going to be thrown away, and make it into something new. We recycle plastic, glass, metal, and paper. Recycling is a great way to stop plastic, and other stuff, from littering our planet- but it’s not the only way! We can also REDUCE and REUSE...When you put together REDUCE, REUSE, and RECYCLE you get the three R’s

While I was proud of this first attempt at storytelling, I felt that it lacked uniqueness, and did not offer any new ideas or story lines that hadn’t been covered before by current or previous children's literature about the environment. As mentioned in chapter two, there is no shortage of children's literature about the environment, dating back several decades. While I enjoyed writing this story, I felt that it was not a unique offering. However, what I gained from writing this was a chance to begin to develop Eden as a main character, who would continue to be a part of each story.

The second was a story told through rhyme. It followed the story of Eden, but this time situated her as both the narrator and a character in her own story. The story follows several students and their search for the perfect item to bring for earth day show and tell. Eden, in this story, creates a work of art to inspire others Here is a snippet of the prose from the very end of the story:

In class the next day, Eden buzzed with anticipation, she couldn't wait to share her creation! Finally, it was her turn to shine. “Our planet” she said, “it's yours, and it's mine” Looking up at the class she said “Now is our time! Some grownups think they can just say "nope throw up their hands, and say there's no hope, but we all know that there is work to be done, this will be our toughest battle, but it must be won. Some of us will fight with science and facts, some of us with protest through radical acts. Some of us will
fight back through theater and song, no matter the artform, it will move us along. We all have unique talents and strengths to share, they all serve a purpose and if we really care, I know we can achieve anything we dare.

I found writing in this style to be enchanting, each new line of the story was a puzzle to be solved, and I most certainly had the most fun in writing this story. I would later even make an attempt to retell one of the other stories in rhyme, although unsuccessfully. The rhyming nature also helped this story to feel the most appropriate for both lower and upper elementary, although I ultimately decided on a more advanced reading level.

For the third story, I deviated by removing the story from the school setting. This story placed Eden as a city kid, disconnected from nature almost entirely, but loves following along with the TV painter Robb Boss who creates picturesque forests and mountains with ease. When Eden’s whole family goes to visit Grandma who lives in the countryside, Eden has the chance to experience nature first hand, and even learns about how to grow her own plants. Here is an excerpt:

As the days and months went by, the air warmed up, the snow melted, and one day, Grandma Penny told Eden it was time to start the sprouts. “Sprouts?” asked Eden, “What are those?” Sprouts are baby plants, grandma said. She led her to the garden shed behind the house, and pulled out a big tray with lots of little compartments. They filled each compartment with soil, and in each one, Eden poked a small hole with one finger, and placed a seed in each one. Grandma kept her seeds in little scraps of paper towel or old seed bags, none of them new, with the name of the seed usually written on the outside in grandma’s cursive handwriting that Eden couldn’t quite understand. Grandma said that all of these seeds came from last year’s harvest. Eden didn’t quite understand what that meant. Grandma told Eden that day that they had planted lettuce, snap peas, tomatoes, beans, peppers, and squash. Eden believed Grandma, but to her all of the seeds looked pretty much the same. Some small, some big, some more flat and some more round, but they all were dry, and brown. Eden wondered how these tiny seeds would turn into food.

Again, much like the first story I wrote, although I thought that there was value to this story as well, it was not meeting the requirements I set out for myself in writing this story. While
there was a good focus on the environment, I felt that the creation of art did not play a large enough role in the plot, and the story lacked a focus on addressing eco-anxiety. Furthermore, this story was a bit too wordy and advanced for the age group I was intending to address.

With each story I wrote I learned more about what kind of writer I am, and I began to overcome some of the insecurity I had when I started the writing process. In the very beginning, when the idea of writing a children's book first came to mind, I had a vague notion of where I wanted the story to take place: inside of the art classroom. However, as I began to undertake the research discussed in the previous chapters about the wide variety of children's books about the environment that are already published, I felt that confining the story to just art class would be too limiting, and perhaps even too niche. Therefore, when I set out to write I initially avoided this setting almost entirely opting for the general classroom or the home, but eventually compromised by the fourth story. Similar to the second story, the fourth story is set inside of a school, but follows the characters throughout various spaces, including both art and science class in order to make connections to both artmaking and the environment in furthering the plot. Ultimately, I chose to proceed with my fourth and final story after narrowing down my choice between the second and fourth [see Appendix A for full text]. Once this choice was made, I had to edit and rewrite quite a bit as one would with any story, however this was an instance where looking back I wish I had done more research beforehand.

4.1.1 Engaging with the audience

As mentioned previously, there were several moments in which following my intuition led me astray, and there were a number of factors that I had never considered coming from an artistic as opposed to literary background. One such factor that was difficult to reconcile was the reading level I wanted to cater to. While picture books are most popular with younger elementary
students in grades K-2, I felt that in order to be successful, my story would be incompatible with the abilities of the average younger reader. This led me to look into the use of picture books in upper elementary (3-5) and investigate what makes for a valuable and enjoyable picture book for the upper elementary reader.

Luckily, I made these considerations before I began writing, and going into the story I knew that I was gearing it towards upper elementary age students. After writing it out I decided to use an online tool to check the reading level or Lexile score. I realized that because of the length and word choice I was closer to an average 6th grade reading level, and I had to make a significant number of changes in word choice and sentence structure. Ultimately making these changes allowed me to think through the story fully, not only making the book more accessible to upper elementary, but made for a better story overall.

4.1.2 Addressing Eco Anxiety

While writing the story, I specifically wanted to address ways in which young learners might handle their own eco-anxiety, and in the process of doing this I realized that there is not a one size fits all solution. To address this, I chose to include multiple viewpoints from various different characters which helped guide the protagonist through the many complex emotions that eco-anxiety can elicit, ultimately resulting in her channeling her frustrations into action. In the story, the protagonist learns from her science teacher that she isn’t alone in her passion for environmentalism, and that the problems of the world are not her burden to bear alone. I wanted to highlight the importance of finding community with those who want to work towards a common goal for the sake of problem solving as well as for our collective mental well-being. This also allowed me to foreshadow the resolution of the story where the protagonist realizes that her ability to enact a change can only go so far when she works alone, and is heightened when
she chooses to work with others. I had intended from the beginning to incorporate art making as an integral part of the story, therefore the art teacher's role in the story was to guide her in self expression through art, sharing with her how art can be both a tool to help organize and express the thoughts in one’s own mind. The art teacher shared her personal experience of making art to manage her fears and frustrations and suggests that the main character try to do the same. However it felt important to leave it up to the protagonist to begin her school-wide protest without the assistance of an adult, as yet another example to how one might react in facing their eco-anxiety. Through the display of her art, and through recruiting the help of her peers, the power that students do hold within their inner world is represented.

I was initially concerned that confining the story to exist only within an art classroom would be too narrow. My goal was to widen the readers' frame of reference for where and how they are capable of exercising their environmentalism, but I ultimately changed my perspective as I worked through the story writing process. I decided that school was a more developmentally appropriate setting, one in which the reader would feel familiar, and hopefully be better able to relate to the experience of the protagonist. As an educator and adult, trying to reposition myself with the mindset of a young reader I had to accept that while encouraging the reader to take an environmentalist mindset into all aspects of their life is an ambitious goal, it cannot be achieved without laying a foundation of understanding and learning to appreciate one's environment first. This realization also helped me to answer my final question: how can I better educate students about the environment in my own art classroom?

4.1.3 Building Environmental Awareness in the Classroom

In hindsight it is clear that my own enthusiasm was clouding my vision when it came to the reality of what it takes to not only teach a topic, but also to inspire a learner to become
passionate about it as well. While I am accepting of the fact that I may never be successful in captivating each and every mind I teach, I let myself get carried away in my expectations for what a picture book can accomplish. In no way is this meant to undercut the capability of picture books; I know and believe they can be incredibly powerful, but that power comes from how the story is told and how it shapes the reader.

I found it difficult at first to reconcile my desire as an educator to give direct and concrete information, and my job as the storyteller to create a tale worthy of being read. Furthermore, it was difficult to reconcile with the voice in the back of my head reminding me that although this story was hypothetically being written for a young audience, in reality its true purpose for the time being is purely academic. I was searching for ways to introduce the environmental topics covered in the story without understating the true nature of the climate crisis. The educator in me wanted to do so with lots of facts, overtly addressing the issue of climate change, and I was even wary of writing a story with a happy ending. My attempts at this did not make for the most unique or interesting story, so I kept trying. Eventually I recognized that in order to grow student’s passion for taking care of the environment, I cannot start at the end. They must first understand what their environment is, how it works, and where they fit into it. For the protagonist of my story, this meant being an animal lover already, passionate about keeping animals safe and willing to take a stand to protect them. Her vested interest in animals led her down a path of wanting to know more about the environment and led to a newfound interest in not only taking care of the environment for the sake of animals, but for the sake of her local community as well. I know that for many of the students I teach, their connection to the environment might not be strong, and they may not even be able to recognize that they are indeed a part of their environment, initially. Starting from the ground up, with simpler lessons for
younger students is not shielding them from the truth, it is an essential step in building up their compassion and understanding for their world, and for some this may lead to a desire to protect this environment. In pedagogical terms this is simply scaffolding, a valuable tool to help students pull themselves up to higher levels of understanding and thinking, with a gentle boost from an educator they are soon ready to continue climbing up on their own. Ultimately, I chose to write an idealistic story with a happy ending because I believe an optimistic outlook would be more effective than an entirely realistic (albeit pessimistic) account of the state of our world. I feel confident in this decision knowing that discussions of the environment, climate change, and taking care of our world can occur at every level without sacrificing the integrity of the lesson, and making art can help get us there.

4.2 Creating a Dummy Book

As mentioned before, this was not a linear process. Upon completing the rough drafts for the four different versions of the story, I set out to begin visualizing what the illustrations might look like. For each of the four story lines, I created very crude thumbnail sketches of anywhere from the first three pages to half way through the story. Creating these thumbnails helped me to visualize scenes and the setting, as the characters had been lying in wait.

Part of what inspired the idea of creating a children's book was a series of sketches I created several years before of various characters [See figure 4.1]. I began sketching these characters in the mornings as I stood guard for hall duty, waiting for hundreds of kids to rush past on their way to class. Despite my personal disdain for the morning, I find it to be a time when I am creative and emotive, and I enjoyed creating these doodles inspired by the many faces that ran past (despite my daily pleas for them to use walking feet). I had a sense of wanting to craft these characters with unique looks and personalities when I first began to sketch, but I had
no clue where these characters would later end up. Starting with this idea of what I wanted the characters to look like I modeled these characters sketches I had created several years prior to the characters in the story. Somehow, creating personality for these characters in their story led to small changes in how they expressed themselves visually.

![Initial character sketches](image)

*Figure 4.1: A selection of the initial character sketches. Graphite on paper, 2019.*

The process of drawing these sketches, and further along into the process of illustrating the dummy book, helped me to reconnect with myself as an artist in an exciting and revitalizing way. In the time I spend as an artist away from the classroom, I dedicate very little time working in 2D drawing and painting, and tend to gravitate much more towards 3D work, so I knew at the onset that this would be challenging. While I was enthusiastic to take on the challenge of creating these illustrations, I overlooked my own insecurities as an artist, and the challenge they would pose. While I have always loved the process of artistic creation, my own insecurities
regarding my artistic abilities have often been a stumbling block. I can first recall this tenuous feeling in middle school, comparing my artistic ability to my peers, and often feeling inferior to the other artists in my class. This feeling followed me through high school, and college, where I finally began to come around to accepting my artistic style for what it was, and appreciating that everyone’s art should indeed look different. This growth I have endured as an artist would later help me to sympathize with my own students who frequently compare their art to others. The experience of observing a student melt down over their own perceived lack of ability, as I look down and see a beautiful display of creativity, hard work, and self-expression has transformed my perception of the process of making art all together, and ultimately helped me to fully accept myself as an artist. This is why I was surprised when my past insecurities re-emerged during this process. One of the manifestations of this was being anxiously putting off starting the process of drawing and sketching altogether. Much like starting the process of writing, I put off putting pencil to paper for a time. When I began to sketch the characters into various scenes, I found it very difficult to break out of a repetitive style of page layout. It was almost as if I was watching the story in my head as if it were a movie, and therefore I kept drawing scenes in the same way; very straightforward with the viewer looking in, not unlike movie stills [see Figure 4.2].

With some encouragement, I recognized that the repetitive nature needed to be broken up with different perspectives. I began experimenting with smaller floating vignettes [see Figure 4.3] that followed the story line, and creative ways to break the characters out of their scenic world to lend balance to the various illustrations in the book.
Figure 4.2: A scene depicting the main character from a straightforward point of view

Figure 4.3: Eden returning a book to her science teacher, visibly upset.
Once the illustrations were complete, it was a seemingly simple matter of scanning them to digitize the images and creating the digital dummy [see Appendix B]. Unsurprisingly, this took longer than anticipated due to the sometimes frustrating nature of trying to make technology yield to one's own will. However, this was yet another step in the process that served as an opportunity for learning. After several failed attempts at determining the best method for scanning the images, I finally found worked best, and began the process of scanning all of the illustrations I needed for the dummy-book, as well as the many pages of sketches I had accumulated. Once this process was complete, I set out to create the digital dummy book using the online design website Canva. This process was also rather experimental, as I went into this with a limited understanding of digital editing and graphic design tools. I first had to determine the page layout which required finding the correct size for the pages. Initially, I made the mistake of making the page size too small, leading to frustration and confusion over font size. Once I realized I needed to double the page size, I was able to start inserting illustrations alongside words more accurately. In this process the biggest hurdle I faced was accepting the imperfection that is a dummy book. I felt that text looked laughably crude in juxtaposition with the sketches, but I had to remind myself of two things: I am not an expert children's book editor with the tools and knowhow to create seamless page layouts, and, a dummy book serves the purpose of giving anyone potentially interested in the book a general idea of what the book would look like, usually including illustrations with even less detail than what I put forth. Ultimately, the text layout of the dummy book [as noted in Figure 4.4 and 4.5] remains one of my biggest critiques of my own work, but fortunately I have learned from this process what I can do to better address this issue if I continue my exploration of creating picture books.
Figure 4.4: An example of a page with an excessive amount of text.

Figure 4.5: An example of a page with a more balanced ratio of text to imagery.
4.3 Creating the Illustrations

As an artist I find that often starting a new task can be more enticing than finishing up the previous one, so I began working on the larger illustrations before even completing the finishing touches on the dummy book. I knew that for these larger illustrations I wanted to select four scenes from the sketches I created for the dummy book, and I felt confident enough in my sketches to keep them relatively unchanged. My plan was to make scaled up print outs of each sketch and trace them out using a lightbox. I realized at this point that I would have to change one small element of my original plan. As I stated in chapter three, I intended to make four 10” x 20” full page spreads. The reason I chose this size was because I anticipated a square layout would be best for my book, however once I began learning more about the reasons why an author might choose square over vertical or horizontal for their book layout, I decided that vertical would suit my story better, as is recommended for stories that follow a vertical main character. Therefore, I decided to change the size to 12” x 18”. Having made that decision, I calculated a rough estimate on how much to enlarge the sketches, printed them out, and taped them together [See figure 4.6]. Using a lightbox, I traced the sketches onto my paper.

Figure 4.6: Example of one of the sketches enlarged and printed out to trace.
Before I began working on the paintings, I did some experimentation with color to try and determine a cohesive color palette for the story. I then mixed various shades to represent skin tone for each character and chose three colors that I felt represented their personality to later use in depictions of each character [see Figure 4.7]. Once I was satisfied with my experimentation, I began painting. My primary medium was watercolor, accompanied by colored pencil and ink on occasion.

Figure 4.7: Color experimentations on scrap paper.

One of the creative decisions I had to make in this process was how to address the negative space which had been intentionally left in many sketches for the purpose of including the story text in the dummy book. Before creating these paintings, I had previously created several works of art in a similar style [See fig. 4.8] as a way to practice my illustrative style, and try to determine whether or not this might be something I wanted to investigate further. In making these paintings one thing I learned about myself as an illustrator is that I find myself enjoying time spent in small background details such as books on a shelf, the wallpaper, or a frame on the wall. I enjoyed working little details into the classroom scenes in particular, with my own classroom in mind as I illustrated a messy countertop, but used my imagination as I
painted the idealistically organized shelves. Throughout the process of illustrating as I was painting, the meditative nature of painting the little details served as a much-needed distraction from the larger picture when I felt in need of a break. I chose to extend the background into these areas of negative space and include more of these little details, and I imagine that in a published book the text could easily be superimposed over any images in the background.

After the work of researching, writing, and sketching, the process of painting felt almost recreational. Of course, I made every effort to create quality artwork, but the familiar and soothing nature of working in watercolor made the painting process the most enjoyable, and in a way served as an example how restorative the process of creating art can be. I was pleased to find myself in this position of feeling soothed by the artwork I was creating [see Figure 4.8, 4.9, 4.10, and 4.11 for completed works] knowing that this is ultimately why I chose to write a story about using art making as a way to manage our fears, anxieties, and stressors. While the story focused on specifically eco anxiety, the concept of art as a therapeutic practice can be applied to a vast range of experiences, and for me the process of creating art has helped me to find solace and find my voice.
Figure 4.8: A completed illustration of pages two and three. Watercolor and ink on 12”x18” paper, 2023.
Figure 4.9: A completed illustration of page six and seven. Watercolor and ink on 12”x18” paper, 2023.
Figure 4.10: A completed illustration of pages eighteen and nineteen. Watercolor and ink on 12” x 18” paper, 2023.
Figure 4.11 A completed illustration of pages twenty-four and twenty-five. Watercolor and ink on 12”x18” paper, 2023.
5 CONCLUSION

While I was focusing intently on completing the task I had set out to accomplish, trying to create a meaningful story that would engage young readers while searching for ways to deepen my understanding of eco-art education, I found myself fully immersed in the creative side of this experience. It was difficult to think about the bigger picture and the specificities of my research questions while I was working through the artistic and creative elements of this process, but now as I sort through my thoughts and reflections it is clear that the lessons I have learned from this experience go far beyond the initial scope of my investigation. My original goal was to determine how to effectively convey the significance of environmental justice to young learners through a story that also acknowledges and helps learners to address eco anxiety. This query and subsequent artistic investigation led me to additional insights about becoming a better eco-art educator, as well as providing deep personal insight into myself as a learner, and artist. In this final chapter I will address both the unexpected findings pertaining to my research questions, as well as the additional insights, and new ideas I can now take with me into the classroom.

5.1 Reflecting on Unexpected Lessons Learned

The unexpected lessons I learned throughout this process were just as valuable as what I learned pertaining to my original research questions. In retrospect this comes as no surprise, choosing any unfamiliar artform through which to experiment and seek answers would have inevitably led me to new discoveries. Venturing into picture book illustration has led me down many fruitful paths, and while this project is coming to a close, I feel as if I was just barely able to scratch the surface, and there is so much left for me to explore. This experience has had a profound impact on how I view myself as an artist, and my teaching philosophy overall. I would like to reflect, finally, on the unexpected things I have learned throughout this process. It would
be remiss to exclude these findings, despite their irrelevance to my original research queries, because of the profound impact they will have on my teaching going forward.

5.1.1 The difficulties of navigating creativity on demand

I am both an art educator and an artist, and while I may engage in creativity and art making on a daily basis, I do have a limited amount of uninterrupted time to spend on personal artistic endeavors. I was given the opportunity to be both a student and an artist once again and this has helped me to reconnect to the vulnerability that comes with being a learner. The vulnerable feeling that comes with taking on something new was one that I had not experienced in a meaningful way in quite some time. Being put back in the position of not knowing the first thing about what I am doing, like writing a children's book, or a master's thesis, is scary, even debilitating at times. I am a firm believer in experiential learning, and I often try to relay this concept to my students when they question activities in the classroom that require them to experiment, fail, and re-evaluate before coming to the expected outcome. While it is easy for me to encourage trial and error, independent exploration, and even failure as a part of the learning process, I have been reminded of how much I desire structure and guidance as a learner. I hope that I will now be better able to recognize those students who do need a little extra guidance along the way.

In a similar way, I have revisited the feeling of making art as a student, it was a much-needed reminder of the difficulty of trying to conjure up something ephemeral as artistic inspiration on command. I had months to tune in and out when needed, come up with ideas, change them, and bring them to life, and I still found it difficult to meld my creativity to the required schedule. Why, then, are students expected to get creative on demand depending on their daily class schedule? While I have always recognized that students will have a difficult day
now and again and creativity can come and go, I am returning to the classroom with a renewed compassion for exactly what that feels like.

**5.1.2 Helping Students Overcome Self-doubt**

When the creativity and inspiration were plentiful, I was able to create a body of artwork that I am proud of, however, as mentioned briefly in chapter four, this did not come easy at first. As I worked through previous insecurities, and found joy in what I was creating, it helped me to affirm a feeling that I had been questioning for some time: as an art teacher, how do I want to balance teaching technique, skill, and methods with allowing for students to have artistic freedom in their self-expression? Surely, both must exist, and you cannot have one without another, but when and where should I draw the line? While working through my own feelings about my proficiency as an artist, one of the thoughts I had to work through was: “Is my artistic ability even good enough to accomplish what I am trying to do?” In these moments, I felt that my perceived lack of ability acted as a deterrent to my own progress, and I saw parallels between the ways in which my students experience this form of self-doubt as well.

**5.1.3 Supporting Students Ambitions at Every Skill Level**

In the classroom, helping to foster student’s self-esteem in their artistic ability is one of the biggest challenges, particularly with upper elementary students. At this age when students begin comparing themselves to others more acutely, I tend to see formerly enthusiastic young artists develop insecurities about their artistic abilities, as they try to move towards realism in their art. To make matters more complex, the disparity in ability that can be found in a single fourth or fifth grade class can be vast, with some already able to grasp proportion and perspective, while others might still be developing the motor skills necessary for legible handwriting. Being an art educator means helping students at every stage of development build
confidence in their artistic ability. This confidence can and should come from seeing an improvement in one's artistic abilities, but if a visible improvement in technical skill is the only measurement we use for success, eventually we may be left feeling stagnant because growth isn’t always straightforward. On the other hand, if we measure a student's success based on the value of their message, their dedication, or passion for creating artwork, their artistic creation and expression can be appreciated and valued at every level, and throughout their growth as an artist. The technical skills that make up the foundations of art making are invaluable to our ability to express ourselves as artists, however I want to enable my students to see their intrinsic value as an artist not because they have mastered these skills but because they have mastered the ability to utilize these skills, at any level, for the means of self-expression.

The caveat is as an art teacher it is also my duty to guide those who, like myself, fear the sense of failure that comes from not feeling insufficient as an artist. Far too many times I have watched students sit idly with furrowed brows, paralyzed by the fear of doing something wrong, or poorly. To address this in the classroom, I try to relay the idea that failure only occurs if we do not make any attempt at all, and the attempts we make along the way are an important part of our process as artists. Unskilled art, sloppy art, and student made art is still art, and all of the fine art that holds immense value in our society couldn’t exist without their first having been a beginner artist at the end of the paintbrush. Moving forward I am excited to find new ways to encourage my students to consider this point of view, and think of themselves as artists simply because they have the desire to create art.

5.2 Implications for the Future

The true measure of whether or not I have actually learned something from this process, and not just observed it to be true will be what I do with all of this newfound knowledge. It is
my hope that completing this project is just the start of a new chapter in my path as an educator and artist. There are many different directions in which I might turn next, but a few possibilities stand out. First, there is the option of submitting my work to publishers. Completing this project has helped me learn about what goes into writing a children's book, as well as helping me connect with myself as an artist, but that is only half of the battle. I am interested in learning more about what it takes to actually get a book published, and even if nothing comes of it I know that I could learn a great deal about the process. Furthermore, I have a feeling that I have more stories left to tell, and even if it is simply for my own enjoyment, I do not think this will be my first and last attempt at being a storyteller and illustrator.

The scope of this project introduced me to a range of topics, and beyond writing and illustrating I was also very interested to learn about outdoor education as an element of environmental education. Outdoor education can be anything from wilderness survival training to plant identification, but it all serves to help connect people to their world through real life experiences. In my research I came to better understand the importance of having a connection to one’s environment, something I realized that I have taken for granted in the past. Coming from the perspective of a public school teacher situated in suburbs near a major city, there are many barriers that keep myself and my students away from being able to take our learning experiences outdoors.

One of the ways I foresee bridging this divide is through a school garden. While I have previously worked in school gardens before, the current school I am teaching at has never had a garden planted, so the opportunity awaits. I have looked into applying for several grants which serve to provide funds for the necessary materials needed for starting a garden, and of course I am lucky to have family ties to a true gardening expert, always ready and willing to advise
throughout the process. School gardens provide so many opportunities for cross curricular learning, and I am optimistic about further exploring how I can bring my classroom outdoors, potentially through the use of a school garden.

5.3 Concluding Thoughts

No matter the trajectory of my future endeavors, I am confident that my guiding principle will serve me well in whatever I take on. I have learned from this process the importance of being a learner, and staying in a perpetual state of seeking out new information. For the first time in my academic career I had autonomy over what I was learning as well as how I would study it, and it affirmed that which I already knew: through self-guided inquiry we are more invested in what we are learning, the internal desire to learn is what drives us to keep learning.

Choosing my own path also led me into uncharted territory, where I was reminded of what it is like to be a complete beginner again. Although I had my trepidations at first about choosing children's book writing and illustration as the medium through which to conduct this research, ultimately, I am so glad I did. Having to learn something brand new, making mistakes, and struggling through the process, and then being able to look back and take pride in the progress I have made has helped me to better empathize and relate to the everyday experience of the students I teach.

Fortunately, if I can rely on myself for one thing it is curiosity. I can say with certainty that I am never not drawn to trying new things, and while in the past I have stopped short of trying new things for fear of failure, I believe my outlook on learning has shifted. Just because I am an adult, a teacher, an educated person, does not mean I have to be good at things the first or fiftieth time I try, because I am, and want to remain a learner. As this phase of my life as a university student ends, I am reminded of the fact that the learning does not have to end here, and
I want to set a precedent for my students that it is perfectly acceptable, and expected for learning to be a lifelong process, that can and should continue even after graduating from institutions of learning. I leave this experience with a renewed excitement for all that there is left for me to learn, and the journey that awaits me whenever I choose to go out and learn it.
REFERENCES


https://www.britannica.com/topic/Andy-Goldsworthy


https://doi.org/10.1111/cdev.13279


Hsiao, C.-Y., & Shih, P.-Y. (2016). Exploring the effectiveness of picture books for teaching young children the concepts of environmental protection. *International Research in*

https://doi.org/10.1080/10382046.2015.1106203


https://www.hilaryinwood.ca/pdfs/writing/Creating%20Map%20Ecoart%20Ed.pdf


APPENDICES

Appendix A: Story Text

Hello, my name is Eden. A few things I would like you to know about me before we begin: I am nine years old, I have one brother, one pet dog, and a prized collection of refrigerator magnets from all of the states I have visited. I am currently in the third grade, and I go to school with my best friend Ruth. In school, I love art class and science class the best, besides lunch and recess. Those are always everyone's first favorites.

If I sound like a pretty normal kid, that's because I am. I'm not like other characters you might see in other books, I'm just like you. I don't have super powers, I'm not a princess, or a spy, I'm just a normal kid, living here on planet earth, so that’s one thing we have in common. If you are still reading this, I would like to tell you a story. It's a really good story, because there is action, drama, and tragedy, but still a happy ending, like all the best kinds of stories. This is my story, and it starts off at school, in my favorite class, on a day just like any other.

I was excited to arrive at art class because I knew that we would be painting that day. I tried my best to have fun, and ignore Timothy Crow mixing up all the paint colors, but when it was time to wash up he drenched me with water at the sink, splishing and splashing everywhere! Ms. Moss, our art teacher, rushed over to the sink to shoo Timothy away, but it was too late! My best friend Ruth and I grabbed as many paper towels as we could- and tried our best to clean it all up and dry off before it was time to leave.

Grumpy, and still a little wet, I made my way to my second favorite class that day, science. It’s my favorite because I love learning about outer space, plants, and most especially,
animals. I love animals. Big ones, like polar bears and tigers, and little ones like hamsters, and turtles and medium ones like house cats, or racoons.

On that day in, Mr. Greenwood’s science class, we were learning about natural habitats. “Polar Bears live in the arctic, because that is their natural Habitat, Meanwhile, Tigers live in the jungle, the jungle is their natural habitat. A natural habitat has everything an animal needs to thrive, food, water, and a climate, or weather, that is the right temperature for them” Sadly, Climate Change can hurt these natural habitats. When temperatures get hotter than what we people, and animals are used to, it can cause really big problems for humans and animals. I had heard of climate change before, but I never really knew what it was.

“Excuse me Mr. Greenwood, but HOW is climate change hurting these animals?” I asked. Mr. Greenwood explained to the class that climate change is all about weather. If the temperature is too warm in the arctic, the snow melts. If it is too dry in the jungle the plants can’t grow, and the animals have less to eat”. I was shocked! I knew I needed to know more about this so-called climate “change” and how on earth to un change it! After class, I marched straight up to Mr. Greenwood and told him that if there was something that was hurting the animals, I need to know everything about it I wanted to know how put a stop to climate change!

Mr. Greenwood smiled and replied “Eden, I am so glad to hear that you are so passionate about protecting our environment. You might just be an environmentalist!” “A what?” I asked “An environmentalist is someone who cares so much about the environment that they do everything they can to try and protect the environment, and they make sure that others know how to protect the environment as well. “Here, take this book home with you, and tell me if you have any questions” Mr. Greenwood said and he handed me a book called “We Can Save the Earth”
That night, when I got home, I read the book cover to cover. I learned so much more about climate change, like did you know that climate change is also called global warming sometimes? That’s because the temperature of the whole entire planet is getting a little warmer every year. This is because of air pollution, like what comes out of gas cars and buses, and factories too. Sometimes you can see and smell air pollution, and sometimes you can’t. Then I found a word I had never heard of before: “sustainability” I learned that sustainability means to not use too many resources too fast. Oh, and resources are things that we use every day like energy, water, wood, and even food. Learning about sustainability made me think about Timothy Crow splashing water all over the art room, and Ruth and I having to clean it all up with paper towels. Learning that paper towels actually came from trees helped me realize it would be better if I used less, so I put some old dish rags in my backpack for the next time I went to art class, just in case there was any water to be cleaned up.

Reading that book made me see the world in a different way. The next day I couldn't help but notice that all around me, people weren’t taking care of the environment. In the morning on the way to school, I noticed that Dad left the car running while we waited in the carpool line to get out of the car. At lunch, I saw something I had never noticed before. In the cafeteria, there were no recycling bins! In the book Mr. Greenwood had given me, I learned that recycling meant taking stuff that had already been used, and turning it into something new. People put the kinds of things that can be recycled, like plastic bottles or aluminum cans into recycling bins so that these things could be taken to a recycling plant, a special place with fancy equipment that turns this trash back into brand new items. I also learned about the other R’s- Reducing and Reusing. Reusing means to use something as many times as possible before throwing it in the trash, or recycling, and reducing means skipping out on buying new things all together unless you really
need them. As I took my sandwich out of a reusable container I thought to myself, hey-I'm reducing and reusing already! But when I passed the garbage can and saw how many plastic bags and containers were in the trash. I wished I could get everyone in the whole school to understand how important it is to reduce, reuse and recycle.

By the time I made it to Mr. Greenwoods class again, I was feeling really down in the dumps. I could hardly focus on the lesson, because I was too distracted looking outside at all the cars, and big trucks going down the street blowing out exhaust. When class was over, I walked to Mr. Greenwood’s desk and solemnly handed him the book. I think Mr. Greenwood could tell something was wrong, because he asked me what was on my mind that day. I told him that now that I know all this stuff about the environment, I can't help but feel terrible because all around me, people were not taking care of the environment. “Ohhhhh I see...You've got the going green blues”… “It happens to many young environmentalists.” he told me. Once they find out about all the many different ways our environment might be in danger, because of what humans have done to our environment, it can start to feel that everywhere you look, you see another problem! it can be a real bummer! Yeah, it was a real downer! But then Mr. Greenwood said something that made me feel a little better. He told me that it’s not my job to solve the world's problems alone, and there are thousands of other people out there just like me, who really, truly care. And we are all working towards the same goal!

At the end of the day, it was finally time for art class but I was still in the pits, and Ms. Moss could tell. That’s when Miss Moss said she knew exactly how I felt because sometimes she got the going green blues too! Miss Moss rushed over to the cabinet behind her desk, and pulled out some old papers. I looked down at the big pile of drawings, paintings, and collages. “When I
get the blues” said Miss Moss “I try to make artwork that shows my feelings…Take a look at this one here” she pointed to a collage that had magazine cut outs of different pictures of plants and animals and words like “Endangered” “deforestation” and “Act Now”. “I made this one after I saw a documentary about the Amazon Rainforest” she said “I was feeling angry, and frustrated at the time, and even through making this collage didn’t change anything about the world around me, it made me feel better in here and here” She said, pointing to her heart and her head. “One thing you must know, Eden, is that if you let your thoughts get the better of you, and you get stuck feeling blue, you won’t be able to focus on what you CAN be done”.

I thought for a moment about what Miss Moss had said, and then, suddenly, I got an idea. “Miss Moss” I asked “Would it be ok if I were to make a collage as well?” Miss Moss smiled and nodded. Together, we got out old magazines, glue, and scissors, and an old piece of cardboard, then I got to work. I found pictures of fish, salamanders, and even cute little otters, then glued them down, and at the bottom I wrote my message. When class was over, I brought the collage up to Miss Moss. “I made something for our classroom I thought maybe…” “We can hang it up right by the sink!” Miss Moss chimed in, excitedly. “Yes!, “That's what I was thinking” Miss Moss hung up the collage with a smile and thanked me for my “very thoughtful creation.”

That night, I was feeling really inspired by what I created in art, and suddenly, I had a new idea. I thought about how in Mr. Greenwood’s class, sometimes students would ball up papers, throw them around the room, or just leave them on the floor instead of throwing them in the recycling bin On the back of an old cardboard box I found in the recycling pile at home I painted a big picture of a forest. Early the next morning, I snuck down the hallway, and left the
cardboard painting in front of Mr. Greenwoods door with a note pinned to it. That very day, Mr. Greenwood had hung my painting right above the recycling cans, and I happened to see my classmates taking a look at it. I even saw one of my classmates try a second and even third time to make sure they got their paper ball into the recycling while they were pretending to shoot hoops. I was happy I’d caught my classmates' attention with my sign, but I knew this was just the beginning.

Back at home I did some research with Mom online about plastic pollution, like the plastic bags I saw in the cafeteria. The pictures online of plastic floating in the ocean did make me kind of sad, but I thought to myself, if these pictures make ME want to stop using so much plastic, maybe the same would be true for my classmates. That's what gave me an idea for my next poster. In the kitchen, I searched through the recycling bin and found plastic water bottles, a plastic fork, and a plastic baggie. I taped these to an old poster board I found from my brother's science fair project a few years back, because after all, he wasn't going to need that again. Under the pieces of trash I wrote: REDUCE: USE LESS PLASTIC, BRING YOUR OWN FORK REUSE: BRING A REUSABLE WATER BOTTLE RECYCLE: KEEP PLASTIC FROM GOING IN THE LANDFILL

Getting my poster to school was tricky, and I had to be careful not to crush it in my backpack. When I crept into the cafeteria that morning, I wasn’t sure if I would even be able to hang her sign. I knew Miss Moss and Mr. Greenwood were happy to support my poster project, but I wasn’t sure if I would find anyone to help me in the cafeteria. I thought I was alone as I was struggled to tape up the sign, when suddenly out of nowhere, I heard a voice “Need help with that young lady?”.
It was Mr. Fixer, the school’s custodian! At first, I thought I might be in trouble, Mr.
Fixer wasn’t too kind to kids making a mess. “Oh, I umm…I'll be leaving now” I tried to say, in
a hurry “No need” he replied. I could tell that today Mr. Fixer was in a good mood, and he didn’t
seem to mind. “Let me go get some push pins and we’ll get that sign of yours hung up” he said
as he shuffled away. He came back before I could even consider making a run for it, and together
we hung up the sign right by the trash cans so everyone would see them as they went by. “I like
your message young lady” he said “I see far too many people in this cafeteria throwing stuff out
like it's nothing.” He held up a plastic water bottle from the trash, and took a long look at it.
“Don’t people know that it takes 400 years for a single piece of plastic to decompose” I did not
in fact know that…but that afternoon when it was time for lunch, I did notice that a water station
had been set up in the cafeteria with a sign that read “refill your water bottle here”.

After three successful missions, I knew that I was ready to take on the biggest challenge
yet: the bathrooms. Always a mess of paper towels spilling out of the trash cans, and water on
the floor, I thought the bathrooms might be a lost cause, but something was telling me I had to try.

At recess, I found Ruth, and filled her in on the plan. “We’re going to make posters for
each bathroom, boys AND girls” I said. "That is A LOT of bathrooms" Ruth reminded me. She
was right, but I was one step ahead of her. I handed Ruth a list of the best artists in third grade.
“Tonight we are going to need to chat with Samantha, Dilan, and Brian, and let them in on our
secret plan. Hopefully, they will be willing to help.” That night, I sent a message to our friend
group and we worked out our plan.
Eden: “Listen up everyone- I have a big idea, but I’ll need your help. Have you noticed all of those posters up around the school? I’ve been working on putting posters up around the-

Samantha: Sarah interrupted her “Wait a minute, I thought that Mr. Greenwood put those up”.

Ruth: “Nope, That was all Eden”.

Eden: “So, I like to make my posters with collage, but I know everyone here has a different talent. Dilan, you are great at drawing, so maybe you can draw your poster.

Dilan: Sure thing! I’m gonna draw a giant trash monster taking over the school!

All: We love it, Awesome, yeah!

Eden: And, Brian, I know you like to paint, so you can do that”.

Brian: Hmm…Yes I will have to put some thought into this Eden, but I will certainly be using water color paint to symbolize the importance of the water we use every day…

Eden: I’m sure it will be beautiful. By the way, I have been making my posters with recycled materials, so if you have any paper or cardboard you want to recycle, you can use that as the backdrop for your poster.

Samantha: I think I am going to make mine a collage out of old magazine pictures and words!

Eden: Thanks everyone for your help. Monday morning, let's all meet in the cafeteria, during breakfast to talk about our plan.
Sunday night I was so excited I could hardly sleep. I knew Monday morning was going to be a really big challenge. When I got to school, my backpack was stuffed with posters. I found Samantha, Brian, Dylan and Ruth all sitting together in the cafeteria waiting for me like we had planned. I noticed right away they were all sitting rather quietly. Samantha was worried. Her mom said we might get in trouble for putting up posters without permission, and now everyone was nervous. I hadn't thought of this possibility yet. Miss Moss, Mr. Greenwoods, and Mr. Fixer were all adults who had helped me with putting up the posters before. Now it was just us kids doing this all on our own, no permission, no asking for help. I thought for a minute before I looked at them and said "OK, we have two options. We can ask Principle Carson for permission first, and risk being told no, or we can just put up the posters and hope for the best. If anyone doesn’t want to help, I won't be upset, I’ll understand! But if anything goes wrong and we get in trouble, I promise I’ll take all the blame. This was my idea after all.” The crew sat for a moment and thought, then Samantha stretched out her hand. “I’m in” she said. With that, each member put their hand in the center, and quietly I whispered “1…2…3… Go team green! With that, breakfast was ending and it was time to go. "Good luck” I said “and remember, we're doing this for a good cause”.

I walked towards my classroom and turned toward the girl’s bathroom, ready to hang the first poster. I waited for all of the other girls to leave before getting out the tape. I was excited, and nervous, all at the same time. Once the first poster was up, I felt less nervous, and more excited. I scurried from one bathroom to the next quickly taping posters to the wall. As I finally finished hanging the last poster, I stood back to admire my work. Suddenly, I heard the familiar sound of tappy footsteps coming around the corner. I tried my best to stuff the tape into my backpack and look innocent but it was too late. There was Mrs. Berns staring down at me. I'd
been caught in the act. “What EXACTLY do you think you are doing young lady? Hanging up posters without the permission of the school? This is unacceptable, come with me right away” Ms. Berns cried out. I felt tears in my eyes as I followed Ms. Burns down the hallway.

“Sit right here” she barked. I sat down in the big chair outside Principal Carson’s office. Inside, I could hear Ms. Burns telling Principal Carson about what she saw that morning. Suddenly, Principal Carson was at her door. “Please, everyone come into my office and let's chat” I took a deep breath and stood up. I'm doing this for a good cause- I thought as I walked in. Principal Carson sat down, and I noticed she didn’t look upset, maybe this was a good sign!

“So” she said “Tell me about these posters you all hung in the bathroom, Ms. Burns tells me that you all vandalized our school, but it looks to me like your posters were about keeping the school and the environment clean” she said. In my strongest, most grown up voice I said “Yes that's right! I did not vandalize the walls, I hung up a poster that was meant to encourage the other students to use less water and paper towels in the bathroom!” “Really?” replied Principle Carson, she seemed surprised “How did you get that idea?” Suddenly we found ourselves telling Principle Carson the WHOLE story about how we came up with our plan. Principal Carson looked deep in thought as she said “I am so impressed by your effort and dedication to getting other students to care about our environment, and I even think that this could inspire some of the grownups in the school to do better as well. I’m impressed!”

“So, we’re not in trouble?” Samantha asked. “No, certainly not” Principle Carson smiled, and shook her head. “You all took a risk, but I can tell you are doing this because you care. I am very proud of you all for being leaders, and trying to encourage the whole school to go green. Actually, this gives me an idea!” Principal Cason said with a smile “How would you all feel
about starting an Eco-Club here at the school? There are all kinds of different things an eco-club might do. Oh, like make a school garden?” Asked Brian, - “My cousins school had a littering clean up day all around the school” Sarah suggested,

“What if we made a video about our school’s eco-club and shared it with other schools?” Said Dilan. And I had one more idea to share “Hey, what if instead of posters, we started a mural on the outside of the school all about taking care of the environment”. Principle Carson smiled, and said these would all be great things for us to do for our school, our community, and the environment… so we did!
Appendix B: Dummy Book

The Going Green Blues
Dara Andre

Hello, My name is Eden. A few things I would like you to know about me before we begin: I am nine years old, I have one brother, one pet dog, and a prized collection of refrigerator magnets from all of the states I have visited. I am currently in the third grade, and I go to school with my best friend Ruth. In school, I love art class and science class the best, besides lunch and recess. Those are always everyone's first favorites.

If I sound like a pretty normal kid, that's because I am. I'm not like other characters you might see in other books, I'm just like you. I don't have super powers, I'm not a princess, or a spy. I'm just a normal kid, living here on planet earth, so that's one thing we have in common. If you are still reading this, I would like to tell you a story. It's a really good story, because there is action, drama, and tragedy, but still a happy ending, like all the best kinds of stories. This is my story, and it starts off at school, in my favorite class, on a day just like any other.

Figure B.1: Title page and page one of the dummy book.
I was excited to arrive at art class because I knew that we would be painting that day. I tried my best to have fun, and ignore Timothy Crow mixing up all the paint colors, but when it was time to wash up he drenched me with water at the sink, splishing and splashing everywhere! Ms. Moss, our art teacher, rushed over to the sink to shoo Timothy away, but it was too late! My best friend Ruth and I grabbed as many paper towels as we could and tried our best to clean it all up and dry off before it was time to leave.

Figure B.2: Pages two and three of the dummy book.
Grumpy, and still a little wet, I made my way to my second favorite class that day, science. It’s my favorite because I love learning about outer space, plants, and most especially, animals. I love animals. Big ones, like polar bears and tigers, and little ones like hamsters, and turtles and medium ones like house cats, or raccoons.

On hat day in, Mr. Greenwood’s science class, we were learning about natural habitats.

“Polar Bears live in the arctic, because that is their natural habitat. Meanwhile, Tigers live in the jungle, the jungle is their natural habitat. A natural habitat has everything an animal needs to thrive, food, water, and a climate, or weather, that is the right temperature for them. Sadly, Climate Change can hurt these natural habitats. When temperatures get hotter than what we people, and animals are used to, it can cause really big problems for humans and animals,” Mr. Greenwood told the class.

I had heard of climate change before, but I never really knew what it was, so I raised my hand to ask “Excuse me Mr. Greenwood, but HOW is climate change hurting these animals?”

Mr. Greenwood explained that climate change is all about weather. If the temperature is too warm in the arctic, the snow melts. If it is too dry in the jungle the plants can’t grow, and the animals have less to eat!

I was shocked! I knew I needed to know more about this so-called climate “change” and how on earth to un-change it! After class, I marched straight up to Mr. Greenwood and told him that if there was something hurting these animals I needed to know about it! I wanted to know how to put a stop to this thing called climate change!

Figure B.3: Pages four and five of the dummy book.
At the end of class that day, Mr. Greenwood told me that he was happy to hear that you are so passionate about protecting our environment, and he told me that I might be an environmentalist. He handed me a book called "How to save the earth" and that night, when I got home, I read the book cover to cover. I learned so much more about climate change, like did you know that climate change is also called global warming sometimes?

That’s because the temperature of the whole entire planet is getting a little warmer every year. This is because of air pollution, like what comes out of gas cars and buses, and factories too. Sometimes you can see and smell air pollution, and sometimes you can’t.

Then I found a word I had never heard of before: “sustainability.” I learned that sustainability means to not use too many resources too fast. Oh, and resources are things that we use every day like energy, water, wood, and even food.

Learning about sustainability made me think about Timothy Crow splashing water all over the art room, and Ruth and I having to clean it all up with paper towels. When I learned that paper towels actually came from trees, I realized I couldn’t just keep using them up, so I put an old dish rag in my backpack for the next time I went to art class. Just in case there was any water to be cleaned up.
Reading that book made me see the world in a different way. The next day I couldn't help but notice that all around me, people weren't taking care of the environment. In the morning on the way to school, I noticed that Dad left the car running while we waited in the carpool line to get out of the car. I reminded him that turning off the engine would make less exhaust, and give us cleaner air.

At lunch, I saw something I had never noticed before. In the cafeteria, there were no recycling bins! In the book Mr. Greenwood had given me, I learned that recycling meant taking stuff that had already been used, and turning it into something new. People put the kinds of things that can be recycled, like plastic bottles or aluminum cans into recycling bins so that these things could be taken to a recycling plant, a special place with fancy equipment that turns this trash back into brand new items.

I also learned about the other R's: Reducing and Reusing. Reusing means to use something as many times as possible before throwing it in the trash, or recycling, and reducing means skipping out on buying new things all together unless you really need them.

As I took my sandwich out of a reusable container I thought to myself, hey— I'm reducing and reusing already! But when I passed the garbage can and saw how many plastic bags and containers were in the trash. I wished I could get everyone in the whole school to understand how important it is to reduce, reuse and recycle.

By the time I made it to Mr. Greenwoods class again, I was feeling really down in the dumps. I could hardly focus on the lesson, because I was too distracted looking outside at all the cars, and big trucks going down the street blowing out exhaust.

Figure B.5: Pages eight and nine of the dummy book.
When class was over, I walked to Mr. Greenwood's desk and solemnly handed him the book. I think Mr. Greenwood could tell something was wrong, because he asked me what was on my mind that day! I told him "Now that I know all this stuff about the environment, I can't help but feel terrible because all around me, people were not taking care of the environment."

“Ohhhhh I see... You've got the going green blues..."

It happens to many young environmentalists, he told me. Once they find out about all the many different ways our environment might be in danger, because of what humans have done to our environment, it can start to feel that everywhere you look, you see another problem! It can be a real bummer! Yeah, it was a real downer! But then Mr. Greenwood said something that made me feel a little better. He told me that it's not my job to solve the world's problems alone, and there are thousands of other people out there just like me, who really, truly care. And we are all working towards the same goal!

**Figure B.6: Pages ten and eleven of the dummy book.**
At the end of the day, it was finally time for art class but I was still in the pits, and Ms. Moss could tell. That's when Miss Moss said she knew exactly how I felt because sometimes she got the going green blues too! Miss Moss rushed over to the cabinet behind her desk, and pulled out some old papers. I looked down at the big pile of drawings, paintings, and collages. "When I get the blues" said Miss Moss, "I try to make artwork that shows my feelings. Take a look at this one here" she pointed to a collage that had magazine cut outs of different pictures of plants and animals and words like "Endangered" "Deforestation" and "Act Now".

I thought for a moment about what Miss Moss had said, and then, suddenly, I got an idea. "Miss Moss" I asked, "Would it be ok if I were to make a collage as well?" Miss Moss smiled and nodded. Together, we got our old magazines, glue, and scissors, and an old piece of cardboard. Then I got to work.

I found pictures of fish, salamanders, and even cute little otters, then glued them down, and at the bottom I wrote my message. When class was over, I brought the collage up to Miss Moss. "I made something for our classroom I thought maybe..." "We can hang it up right by the sink!" Miss Moss chimed in, excitedly. "Yes, that's what I was thinking!" Miss Moss hung up the collage with a smile and thanked me for my "very thoughtful creation."

Figure B.7: Pages twelve and thirteen of the dummy book.
That night, I was feeling really inspired by what I created in art, and suddenly, I had a new idea. I thought about how in Mr. Greenwood’s class, sometimes students would ball up papers, throw them around the room, or just throw them on the floor instead of throwing them in the recycling bin.

I even saw one of my classmates try a second and even third time to make sure they got their paper ball into the recycling while they were pretending to shoot hoops. I was happy I’d caught my classmates’ attention with my sign, but I knew this was just the beginning.

On the back of an old cardboard box I found in the recycling pile at home I painted a big picture of a forest, and a message about saving paper.

Early the next morning, I snuck down the hallway, and left the cardboard painting in front of Mr. Greenwood’s door with a note pinned to it.

That very day, Mr. Greenwood had hung my painting right above the recycling cans, and I happened to see my classmates taking a look at it.

Figure B.8: Pages fourteen and fifteen of the dummy book.
Back at home I did some research with Mom online about plastic pollution, like the plastic bags I saw in the cafeteria. The pictures online of plastic floating in the ocean did make me kind of sad, but I thought to myself, if these pictures make ME want to stop using so much plastic, maybe the same would be true for my classmates.

That’s what gave me an idea for my next poster. In the kitchen, I searched through the recycling bin and found plastic water bottles, a plastic fork, and a plastic baggie.

I taped these to an old poster board I found from my brother’s science fair project a few years back, because after all, he wasn’t going to need that again. Under the pieces of trash I wrote:

REDUCE:
USE LESS PLASTIC, BRING YOUR OWN FORK
REUSE: BRING A REUSABLE WATER BOTTLE
RECYCLE: KEEP PLASTIC FROM GOING IN THE LANDFILL

Getting my poster to school was tricky, and I had to be careful not to crush it in my backpack. When I crept into the cafeteria that morning, I wasn’t sure if I would even be able to hang my sign. I knew Miss Moss and Mr. Greenwood were happy to support my poster project, but I wasn’t sure if I would find anyone to help me in the cafeteria.

I thought I was alone as I was struggling to tape up the sign, when suddenly out of nowhere, I heard a voice
“Need help with that young lady?” It was Mr. Fixer, the school’s custodian! At first, I thought I might be in trouble, Mr. Fixer wasn’t too kind to kids making a mess. “Oh, I umm.. I’ll be leaving now” I tried to say, in a hurry.

“No need” he replied. I could tell that today Mr. Fixer was in a good mood, and he didn’t seem to mind. “Let me go get some push pins and we’ll get that sign of yours hung up” he said as he shuffled away.

He came back before I could even consider making a run for it, and together we hung up the sign right by the trash cans so everyone would see them as they went by. “I like your message young lady” he said “I see far too many people in this cafeteria throwing stuff out like it’s nothing.” He held up a plastic water bottle from the trash, and took a long look at it.

“Don’t people know that it takes 400 years for a single piece of plastic to decompose” Mr. Fixer asked me.

I did not in fact know that... but that afternoon when it was time for lunch, I did notice that a water station had been set up in the cafeteria with a sign that read

“refill your water bottle here”

I’m 350 years young!

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Figure B.9: Pages sixteen and seventeen of the dummy book.
After three successful missions, I knew that I was ready to take on the biggest challenge yet:

THE BATHROOMS

Always a mess of paper towels spilling out of the trash cans, and water on the floor, I thought the bathrooms might be a lost cause, but something was telling me I had to try. This time was different though, I was going to have to ask for help.

Figure B.10: Pages eighteen and nineteen of the dummy book.
At recess, I found Ruth, and filled her in on the plan. “We’re going to make posters for each bathroom, boys AND girls” I said. “That is a LOT of bathrooms!” Ruth reminded me.

She was right, but I was one step ahead of her. I handed Ruth a list of the best artists in third grade. “Tonight we are need to chat with Samantha, Dilan, and Brian, and let them in on our secret plan. Hopefully, they will be willing to help.”

That night, I sent a message to our friend group and we worked out our plan.

Sunday night I was so excited I could hardly sleep. I knew Monday morning was going to be a really big challenge. When I got to school, my backpack was stuffed with posters.

I found Samantha, Brian, Dylan and Ruth all sitting together in the cafeteria waiting for me like we had planned. I noticed right away, they were all sitting rather quietly.

Samantha was worried. Her mom said we might get in trouble for putting up posters without permission, and now everyone was nervous.

I hadn’t thought of this possibility yet. Miss Moss, Mr. Greenwoods, and Mr. Fixer were all adults who had helped me with putting up the posters before. Now it was just us kids doing this all on our own, no permission, no asking for help.

I thought for a minute before I looked at them and said “OK, we have two options. We can ask Principle Carson for permission first, and risk being told no, or we can just put up the posters and hope for the best. If anyone doesn’t want to help, I won’t be upset. I’ll understand! But if anything goes wrong and we get in trouble, I promise I’ll take all the blame. This was my idea after all.”

The crew sat for a moment and thought, then Samantha stretched out her hand. “I’m in” she said. With that, each member put their hand in the center, and quietly I whispered “1...2...3...go team green”

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Figure B.11: Pages twenty and twenty-one of the dummy book.
With that, breakfast was ending and it was time to go. "Good luck!" I said "and remember, we're doing this for a good cause."
I walked towards my classroom and turned toward the girls bathroom, ready to hang the first poster. I waited for all of the other girls to leave before getting out the tape. I was excited, and nervous, all at the same time.
Once the first poster was up, I felt less nervous, and more excited. I scurried from one bathroom to the next quickly taping posters to the wall. As I finally finished hanging the last poster, I stood back to admire my work.
Suddenly, I heard the familiar sound of tappy footsteps coming around the corner. I tried my best to stuff the tape into my backpack and look innocent but it was too late. There was Mrs. Berns staring down at me. I'd been caught in the act.
“What EXACTLY do you think you are doing young lady? Hanging up posters without the permission of the school? This is unacceptable, come with me right away” Ms. Berns cried out. I felt tears in my eyes as I followed Ms. Burns down the hallway.

Figure B.12: Pages twenty-two and twenty-three of the dummy book.
*Sit right here* she barked. I sat down in the big chair outside Principal Carson’s office. Inside, I could hear Ms. Burns telling Principal Carson about what she saw that morning. Suddenly, Principal Carson was at her door. “Please, everyone come into my office and let’s chat” I took a deep breath and stood up. I’m doing this for a good cause- I thought as I walked in. Principal Carson sat down, and I noticed she didn’t look upset, maybe this was a good sign.

“So!” she said “Tell me about these posters you all hung in the bathroom, Ms. Burns tells me that you all vandalized our school, but it looks to me like your posters were about keeping the school and the environment clean” she said. In my strongest, most grown up voice I said “Yes that’s right! I did not vandalize the walls, I hung up a poster that was meant to encourage the other students to use less water and paper towels in the bathroom!” “Really!” replied principal Carson, she seemed surprised “How did you get that idea?”

Suddenly we found ourselves telling Principal Carson the WHOLE story about how we came up with our plan. Principal Carson looked deep in thought as she said “I am so impressed by your effort and dedication to getting other students to care about our environment, and I even think that this could inspire some of the grownups in the school to do better as well. I’m impressed!”

“So, we’re NOT in trouble?” Samantha asked.

“No, certainly not” Principle Carson smiled, and shook her head. “You all took a risk, but I can tell you are doing this because you care. I am very proud of you all for being leaders, and trying to encourage the whole school to go green. Actually, this gives me an idea!” Principal Carson said with a smile “How would you all feel about starting an Eco-Club here at the school? There are all kinds of different things an eco-club might do.

*Figure B.13: Pages twenty-four and twenty-five of the dummy book.*
Figure B.14: Pages twenty-six and twenty-seven of the dummy book.