

GO OUTSIDE:  
ENGAGING ELEMENTARY ART STUDENTS IN OUTDOOR EXPLORATION

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### Abstract

This action research study examined how to incorporate the learning strategy of outdoor exploration into a forty-five minute class period, and what role that strategy could play in student understanding of art concepts. This research is consistent with professional literature concerning the benefits for children of exploring the natural world, the role nature plays in aesthetic experiences, the role inquiry plays in integrating natural science and art concepts, and current studies of eco-art education. Through this study, I realized the importance of setting limits, minimizing materials, preparing for the predictable while expecting the unexpected, listening more, observing more, directing less, and learning to follow the students' lead when using the strategy of outdoor exploration. I also discovered how exploring nature could engage the students in aesthetic experiences, imaginary adventures, inventing names, sketching from observation, and building an empathetic relationship with nature. Students demonstrated an understanding of how artists work by making personal choices, experimenting with tools and materials, collecting and incorporating found objects in their work, and planning projects. This study confirmed my beliefs that inquiry-based learning helps children understand art concepts, that nature can inspire even the youngest artists, and that the exploration of nature needs to be a part of the elementary art curriculum.

## Chapter 1: Statement of the Problem

Exploring the natural world has become a rare event in children's daily lives, and yet this form of exploration leads children to new observations, new ideas, and new questions. Outdoor exploration is a learning strategy that has many benefits, and yet it is seldom used in the public school district where I teach. In discussing this with my colleagues, they cited lack of time, lack of natural environment, and absence of the strategy in their existing curriculum as reasons they rarely take their students outside (J. Leiknes, J. Glaza, T. Kresser, B. Doud, M. Bebout, personal communication, April 2012). This troubled me, as the natural world is a massive database that can inspire and inform the artwork of children. Exploring nature is an important aesthetic experience that first adds to children's knowledge of the world, and second to their knowledge of art practices; of concepts, subject matter, processes, and materials (Song, 2010). These types of experiences outside the classroom allow students to construct knowledge of their environment, which is vital in developing artworks that are divergent and personal (Blandy & Hoffman, 1993; Cowan & Dolgoy, 1984; Kauppinen, 1990; Neperud, 1973; Purser, 1978; Tatarchuk & Eick, 2011).

Artists and scientists have long been inspired by their observations of the natural world. Educational research advocates for the integration of art and science as inquiry is at the root of both disciplines (Chessin & Zander, 2006; Dirnberger, 2006; Krug & Cohen-Evron, 2000; Weigand, 1985). By using the teaching strategy of outdoor exploration, elementary children can experience the connection between art and the natural sciences (Marshall, 2004, 2005, 2010; Nelson & Chandler, 1999).

Exploring nature also serves as a base for young children to learn the rudiments of eco-art concepts which include interdependence, biodiversity, conservation, restoration, and sustainability. Inwood (2010) concluded that the reason eco-art education is not part of elementary art education is a lack of professional development for teachers and the absence of available curriculum.

Recent research by Louv (2007) pointed to the problems of "nature deficit disorder." He correlated childhood anxiety, depression, and obesity with a lack of unscheduled time spent in nature. The exploratory, inquiry-based element of outdoor education can introduce children to the joy and excitement of discovering their natural surroundings for themselves.

As I came to understand the powerful reasons for children to explore nature, I reflected upon my own choices when it came to art education. Even though my personal art practice revolved around time spent in nature, I had not attempted to integrate outdoor exploration into my teaching. Staying on the easier road of tried and true lesson plans focused on the elements of art and famous artists let my students produce visually appealing artworks, but their drawings, paintings, and sculptures held little personal meaning. Certainly I took my students outside to sketch on days when the weather was nice, but I was, for the most part, not building on the concepts of inquiry and meaning making.

The goal of this capstone research project was to initiate a change in my approach to teaching art. Through action research, I sought to answer two questions about implementing outdoor exploration into my teaching practice. First, what are the essential factors for implementing outdoor exploration as a form of artistic

inquiry at an elementary level? And second, in what ways will outdoor exploration engage students in artistic inquiry and how will it inform their art practices?

I wanted to know how to purposefully engage my own young students in the learning strategy of outdoor exploration and understand how it could play a vital role in switching from a formalistic art education program to an inquiry-based program. By putting this strategy into practice, by researching the process and the results, and by sharing the outcome with other elementary art teachers, I hope to inspire others to take their students outside to explore.

## Chapter 2: Literature Review

This literature review organizes selected scholarly literature that addresses the need for outdoor exploration and the possible implications of this form of experiential learning to art education around six key concepts. The review does not include an exhaustive synopsis of all literature about outdoor education, the environmental and place-based art movements, or the integration of art and science, but seeks to synthesize the important ideas behind incorporating outdoor exploration into the art curriculum.

The first key concept is that outdoor exploration of nature is a well-documented learning strategy to teach observation, inquiry, and environmental awareness. The strategy is not a curriculum in itself, but a practice that may be applied across many disciplines (Gillenwater, 1969; Tatarchuk & Eick, 2011). Exploring nature as a method of inquiry has been an important part of education for hundreds of years and was promoted by several educational philosophers in the past (Chambers, 2011). Most were influenced by the writings of Jean-Jacques Rousseau whose novel *Emile* (1762) told of a child that learned by experience and natural observation, using his senses to construct knowledge and understanding. Johann Heinrich Pestalozzi attempted to put Rousseau's ideas into educational practice in 1775. Pestalozzian principles, as they came to be known, are foundational to educational systems in Europe and the United States. These principles include child-centered methods where children are actively involved in direct experiences, thereby learning through their senses, without being told information they can gather on their own (NCU, 2009). Pestalozzi's student,

Friedrich Wilhelm August Froebel, founded the kindergarten system based on these principles (Chambers, 2011). Froebel believed that all human beings are creative and learn through activities such as storytelling, music, and art making. Nature study was an important aspect of childhood play (Strauch-Nelson, 2012.) The idea of learning through sensory experience was promoted strongly in the United States by the educational philosophers Edward A. Sheldon in the 19th century and John Dewey early in the 20<sup>th</sup> century (Chambers, 2011; Dewey, 1934). In the 1960's the Central Midwestern Regional Educational Laboratory (CEMREL) developed a federally supported framework for integrating aesthetics, or sensory experiences, into the general education program. Similar to the current interdisciplinary approach to elementary education, this model was based on sensory learning through the arts (Madeja, 1976). Today, technological advancements and social changes have separated children from nature's wealth of sensory experiences by bringing children of the 21st century inside (Louv, 2007).

This lack of time spent exploring nature leads to a second key concept, that children and nature can have a mutually beneficial relationship. Louv's research (2007) illustrated that excessive time spent indoors has been detrimental to children's well-being. Unstructured time spent in nature calms anxiety while reducing childhood depression and obesity (Louv, 2007). Furthermore, by staying inside children lack informed empathy for the natural world and are less likely to develop habits of stewardship towards the earth (Center for Ecoliteracy, 2011; Louv 2007; Waite, 2011).

The need to develop environmental stewards through art is the third key

concept. The current environmental awareness movement began in the late 1960's and early 1970's when people noticed that air and water quality were being compromised (CNNtech, 2011). The understanding of ecosystems and sustainable habitats, along with a sensibility about the effect humans have on their environment, evolved and grew over the past forty years and was coined *ecoliteracy* in the 1990's. In the 21st century, climate change and environmental destruction have led to an ecoliteracy educational movement to teach the populace about the role humans play in maintaining and restoring the health of the environment (Center for Ecoliteracy, 2011). Ecoliteracy is not specific to art education; rather it is an interdisciplinary approach to applying environmental conservation principles to the entire school system.

There is a related contemporary art movement that focuses on environmental health called *eco-art*. Artists engaged in eco-art center their work on restoring the balance between nature and humans, focusing on the interdependency of all life forms and the importance of sustainable systems. Instead of making works of art for viewing, these artists use their creativity to build outdoor habitats and interactive installations that build awareness of environmental issues (Carter, 1975; Greenmuseum.org, 2010; Thurber, 1997). *Eco-art education* is an offshoot of this movement that brings the concepts, activities, and artworks into the educational system, preparing young people to participate in this contemporary art practice (Blandy, Congdon & Krug, 1998; Hawkins & Vinton, 1970; Inwood, 2010; Miraglia & Smilan, 2009; Neperud, 1997; Thurber, 1997; Ulbricht, 1998). Not well supported by professional development and teacher preparation, the principles of eco-art

education remain relatively unknown to many elementary art educators (Inwood, 2010.)

Eco-art constructs are dependent upon an understanding of both artistic and scientific principles. That children are able to connect art and science through observation and inquiry into the natural world is the fourth key concept. Artists and scientists have traditionally turned to nature for information and inspiration. There is significant research that demonstrates how art and science share the common practices of observation and inquiry, and how these practices can be used to integrate the two subjects (Chessin & Zander, 2006; Dirnberger, 2006; Krug & Cohen-Evron, 2000; Marshall, 2004, 2005, 2010; Nelson & Chandler, 1999; Weigand, 1985). Several art teachers, particularly at the secondary level, teach the connection thematically, using concepts such as camouflage and metamorphosis (Chessin & Zander, 2006; Krug & Cohen-Evron, 2000; Nelson & Chandler, 1999; Weigand, 1985). Their research however, is limited to the connections of art and science to process and subject matter; it does not address the possible connection of materials between the two disciplines.

The fifth key concept is that student art practices may be inspired and informed by the natural world around them. Contemporary art practices focus on the uniqueness of the artist's location, and how that sense of place inspires the artist in his or her creation (Greenmuseum.org, 2010; Hansen, 2009; Lai & Ball, 2002). The idea of teaching art students to observe the natural areas nearby, as opposed to areas they do not have a personal connection with, is called *place-based art education* (Hansen, 2009). Developing a connection to the environment in which the

student lives leads to a greater variety of artwork and more significant meaning within student created pieces (Blandy & Hoffman, 1993; Cowan & Dolgoy, 1984; Kauppinen, 1990; Neperud, 1973; Purser, 1978; Song, 2010; Tatarchuk & Eick, 2011;). This new found connection, or relationship, has led students to use materials and processes found in nature (Hansen, 2009; Song, 2010).

Despite the stated advantages of incorporating outdoor exploration into elementary art practices, the last key concept is that there is a shortage of current elementary art curriculum and teacher resources for doing so (Inwood, 2010). Some contributing factors for not using the strategy of outdoor exploration included mandates from *No Child Left Behind* that emphasize reading and testing leaving little time for teachers to use open-ended strategies (Sabol, 2010), and the problem of public schools situated in unsafe environments (Zhu & Lee, 2008). Waite (2011) suggested a fear or discomfort with the element of the unknown, or uncontrolled outdoor spaces, may influence teachers' decisions not to venture outdoors.

In summary, outdoor exploration is an effective learning strategy for teaching the art and science skills of observation and inquiry. When children spend time in nature it can lead to a mutually beneficial relationship between the two if children are taught to become better stewards of the earth. This stewardship is the goal of the ecoliteracy and eco-art education movements. Students are better engaged in learning when they notice the connections between their lives, their place in the world, and the subject matter. Outdoor exploration inspires and informs student art practices; for subject matter, processes, and materials, however the strategy is not well integrated into the public school system for a number of reasons including lack

of teacher resources, concern over teaching students in uncontrolled environments, and educational systems focused on NCLB mandates.

### **Chapter 3: Research Method**

The methods used in this research were an attempt to address a disconnect between how I taught art and what I believed would be a better approach. Like most art educators in Iowa, I was following a formalistic art education model that was teacher centered rather than inquiry-based. Students learned about the elements and principles of art, art history and the art of many cultures. I would instruct them in a process and a concept, and they would apply the strategy and idea to their artwork. I knew in my heart, however, that art education, even at the elementary level, should be inquiry-based. An inquiry-based, experiential model requires students to have experiences that prompt their own questions into art processes and the meaning of their own work (Art21, 2012). The strategy of outdoor exploration fit this model of art education, and importantly, it connected students to both historic and contemporary art practices and concepts (Inwood, 2010).

In order to reflect on and change the way I taught, I engaged in action research. Action research is a relatively new form of research that is well suited to art educators (McFarland & Stansell, 1993). The systematic, cyclical design of action research has been adapted by many public school districts for professional development and is commonly referred to as reflective practice (Osterman & Kottkamp, 1993). Simply put, action research in education involves recognizing the need to change something in the teaching practice, creating a plan towards that change, taking action and collecting data based on the plan, analyzing the data from the action, reviewing or reflecting upon those results, modifying the plan as need be, and implementing it (taking action) again (Ferrance, 2000; Painter, 2009; Waters-

Adams, 2006). Because this method is a flexible form of research, it is important for art educators to employ several different forms of data collection from different perspectives, commonly referred to as triangulation, to verify the results. Ferrance (2000) suggests several possibilities for collecting data to capture various perspectives, many of which would be applicable to outdoor exploration, such as videotapes, photographs, samples of student work, student journals, student interviews, and the educator's field notes.

One art educator that has been using action research to reveal the importance of outdoor-based art education at the elementary level is Dr. Hilary Inwood. She has written extensively about the need for better teacher preparation and curriculum in the field of eco-art education (Inwood, 2010), as well as her own collaborative action research based on the following questions;

How do teachers define eco-art education and apply it in their classrooms?

How do they weave together art and environmental education in a cohesive way to learn about environmental issues and concepts? What curricular content and structure strikes a chord with teachers and students in elementary eco-art lessons? Is a specific pedagogy necessary to present eco-art content, and if so, what are its features? What can eco-art education look like in elementary classrooms? (Inwood, 2007, p. 4)

Inwood worked with a team of four art educators, who collected their experiences with their students in journals, field notes, and photographs, and then gathered to discuss and analyze their findings. After nine months, they concluded

that further analysis of their research was necessary, yet the results were impressive. She states;

Students have utilized a range of environmentally friendly materials, from ones found in nature to consumer products that are reusable and recyclable. They have experimented with a wide variety of techniques, including traditional ones such as drawing and painting, to more challenging ones such as papermaking, clay modeling, basket weaving and ice sculpting. Their creative products have been equally innovative: writing, plantings, scarecrows, murals, performance art, garden installations and a video have all been created over the course of the project. It has been inspiring and exhilarating to both observe and participate in the development of the lessons, as students so often demonstrated a level of engagement and innovation that we had not anticipated. (Inwood, 2007, p.12)

She concluded that they had created an "extensive database of elementary eco-art lessons" studying "the roles of collaboration, place-based learning, systems-thinking and stewardship in eco-art learning, as well as the importance of using biodegradable materials and natural processes in making eco-art with children." (Inwood, 2007, p.13). Reflecting on Inwood's research, I saw parallels to my own desire to engage students in their local environment. Her interest, however, is specific to developing an eco-art education curriculum, while mine is how to incorporate the exploration of nature into an inquiry-based art education model.

As I considered my own research, I realized that one drawback of using action research was that my findings may not be applicable beyond my individual

location as they will reflect my personal perspectives and beliefs (Riel, 2011). However, action research was valuable in improving my teaching practices as well as my understanding of that practice (Ferrance, 2000; Painter, 2009; Riel, 2011; Water-Adams, 2006). Two serious limitations I faced in the research were time and class size. Inquiry and exploration requires students to follow their observations to a natural conclusion, yet we had to work within a time frame of student's scheduled art class periods that took place for 45 minutes, once every eight days. Each group consisted of 24-28 students, limiting my ability to personally discuss the experience with individual students. A valuable follow-up study to this project would be to research the experiences of students who did not have to explore nature within artificial time constraints.

### **Navigating the Action Research Process**

In thinking about how to start this study, I found guidance in six questions posed by Waters-Adams (2006) which were derived from Barrett and Whitehead (1985) to guide the educator in starting his or her own action research. This section describes the ways that I applied these questions to my own teaching practice.

**What was your concern?** I was concerned that my teaching practices did not focus on exploration and inquiry and my elementary art students were not engaged in exploring the natural world around them.

**Why were you concerned?** I was concerned because I did not believe my students understood the basic concepts of art. When asked to explain art, they said it was drawing and painting; making something, but they did not view art as a way to create meaning both for themselves and others. Most had as little understanding

of the natural world as they did of art (Turnbull, 2011). As stated earlier, there are great benefits for all when elementary students engage with the natural world. Artists have been inspired for generations by the diversity and beauty of nature and my students were missing this experience. Children benefit physically, emotionally, and mentally from time spent in nature as shown by Richard Louv (2007). Time spent in nature builds children's empathy for the natural world and a desire to see it maintained, while giving them a sense of belonging to their environment (Waite, 2011). Considering our rapidly deteriorating global environment, this symbiotic relationship between children and nature needed to be developed and nurtured.

**What did you do about it?** I designed and implemented a unit of outdoor explorations for my students, then documented our joint experiences. Teacher planning was an important first step. Prior to taking my students outside, I interpreted and altered my district's elementary science inquiry objectives into art inquiry objectives (Appendix A). From these objectives, I created possible outdoor exploration prompts for kindergarten through fifth grade (Appendix B). Next I determined the supplies I needed to take outside, and put together backpack exploration kits for the students to take with them (Appendix C), drafted a schedule, and wrote lesson plans to communicate my expectations for the outdoor explorations (Appendix D). I walked the area students would explore to check for safety hazards and conferred with the school nurse about any health concerns. I sent a note to parents and posted information on my school blog about this project as well as updates for students and parents to read during the research period.

Putting the plan into action was an exciting moment for both myself and my young explorers.

With many stages of planning complete, I took my students outside to explore their school grounds. Although not large in scale, there is a butterfly garden, a restored prairie habitat with walkways, a green space with young trees, and a rambling creek alongside the school property. This area was a relatively safe environment for even the youngest students to explore. I explained the areas' boundaries, safety factors including a buddy system, acceptable behavior, observations to be collected, communication signals, and what objects (such as poison ivy) to avoid. I gave them the age-appropriate prompts to guide their steps, and then observed their explorations and questioned them about what they were doing. When we regrouped, I asked the students how they could apply their experiences to their art-making processes. Some of those ideas were developed in follow-up lessons. For example, the kindergartener's tried building structures with the small objects they had collected, the first graders tried painting with sticks and leaves, and the fourth graders experimented with mud as an art medium.

**What kind of evidence did you collect to help you make some judgment about what was happening? How did you collect such evidence?** I observed and documented the students' experiences in daily reflections, through photographs, videos, interviews, and then collected the students' sketches to photograph.

**How did you check that your judgment about what happened was reasonable, fair and accurate?** My primary goals for the research were to document student engagement in exploring the natural world and to discern how

the learning strategy of outdoor exploration and inquiry would fit into the elementary art curriculum. I reflected on the experiences and analyzed my collected data prompted by these questions:

- Were the students engaged in exploring?
- What did that look and sound like?
- If they were not engaged, why weren't they?
- Did their explorations lead students to engagement in the art making process in a different way than before the explorations?"
- In what ways did their art processes and projects reflect an understanding of inquiry and meaning making?
- What steps needed to be in place to have a successful exploration in a short window of time?
- What type of prompts gave students enough focus to be productive in exploring, yet open-ended enough to engage them in their own questions and observations?
- How could I assess inquiry-based artistic processes?

In summary, I chose to engage in action research to better inform my choice to include outdoor exploration in my teaching. I was inspired by the research of Hilary Inwood (2010) and advised in how to proceed by Stephan Waters-Adams (2006). I facilitated my students' explorations into nature, collected evidence of those explorations, and analyzed that data to discover the steps needed to successfully integrate inquiry-based outdoor exploration into my teaching practice.

## Chapter 4: Results

Taking my students outside to observe them exploring nature altered my long held beliefs about the role of a teacher in student learning. Instead of being the authority, I found myself prompting the children with questions that I myself couldn't answer, and discovered nature with new found wonder, as if from the eyes of my youngest students. In looking at my own questions that led to this action research, I was often surprised by the answers. My first research question; "What are the essential factors for implementing outdoor exploration as a form of artistic inquiry at an elementary level?" led me to the following conclusions.

### **Essential Factors for Outdoor-based Art Exploration**

**Set limits, both physical boundaries and behavioral expectations, with consequences attached for breaking those limits.** When working with a large group of children, their safety is paramount. Setting physical boundaries that defined the area in which they could wander safely gave my students the freedom to explore. Giving them a set of behavioral expectations (Appendix D) and the duty of keeping track of their buddy made them responsible for their actions. As expected, a few students disregarded these behavioral expectations. After some brainstorming, I fell upon the idea of a *Tree Stop*. Students not following the rules had to stand with one hand on a given tree until I told them they could return to their explorations. This worked surprisingly well in giving the wayward students a short break to consider their actions.

**Minimize the number of tools and materials.** When my students first went outside, I gave them an entire pack of things to be responsible for and to use in their

explorations (Appendix C). This was a sizable mistake in that the students had difficulty putting the material packs on their backs and the packs tore as they were swung about. In taking tools out of the pack, students often dropped crayons, pencils, and viewfinders and left them behind. They would run, creating the possibility of injury from the pencils in the pack. I eventually whittled down the amount of tools and materials to a clipboard with paper for each student and a sealable plastic bag filled with crayons to be shared between the two partners. With fewer items to be responsible for, and a partner to share in that responsibility, the students spent less time fumbling with their materials and more time engaged in exploring the area. In the future, my students will make personal sketchbooks to bring on their trips outside, but time did not allow for that during this study. I carried the pencils in a box, and if the grass was damp, I had two students carry oilcloth squares (for sitting on) to our nature area. The items in the teacher's pack (Appendix C) however, remained consistent and useful throughout the time spent outside.

**Prepare for what you can predict, and then be ready for the unknown.**

As stated previously, I took my students outside only after preparing lessons, materials, and checking the area for safety. What I wasn't prepared for was my students' palpable excitement, active engagement in their surroundings, joy in having an exploring partner, and abject fear of insects. Because this was such an exciting experience, after the first classes went outside, I found I needed to give some brief directions prior to exiting the building. I instructed the children to listen for two different whistle signals; one chirp meant to listen to me, and a series of

three blasts meant to gather together to return to the art room. Next we discussed two important questions about our explorations: Why are insects and animals outside? And, what should you do when you meet an insect or animal? The discussion led to students' understanding that nature was home to plants and animals, and that we needed to imagine ourselves as guests. There was a great deal of apprehension when I mentioned snakes, spiders, and bees. Students needed to discuss what they should do and came to understand that the best plan was to remain calm. New to them was the idea of quietly observing the insects and animals, and even taking their picture, sketching them, or handling them gently. This handling was a happy surprise as my students became comfortable enough with nature to pick up pill bugs and worms, and observe flying insects that landed on their skin.

Not only did I need to prepare my students for the unknown, I needed to prepare myself. Teaching in a relatively controlled environment, such as a classroom, is completely different than teaching outdoors. Students had more varied experiences with more varied objects. This led me to another conclusion.

**Listen and observe more, direct less.** When exploring outdoors, I discovered that I needed to observe what my students were doing, not direct what they were doing. Having given the children instructions on how to stay safe, we exited the building then sat in a circle within the nature area as I introduced the concept of aesthetic exploration through a short group exercise in sensory awareness (Appendix D). My last element of group instruction was a prompt to engage their thoughts (Appendix D). As they wandered away from the group circle, I

watched what they were doing, asked them to explain their thinking, and answered most questions with another question. For example, I asked the first graders, "If a tree could talk, what question would you ask it?" Their answers were surprisingly creative: "Do you have a sister?" "Can you slam dunk a basketball?" "Can you make leaves grow on my head?" Without direct instruction, my students were engaging in creative thought.

However, the lack of direction also illuminated the problem of student misconceptions about art and nature. I found that my questions helped them think through a problem more deeply than if I simply put them straight on the matter. To illustrate, the third graders were asked to sketch or photograph the creek from their favorite viewing location. Several students colored the water with a blue crayon. During our next class, I asked the students to tell me the color of water. After an array of responses (blue! teal! no, it's baby blue! clear!) they looked at several artist's interpretations of water and then at a picture taken of the creek during the previous class. Soon the discussion changed to how to draw something that is clear, and as they returned to sketch the creek again, they paid closer attention to the colors they were observing (Figure 4.1).

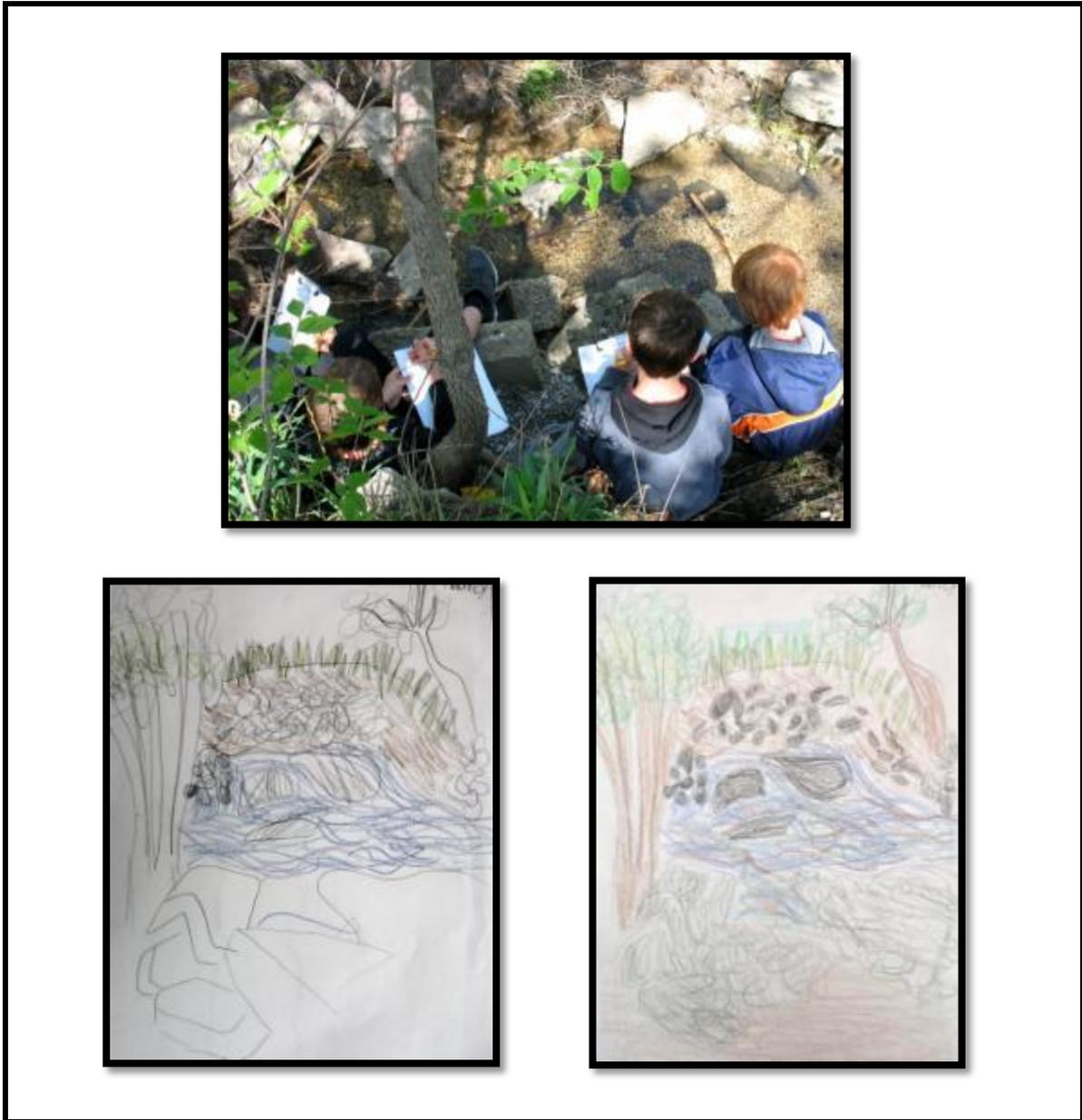


Figure 4.1. Drawing the Creek

Another example of student misconceptions came from a discussion I had with one of these third graders.

Boy: (*pointing at a piece of cement in the creek*) I'm going to draw this rock. I like the way it feels.

Me: You like the texture? How does it feel?

Boy: Bumpy and smooth.

Me: Is it a rock?

Boy: Yeah. It looks like a rock and feels like a rock.

Boy 2: (*joining the conversation*) Hey, this rock (*pointing at another piece of cement in the creek*) has a piece of metal stuck in it.

Me: Is it a rock?

Boy 2: I don't know.

Boy 3: (*joining the conversation*) Its cement.

Boy 1: What do you mean? Why is there cement in the creek?

Me: That's a good question. Why don't you think about that?

Instead of explaining the phenomena my students were observing, I observed their actions and formulated questions; questions that would engage them in either creative or critical thought, to discover what impressions of nature they were making on their own. As I observed and listened to my students' responses, I also discovered for myself the importance of using multiple forms of questions in inquiry-based learning.

**Follow the student's lead.** Over the course of this project, I was often confronted with the question, "What should my students be doing while they are exploring?" Here is a reflection I wrote after our second day outside:

How much do I reign in students who are not focused on the prompt, who instead have taken *flights of fancy* based on what they are finding? A group of fourth grade boys, instead of gathering soils and making observational drawings, engaged in role play of adventuring into the wild. They had a storyline started and had gathered water in plastic bags, because, as we all know, you need water in the wilderness. Some of the kindergarteners were sure they had found Bigfoot's footprint and others argued over whether they had found a dinosaur fossil or a tree root. To what extent do I try to refocus these students, or do I let them follow their imaginations?

I eventually came to the conclusion that if students were engaged in observation or creative thought brought about from their experience in nature, their activity met the criteria of exploration; whether or not it had to do with the prompt they were given. The prompt became a jumping off point instead of an absolute.

### **Student Engagement**

As this project progressed, it became clear to me that the second question; "In what ways will outdoor exploration engage students in artistic inquiry and how will it inform their art practices?" needed to be broken down into two distinct parts. The first was the impact of the discovery phase where the students explored, observed, and imagined.

**The children discovered the aesthetic attributes of objects and experiences.** As students explored the area, they became very in tune with their surroundings. In reflecting on the objects they were drawn to, I was surprised by how much their sense of touch and smell played a role in the experience. First and foremost they were drawn to the creek. Several students commented on how much they enjoyed climbing down the bank, touching the water, or simply sitting and listening to it run. A close second was a plant commonly called lamb's ear, a groundcover that looks and feels like velvet. But the students were not just drawn to objects that felt good. They would touch the thistles to see if they pricked their fingers, and were surprised when they touched them very softly, they didn't hurt at all. Some of the plants in the nature area were herbs, planted by parent volunteers. I showed students how to rub their fingers on the underside of leaves, rather than pick them, to experience the intense smells of oregano, thyme, and lemon mint. They found this thrilling and quickly shared the experience with other students. Since the predominant colors in the nature area were shades of green and brown, any flowers blooming drew the children in (Figure 4.2.). Dame's Rocket and Daisies were declared to be incredibly beautiful. Even knowing how children enjoy color, their response was surprising to me; these things seemed so simple, so ordinary. It reminded me that artistic inquiry can start from the simplest of sensory experiences.



*Figure 4.2. Flower Observations*

**The children engaged in imaginary adventures.** Exploring the nature area led several students to make up stories and act them out. One group of fourth grade boys imagined themselves lost in the wilderness, collected water in sealable bags, made walking sticks, and covered their arms in mud as camouflage. Walking the creek captured their imaginations as they climbed along the stones that line the bank. The boys spoke as if the creek was a trail leading to a magical place.

**The children sketched from direct observation.** I have not required my students to do very much observational drawing in the past, instead favoring learning through various art processes. I now see this as a mistake. Not only did the students enjoy drawing from nature, several showed greater persistence in their work and a desire to understand what the objects looked like, what they were

called, and what their purpose was. Careful observation engaged the students in deeper inquiry and their drawings showed a greater understanding of structure. One first grader spent the entire class period focused on drawing a tree. He had started at ground level, and worked his way slowly up towards the leaves. As we headed back to the classroom, he told me that the tops of trees were very complicated and hard to draw (Figure 4.3). No wonder young children simplify trees to straight lines and circles. Simply contemplating drawing so many leaves was difficult, yet this first grader was trying to understand how it could be done.



*Figure 4.3.* First Grader Drawing a Tree

**The children invented names for plants and animals.** I perceived these dreamed up names as students' creative thought, a claim to ownership, and the beginning of a personal connection between the child and the object. For example, the first graders, with a partner, choose a tree to study through their senses. I was surprised that most of the children, after choosing a tree, gave the tree a name,

similar to a name a child might give a pet animal; such as Bob, Treeme, or Fluffy. Whenever the students found insects or small animals, they spent some time giving them pet names. I thought about the connection between naming, titling, and ownership. My students both enjoy and struggle through titling their works of art and they see this as a very important aspect of finishing their piece. At conference time, telling their parents the title of a work is always the first chosen step; before even showing their parents the work of art. I saw this naming as an important step towards the children connecting with the natural world.

**The children built empathetic connections with nature and within their learning community.** Having the freedom to explore, with the knowledge that they were to not harm the animals or plants, led my students to exhibit greater sensitivity both for the natural world and for each other. Instead of running and yelling, the children treaded carefully, looked closely at nature, and became increasingly interested in natural patterns and systems. The second graders, given the prompt to sketch patterns they found, came to the conclusion that all things in nature have patterns; you simply needed to be observant. The children were particularly gentle with the insects they found. They were empathetic towards ants carrying their eggs, which they discovered when turning over some rocks. The children insisted that no one interfere with the ants' activity, and then gently placed the rock back in its original spot. Fifth grade girls adopted earthworms they found, named them, and placed them back in the soil after holding and petting them (Figure 4.4).



*Figure 4.4.* Insect and Animal Observations

This sensitivity towards nature carried over into personal relationships. Not once did I have a problem with students arguing, hurting each other, or feeling left out. I did however, have difficulty with several fifth graders being more interested in each other than in exploring the area. In my daily reflections I wrote:

Frustration with fifth graders again. Several never settle in to draw or even engage with their surroundings; instead they engaged with each other. I witnessed several small bumps and abrasions all caused by a lack of observation. Of course, fifth grade students are very social, growing quickly and can be less coordinated at times. At fifth grade, the social component is huge.

I overcame this problem by giving the fifth graders a group project to create a plan to rejuvenate the nature area. When their focus was on working together, they paid closer attention to the task at hand.

All of the students became more aware of the artistic process through their explorations. The second part of the question, "In what ways will outdoor exploration engage students in artistic inquiry and how will it inform their art practices?" dealt with applying their discoveries to their understanding of art. From this study, I found my students constructing knowledge of how artists think and work.

**Artists make personal choices in what they create.** In my daily reflections I wrote:

I am seeing my students through new eyes. What interests them? I am focused on what they do, what they learn, instead of what I teach. In studying

what they do, I learn to adjust what I do. Of course I have done this as a matter of course, but somehow this is different. Before I was interested in improving student behavior and the quality of their work, now I'm trying to see what will engage them in the creative process because they WANT to be engaged in it.

Exploring nature offered the students choices in subject matter. They gravitated to different areas, engaged in different activities, observed different phenomena, and gathered different objects. This is how artists work; choosing ideas and materials from personal experience.

**Materials have both multiple uses and limitations.** Nature is a great resource for art materials and my students began to see the creative potential for using natural resources in their work. Having charged them with not harming any living thing, they quickly gleaned that what they could use were objects lying on the ground, water from the creek, and loose dirt. After exploring the area, the fourth graders wanted to make what they labeled *Mud Art* during their next art class. I was very apprehensive about allowing this activity, with thoughts of angry parental e-mails, but it was one of the highlights of this study. With minimal materials, the students showed great diversity in their approaches to using dirt to create art. They poured water down a mud encrusted board mimicking a river through mountains, used sand and clay modeling techniques, added fallen objects, adhered fallen leaves to a tree, made hand stamps and painted designs on the trees, and stenciled leaves onto paper combining printmaking with painting techniques. Most interesting to me were their created habitats for birds and worms which I saw as an opening to

introduce eco-art principles to the students. However, the children also learned what dirt could not do; they discovered that the mud objects fell apart as they dried, to paint with dirt they needed to mix it with a lot of water, and only certain types of dirt worked well at adhering objects (Figure 4.5).



*Figure 4.5. Using Dirt to Create Art*

**Materials can be found objects.** My students were quite used to me providing them specific materials and tools in their art making. Exploring the natural world let them see that art materials do not need to be purchased or provided, but can be found in the environment. Several students realized the potential of discarded litter which they could recycle into art objects.

**Collected objects and observations can be used in what you create.** Artists are collectors, and their collections play an important role in what they create. The kindergarteners went on a sensory scavenger hunt, gathering small objects off the ground that appealed to their senses. They brought these objects, which became very precious to them, back to the art room. During the class after their scavenger hunt they built structures from their collected objects, and then chose one or two to adhere to a drawing they made which illustrated their outdoor exploration (Figure 4.6.). I was surprised that these natural objects held their meaning from week to week, as the children knew what they had collected and wanted to take them home.



*Figure 4.6.* Kindergarten Building and Pastel Collage

**Planning and/or mapping can be an important step in the creative process.**

Artists work in many different ways, and creating a plan is one method. The fifth graders planned out and mapped improvements to our nature area. I asked them to

think both realistically, and fancifully. They worked in small groups, and then shared their ideas with the class. Several girls came up with the idea of forming a nature club that would come to the area and help with the actual renovations. This led to an interesting discussion about the role humans play in forming and maintaining natural areas, and questioning which was better; to leave nature alone or play a role in sustaining a certain environment. The fifth graders realized, as artists working within nature, careful planning would be an important first step for improving the school's nature area. They would need to consider the resources, agree on a design, and plan a work schedule.

### **Lessons Learned**

This action research study answered many of my questions about using outdoor exploration in the framework of inquiry-based art education model. I had long used a format of direct instruction for introducing art projects and processes to my students. I perceived this method to be flawed, but was not sure what direction I should take to improve my teaching. By implementing experiential, discovery, and inquiry-based learning strategies, my students developed a better understanding of the creative process, and I improved my teaching practice. The children learned that art involves engagement in sensory experiences, personal choice in activity, sensitive observations, imagination and discovery. By switching my role as teacher to fellow explorer, I discovered that "teaching" art requires loosening my perception of control over what students *do* and what students *learn*. By embracing the unknown, the uncertain, the ambiguous, we became fellow explorers, which revitalized my desire to teach. This study helped me reconcile my beliefs about

teaching and learning with the methods I use in the classroom, and within my newfound outdoor arena.

## Chapter 5: Discussion

### A Needed Strategy in Art Education

The premise of this study began with my belief that children need to spend more time in nature for their own well-being, for their understanding of art concepts, and to help them develop an empathetic stance towards the natural world. Taking children outside to explore seemed such a simple strategy for learning these things, yet I did not know how to implement the strategy successfully. In reflecting back on this study, I went through several revisions of how to present the concept of artistic exploration to the students, how to prepare for learning outside the classroom, how to keep students focused on that learning, and how to assess what they had learned. Outdoor exploration required a great deal of preparation and flexibility combined with careful observation and reflection on student activity. The ambiguity of this strategy, in that students were not given specified learning methods or outcomes, required my students to be both responsible and thoughtful. In my mind, the results were profound in that they changed my understanding of how to teach elementary art, they showed how inquiry led my students to better comprehend artistic concepts and processes, and demonstrated a way for children to reconnect with nature. For several years I struggled with students viewing art as a time when they get to make something, and nothing more. The experience of exploring and observing helped them see the role that nature can play in their art and aesthetic encounters. As I interviewed individual students, I saw how these experiences led the students to view art as meaningful and experimental. Switching from the role of presenter and advisor to fellow inquirer and explorer took a shift in

my thought process about *how* children learn and *what* they need to learn.

Exploring nature, with its varied sensory experiences piqued my students' curiosity, captured their imagination, and engaged them in careful observation of environmental phenomena. By providing learning opportunities through creative prompts instead of through direct instruction, my students and I discovered an alternative and exciting approach to learning about both art and nature.

In looking back at the first research question about the essential factors needed to engage students in outdoor exploration, I had understood the importance of safety at the outset, but not my need to embrace the ambiguous situations that arose during those explorations. Implementing an exploratory strategy in an uncontrolled environment made precise planning difficult; instead I had to prepare my students and myself for the unknown. I had to change my point of view from seeing my students as an age-defined group that would benefit from learning specific art concepts and processes, to a diverse group of individual artists. The second research question that asked how outdoor exploration would engage the children in artistic inquiry and understanding of art processes helped me see my students as artists who could make their own choices in what they created. Nature was the bearer of sensory experiences which inspired these artists much more than a concept or process I had chosen to meet a specific learning target. The children had the freedom to explore and experiment with their own ideas, which sparked greater creativity in the artistic process.

### **Verifying of the Value of Outdoor Exploration**

In considering the professional literature written about the importance of outdoor exploration, this study confirmed that this strategy engaged children in observation, inquiry, and environmental awareness. Although conducted over a short period of time, the students made visual and verbal observations about sensory experiences, questioned these experiences, and developed greater empathy for living things. It was also apparent, as seen in the results section of this study, that students drew inspiration from nature for their artwork, and developed a better understanding of the role natural objects and processes play in creating art. The results also suggested that the students' experiences could be interpreted as the beginning steps towards developing a mutually beneficial relationship with nature, as found in Louv's study (2007), and that the students started learning to be environmental stewards as found in Inwood's research (2010). For instance, the students showed concern about the garbage they found in the creek and planned how to make the nature area more attractive to both humans and animals.

The professional literature also focused on how outdoor exploration could help students make connections between science and art concepts through inquiry. In order to examine this theory, I looked at my interpreted science objectives used in creating the lesson plans for this study (Appendix A). My students were actively engaged in asking questions about the natural world with questions such as: Why do insects live under rocks? Why don't they get squished by the rock? Why does the thistle plant have thorns? Students had many questions about how nature worked. They conducted simple investigations, such as lifting and replacing the rocks several times to see how that affected the insects. They observed how different objects

thrown in water behaved differently. The kindergarteners took great delight in collecting and curating the natural objects that they found. Students were interested in learning the common names of natural objects, and I could hear them sharing that knowledge amongst their peers. Several fourth graders described their mud creations as "habitats" for birds and worms, supplying their interpretations of shelter, food, and water. I overheard first graders talking about the life cycle of their adopted trees and the seed "babies" the trees were dropping. In many ways, this study revealed the close connection between artistic and scientific inquiry.

### **Potential Bias and Limitations of the Study**

This study was conducted as a form of action research, meant to improve the way I teach, so the results are personally valid in that they opened my eyes to a very different way to approach art education. As a result of this study, I plan to implement inquiry-based outdoor exploration regularly into my teaching, giving students sensory experiences on which they can form their own artistic creations. Their interest in examining natural phenomena will help them understand the principles of eco-art, and hopefully begin to build a symbiotic relationship with the natural world. It is my desire that other elementary art teachers analyze this research in order to implement outdoor exploration into their own practice.

I obviously have a strong bias towards developing a thoughtful, sensitive community of learners that will come to understand the need to sustain and protect our natural world. There are many artist educators, such as Inwood (2010) and (Strauch-Nelson, 1012) that share this desire. I tried to design this study, however, to allow my students to draw their own conclusions and investigate art and nature

without being told the issues of environmental concern. Waite's (2011) study supports the theory that children first needed to hold an empathetic view of nature before exposing them to the concerns of climate change.

Applying the results of this research to other elementary teachers' situations and students is possible with several limiting factors. My school's location was optimal for safety, accessibility to a natural environment, and allowing for classes to explore within a limited time frame. This is certainly not the case for all elementary schools. The natural environment was specific to central Iowa, so the study would have looked very different in another location, such as a coastal, desert, or inner-city environment. The student body studied reflected children from diverse backgrounds, although none had physical disabilities that kept them from participating. Our nature area would not have been accessible to students using wheelchairs, although a student on crutches managed to maneuver through the area with the help of friends.

### **Questions for Further Study**

I am left, however, with two known unresolved issues. The first pertains to the assessment of student learning during their explorations, and the second to the possible detrimental effects their explorations could have on the area. Although I collected anecdotal reflections, photographs, and video of the children during this study, I did not assess the students individually beyond asking them questions about what they were doing and documenting their activities through photographs. Although I have collected formative assessments through discussions with students in the past, my primary mode of assessing student achievement has been through

the examination of their art projects. The production of art was not the aim of this study; it was to engage students in artistic inquiry. As objectives are tied to assessments, I needed to place a value on student engagement in the experience, not on the final product, and document the learning that occurred during that experience. I did not have the students individually self assess their experiences during the study, and I see this as a possible validity issue as to the results of the study. Student engagement could be assessed by having the children complete a checklist or short answer form about their experiences. The issue of student assessment requires more research, evaluation and reflection on my part.

The second unresolved issue pertains to the students' effect on the nature area. Taking over six hundred children into a relatively small area led to some deterioration of the soil and grasses in the area. This may seem a trivial point, in that grasses in Iowa grow quickly, but in the grander scheme of nature, overuse has led to many problems of erosion and damage to the environment. How ironic then, that in an attempt to reconnect children with the natural world, their presence, in large numbers, could lead to environmental destruction. This issue needs further examination.

### **The Big Picture**

This was a small study of one elementary school's population engaging in outdoor exploration during the month of May, 2012. The research that was conducted and interpreted played an important role in changing the way that I teach; shifting from a direct instructional format to an experiential, inquiry-based model that considers how students learn above trying to disseminate information to

them. Other elementary art teachers may benefit from this study and learn to incorporate outdoor inquiry-based learning into their own programs.

Outdoor exploration needs to be reintroduced into the art education practice, not just to improve elementary teaching methods, although that is a worthy goal, but for the benefit of future generations. Today's children lead lives that are filled with scheduled and media driven activities, with little time or encouragement to develop their own questions and ideas; while the natural world is in need of a sensitive, informed humanity. Improving the lives of children by allowing them to explore the natural world through artistic inquiry, and creating sensitive environmentalists at the same time, is an idealistic premise, and not easily implemented in a school system based on standardized testing, time units and large class sizes. Yet, as this study finds, it is possible to incorporate aesthetic experiences in nature into the time frame of an elementary art class, engaging children once more in the wonder that is our natural world.

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## Appendix A

The Waukee, Iowa elementary science curriculum standard, *Science as Inquiry*, as I interpreted it for art inquiry into nature.<sup>1</sup>

**Kindergarten:**

Use tools to gather data and extend the senses.

Name and use simple tools.

Use simple tools to explore nature.

Use data to construct reasonable explanations.

Make predictions.

Make observations about nature.

Communicate investigations and explanations orally, in writing, or through drawings.

Communicate investigations and explanations orally and through drawings.

Communicate observations of nature through artistic processes.

**First Grade:**

Ask questions about objects, organisms, and events in the environment

Ask questions about the natural world.

Ask questions about the natural world.

Plan and conduct simple investigations.

Conduct simple investigations.

Conduct simple investigations in the natural world.

Use tools to gather data and extend the senses.

Name and use simple tools and gather data.

Collect, curate, and present sensory images and objects from nature.

Use data to construct reasonable explanations.

Make predictions based on observations.

Make observations about nature.

Communicate investigations and explanations orally, in writing, or through drawings.

Communicate investigations and explanations in writing.

Communicate observations of nature through artistic processes.

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<sup>1</sup> Color-coded black for Waukee science curriculum standard *Science as inquiry* and corresponding benchmarks. Color-coded blue for Waukee science curriculum objectives. Color-coded green for interpreted, corresponding art inquiry into nature objectives.

**Second Grade:**

Ask questions about objects, organisms, and events in the environment.

Seek answers by making careful observations.

Ask questions about natural objects and events.

Plan and conduct simple investigations.

Plan and conduct simple investigations.

Plan and conduct simple investigations of nature.

Use tools to gather data and extend the senses.

Name and use simple tools and gather data to construct reasonable explanations.

Collect, curate, and present sensory images and objects from nature.

Use data to construct reasonable explanations.

Make predictions based on observed patterns.

Observe, collect, and analyze patterns in nature.

Communicate investigations and explanations orally, in writing, or through drawings.

Communicate observations of nature through artistic processes.

**Third Grade**

Identify and generate questions that can be answered through scientific investigation.

Create questions from explorations in nature.

Plan and conduct simple investigations.

Plan and conduct simple investigations of nature.

Use appropriate tools and techniques to gather, process, analyze and interpret data.

Experiment using tools and scientific techniques.

Experiment with natural art tools, materials and processes.

Use evidence to develop reasonable explanations.

Curate artwork made from natural objects and observations.

Communicate scientific procedures and explanations.

Communicate observations of nature through artistic processes.

Recognize that scientists perform different types of investigations.

Recognize that artists perform different types of investigations.

**Fourth Grade**

Identify and generate questions that can be answered through scientific investigation.

Identify questions that can be answered through scientific investigations.

Create questions from explorations in nature.

Plan and conduct simple investigations.

Plan and conduct simple investigations of nature.

Use appropriate tools and techniques to gather, process, analyze and interpret data.

Experiment with natural art tools, materials and processes.

Use evidence to develop reasonable explanations.

Curate and present artwork made from natural objects and observations.

Communicate scientific procedures and explanations

Communicate observations of nature through artistic processes.

Recognize that scientists perform different types of investigations.

Generate an inquiry question; identify an investigation to answer the question.

Recognize that artists perform different types of investigations.

**Fifth Grade**

Identify and generate questions that can be answered through scientific investigation.

Create questions to explore in nature.

Plan and conduct simple investigations.

Design and conduct a scientific investigation to answer questions.

Plan and conduct simple investigations of nature to answer questions.

Use appropriate tools and techniques to gather, process, analyze and interpret data.

Use tools and scientific techniques to make better observations.

Experiment with natural art tools, materials and processes.

Use evidence to develop reasonable explanations.

Use data to construct reasonable explanations.

Curate and present artwork made from natural objects and observations.

Communicate scientific procedures and explanations.

Analyze scientific procedures and explanations.

Communicate observations of nature through artistic processes.

Recognize that scientists perform different types of investigations.  
Recognize that artists perform different types of investigations.

## Appendix B

Here are some suggested prompts for outdoor exploration. These prompts are divided into grade levels, however many could be used at any grade level. Some were inspired by Keri Smith's *How to be an Explorer of the World* (2008).

Prompts were devised based on the concept that both artists and scientists observe, collect, analyze, compare, and notice patterns.

## Kindergarten:

- Go on a sensory scavenger hunt.
- Collect small objects and sort by shape, texture, color, etc. Use to create a mosaic or collage.
- Make colored goggles. Take a walk and see the world like an artist.
- Collect sounds, smells, sights, and textures.
- Paint with water on different surfaces. Put a painting out in the rain and watch it change.
- Curate and present collections of natural objects.

## First Grade:

- Befriend a tree. Use all your senses to explore the tree. Make a rubbing from the bark and leaves.
- Gather fallen tree parts and experiment with them as tools and materials.
- Document faces you find in nature using a camera or sketchbook.
- Collect a certain natural object in abundance (for example: fallen leaves). Play with them and create from them.
- Cover paper with Vaseline. Take a walk on a windy day, holding up the paper to create a chance collage of windblown objects.
- Gather pinecones or burrs and make a sculpture from them.

## Second Grade:

- Explore in an altered state: through colored goggles and from a topsy-turvy viewpoint.
- Collect and document found patterns. Incorporate found patterns in artworks.
- Match a paint chip color to a natural object. Draw the object on the paint chip. Collect several.
- Take a sensory trust walk. One friend leads another blindfolded friend to feel natural objects.
- Make shapes from cardboard. Place in the grass for several days. Remove the cardboard. Or place natural objects on construction paper outside in the sun to create a sun print.
- Artists notice things. Collect shadows in a sketchbook.

## Third Grade:

- Experiment with water as a process, a tool, and a medium.
- Collect stream and/or pond water in a jar. Bring inside and place it in the sun. Document the changes with a camera or sketchbook.
- Watch water. Sketch the motion, light, and reflections. Document the shapes you see in water.
- Find art in nature. Take a photograph of what is beautiful to you.
- Gather seeds and use them to make a mosaic.

#### Fourth Grade:

- Explore natural dirt and mud. Use them to create something. Combine them with other natural objects.
- Make pigments from found natural materials. Use them to paint and draw.
- Compare found objects that are nature made, human made, and a combination of the two.
- Gather different types of leaves and make prints.
- Look at nature upside-down. Try drawing upside-down. Lie down under a tree and look up. Draw what you see.
- Make an outdoor weaving from natural found objects.

#### Fifth Grade:

- Sketch what is seen within a viewfinder. Create an artwork from these observations.
- Choose a one cubic foot area of nature. Sketch the space over several days and weeks. Record your thoughts and questions about what you see, hear, and touch.
- Record everything you consume in one day in writing and images.
- Create a tactile map of a natural area from found natural objects.
- Collect natural objects and make up a story about them.
- Design and construct an artwork made from natural materials.

## Appendix C

Teacher Kit: To be brought by the art educator:

- A cell phone or Walkie Talkie to communicate with building administrator or classroom teacher
- A whistle
- A first aid kit
- A set of labeled digital cameras for students to check out
- Several buckets with trowels and cups for collecting
- A camera, video camera, digital voice recorder, and tripod for recording explorations
- Some string
- A pair of scissors
- A pencil sharpener
- Several magnifying glasses
- Some rubber gloves
- Some small garbage bags for collecting trash
- Some old towels for wiping off hands

Exploration kits for each student:

- A bag or backpack to carry materials
- An oilcloth squares to sit on if ground is wet or damp
- A clipboard with stock of sketch paper
- A case for pencils, erasers, and crayons
- Two or three pencils and erasers
- A set of crayons
- Two or three gallon sealable bags
- A viewfinder

*Note: After two days of student explorations, the student kits were no longer used. To make materials more manageable for children, each child carried a clipboard with paper and each pair of students shared a sealable bag of crayons. Extra bags, viewfinders, and pencils were added to the teacher kit. When it was damp, two students carried the oilcloth squares to the area.*

## Appendix D

**Lesson Plan**

Rationale: Students at my school were not familiar with outdoor art explorations. This first lesson was designed to orient students to the area, explain the expectations for behavior and learning, and included a brief inquiry-based art lesson. Each grade level was given different, age appropriate prompts, followed by time to observe and explore the natural areas near our school building.

**Objective:** Artistic inquiry through outdoor exploration.

**Supplies:** Teacher kit, a box of pencils, oilcloth squares if the ground is wet, sealable bags with crayons for each pair of students, and a clipboard with paper, or a sketchbook, and a gallon sealable bag for each student.

**Step by Step:**

1. Gather supplies.
2. Prior to leaving the building, explain the whistle signals for both listening to instruction and regrouping, and discuss these two questions:
  - Why are insects and animals outside?
  - What should you do when you meet an insect or animal?
3. Lead the students outside, briefly touring the area to be explored, and then form a group circle for instruction.
4. Have students sit and close their eyes in silence. Ask them what they hear, and what they smell. Tell them to touch the ground next to them. Ask them what they feel. Have them open their eyes and look up towards the sky and ask what they see.
5. Explain the idea of exploring things in nature that attract our senses. Have the students run their fingers through the grass again. Tell them when they find something they like to ask themselves: Why do I like this or why don't I like this? Which of my senses does it affect?
6. Ask the students which sense they shouldn't use when exploring. Discuss why tasting natural objects is not allowed.
7. Explain and discuss the prompts.
  - **Kindergarteners** will explore the nature area in a sensory scavenger hunt.

- **PROMPTS: What do you notice first? Which natural objects in the nature area are you attracted to? Which ones can you collect?**
- **First Graders** will explore the nature area and arboretum to discover and sketch the uniqueness of a single a tree. Model drawing a tree from your mind's eye compared to drawing a specific tree from observation. Have students practice making branch shapes with their arms by looking at a specific tree.
- **PROMPTS: What makes your tree special? What question would you ask your tree? How can you draw your tree so that others see what makes it special to you?**
- **Second Graders** will explore the nature area and arboretum looking for and documenting natural patterns. Model finding and sketching a natural pattern.
- **PROMPTS: What is a pattern? On what natural objects do you find patterns? How many different natural patterns can you sketch on your paper?**
- **Third Graders** will explore, observe and sketch the water in the creek area. Ask students to solve this riddle: What do we need to survive that artists use but find challenging to draw and paint? Then discuss the question: Why are artists fascinated by water? Explain that they are to observe the stream carefully and try to draw what they see. Model drawing water from your mind's eye compared to drawing from observation.
- **PROMPTS: How can you draw the water in the creek? What color is water?**
- **Fourth graders** will explore the nature area, arboretum, and creek to collect and experiment with dirt in making artworks. *(They will need some extra supplies including buckets, trowels, and old paintbrushes.)* Ask the students where clay comes from. What is clay? What do artists do with clay? Are there other types of dirt? How do you think artists could use dirt?
- **PROMPT: How can you use dirt in making an artwork?**
- **Fifth graders** will explore the nature area, arboretum, and creek to plan and design improvements to the area. Discuss the following questions: What makes this a nice place to be sitting? Could we improve it? Could we make it worse?
- **PROMPT: How can you improve this area in a way that will benefit the plants and animals that live here AND make it more appealing to your senses?**

8. Show the students the area boundaries.
9. Give the expectations:
  - Stay with your buddy.
  - Stay in the boundaries.
  - Be responsible for your supplies.
  - Be gentle with nature. Do not pick any plants or hurt any creatures.
  - Think about what you are exploring – what do you see? What do you hear? What do you touch? Be aware of what is around you.
  - Regroup at the meeting spot when you hear the whistle.
10. Give the consequences of not following the expectations.
  - Students not following the expectations will be given a *tree stop*. They must put one hand on a tree chosen by the teacher and remain there until the teacher instructs them to return to their exploration.
  - Students that continue to not follow the expectations after a *tree stop* will be sent inside to sit in the office.
11. Restate the prompt.
12. Students explore the area based on the prompt or other creative or artistic experience.
13. Regroup at the whistle signal.
14. If time, share favorite objects, sketches or experiences. Discuss how they can apply what they learned to creating art.
15. Return to the classroom and put away the materials and supplies.

### **Biographical Sketch**

Melinda Turnbull has been teaching elementary art in the Waukee, Iowa Community Schools District since 2003. She is a graduate of West High School in Madison, Wisconsin, The University of Wisconsin with a degree in Art History in 1982, and Iowa State University with a degree in Elementary Education in 2002. A lifelong participant in the arts, Melinda has enjoyed a variety of creative experiences, from drawing and painting to wheel throwing, and from playing the piano to directing children's theater productions. Melinda lived for six years in Hungary and Thailand where volunteer work in the international schools inspired her to become a teacher. Her hobbies include hiking with her two dogs, commuting to school by bicycle, gardening with her husband, and volunteering at a local outdoor museum of agriculture.