REWILDING STUDENTS TO ESTABLISH A SLOW PEDAGOGY IN SHORT TERM ENVIRONMENTAL EDUCATION SETTINGS

by

Mason Keel

A capstone project submitted in partial fulfillment of the requirements for the degree of Master in Natural Science and Environmental Education

Hamline University

St. Paul, Minnesota

May 2021

Capstone project facilitator: Jana Lo Bello Miller Content reviewer: Erinn Kronebusch

Project Summary

Environmental learning and natures centers across the world offer very short-term learning and/or adventure opportunities for their users. The environmental learning center where this project was created is no different. Due to the limited length of these opportunities, one may question how effective this programming is at connecting individuals to nature, promoting a sense of place and, in turn, promoting broader environmental responsibility. Speaking from personal experience, I believe that short-term environmental education does not do everything it can to set up students for connection with nature and positively impactful experiences. This especially rings true for individuals that have few outdoor experiences and a corresponding low comfortability in the outdoors, including marginalized and underserved populations. I have seen and been hurt by students with a strong desire to leave at the end of their trip to our environmental learning center. I would not be surprised if these students received little meaning from their trip, distracted by their discomfort in new and/or natural settings. I set out to figure out if there was a way to set students up for success in short-term outdoor learning environments as a means for increasing the impact of environmental learning and nature centers.

To help make progress toward solving this issue, I set out to answer the following question: *how can outdoor educators use "rewilding" to promote place meaning and attachment and in turn set up their students for improved learning and a positive outdoor experience?* In order to answer this question, I made a curriculum unique to the organization where this project was created. Since the curriculum was not implemented, the intended audience for this project was a visiting school group of fifth and/or sixth

grade students. Ideally, these students would be from an urban or suburban area, considering that, from personal experience, rural students are more comfortable in a natural outdoor setting and more readily develop place meaning and attachment to this kind of setting. Even more ideally, this class would be implemented with a school/schools where a majority of the student population come from underserved populations and/or communities of color. This is because according to a report from The Trust for Public Lands (2020) stated that parks serving nonwhite populations are, on average, about half the size of parks serving white populations, and parks in low-income areas are, on average, four times smaller and four times more overcrowded than parks in high-income areas. This means that students with these backgrounds will most likely feel much more uncomfortable with open natural spaces. However, the curriculum for this project will be designed for implementation for students of any age or background.

The educational framework that this curriculum was constructed around is known as The Learning Cycle. The BEETLES Project developed the Learning Cycle for environmental educators to frame their classes around (The Regents of the University of California, 2015c). This framework is made up of mostly consecutive phases of invitation, exploration, concept invention, application, and reflection. Backed by research, the Learning Cycle is used for all curricula at the RELC where this project took place.

Although the Learning Cycle was developed mainly for the grasping of natural science concepts, this Rewilding class still used the Learning Cycle but in a looser framework. By this, I mean that I planned to reveal the concept of "connection" to the students at the start of class as opposed to students inventing the entirety of the concept

themselves. However, through activities and more informal post-activity debriefs, students would come to a deeper understanding of their connections to themselves, each other, and nature. As a means for comparison, a class about fungus created at the same environmental learning center (AKA Fungus AmongUs) follows a tighter Learning Cycle framework. Through specifically prompted explorations and carefully ordered guiding questions, most students are able to figure out the role of decomposer that fungi play in our biosphere.

The class begins with some group games and activities that allow students to break the ice with each other, their instructor, and their adult chaperones. The class then delves into various sensory and creative activities that allow students to dwell in nature and make novel observations that they might not have been able to make doing adventure activities that the environmental learning center also offers, such as canoeing and rock climbing. These activities promote connection with nature but also allow students to be more with their own thoughts and feelings, allowing them to connect with themselves as well. The class ends with a reflection of how the students can take themes from the class and apply them to the rest of their time at the environmental learning center and back at home as well.



Rewilding

Outline

Preparations before class Introductions Games and Activities Sensory Activities Bring it on Home (30 min.) (20 min.) (45 min.) (1 hr. 45 min.) (10 min.)

Class Framework

Торіс

Rekindling wild emotions of connection and curiosity.

Theme

Spending time exploring nature can help us reconnect with our wild emotions and promote positive outdoor learning experiences.

Universal Concept

• Connection: Humans greatly benefit from connecting with themselves, each other, and nature.

Equipment

No equipment needed! Just a Positive Mental Attitude (PMA)



Preparation

- Set out chairs (one for each student and adult)
- Make your board with plans and goals for the class
- Check student med forms for any possible accommodations



INVITATION

Introductions

Purpose: Students will get excited about spending time outside and access prior experiences. You will assess their outdoor experience and learn names. **Time:** 20 minutes

Before the students arrive, review their information from MMM to get a general idea about their experience in the outdoors (students from rural areas are basically guaranteed to feel more comfortable at Eagle Bluff than inner city students). Once they arrive, welcome them as they enter the classroom; introduce yourself, make small talk.

Today's class will focus on tapping into our "wild" side. This does not mean we will be hunting animals or spending the night under a tree. It will involve spending as much time outside as possible, exploring nature in various ways and playing some games along the way. Through these activities, you should walk away from class today feeling at least a bit more comfortable with Eagle Bluff's campus. You'll hopefully also walk away feeling a greater connection to yourself, each other, Eagle Bluff, and nature in general. First, I want to learn your names and understand your general feelings about the outdoors and nature.

→ Think Pair Share: What memorable outdoor experiences have you had recently? What about those experiences made them memorable? (These can be positive or negative experiences. This is a great way to assess/gauge students' interest in and prior experiences with the outdoors.)

When the students share their answers with the class, have them also share their names. Based on the experiences they share, gauge the comfort students seem to have in the outdoors. This will help you in picking activities that are suitable to their comfort levels.

Explain to them that the activities they will be doing today will be different than ones they are used to and a great way to practice respecting themselves is to keep an open mind to these activities. Just because something is different doesn't mean it's not fun!

Take a few minutes to let students use the bathroom and get a drink if they need to.



EXPLORATION

Games and Activities

Purpose: Students will break the ice and connect with each other by playing various outdoor games.

Time: 45 minutes

Many positive outdoor experiences are created when people share those experiences with others. Select a few of these games to play with your students in order to help them become more familiar and comfortable with the students in their group and being in a new environment.

- Owls and Crows: This is a good warm up game that also helps the students review Eagle Bluff's general rules and policies that they will have learned in their welcome. You will need an open field to play this game. Split up the students into two groups of equal size and have them stand in two separate shoulder to shoulder lines facing each other. One line of students will be owls and the other will be crows. The two lines should only be about 10 feet apart. Place a rope parallel to each line about 40 feet behind each of them. The instructor will give a true or false statement about Eagle Bluff's rules and policies. If the statement is true, the owls have to try and tag the crows before the crows then try to tag the owls before they make it past their rope. Any students that get tagged become part of the other bird's group. Continue until all students end up on one side or however long you like.
- *Camouflage*: One student is selected as prey and the rest are predators. In an area with plenty of places to hide (preferably a forest or a prairie in the late spring/summer), the predators are told to hide while the prey counts down from 30. The prey can then open their eyes and, without moving from their position, point out as many predators they can see. Once they cannot see any more predators, the prey must close their eyes again and count down from 10. The predators must move closer to the prey during this countdown but cannot yet "eat" (tag) the prey. Again, the prey opens their eyes and points out as many predators they can see. Once they cannot see any more predators, they must again countdown from 10. The predators many predators they not the prey during this count see any more predators.
- Shelter Building: In smaller groups, students are given 20 minutes to build a shelter that they can all fit in with natural materials. Before you send them out to build, have them discuss ideal spots to build a shelter and characteristics their shelter should have. At the end of the 20 minutes, the class does a "shelter tour" together.

4 Respects: Before heading outside, take time to ask the students how the 4 respects might relate to class. Chime in with the following information:

- Yourself: Step out of your comfort zone and try new things today! Something that may not seem exciting at first could be very fun once you get yourself involved!
- **Others:** Some of these activities will involve you working and discussing with your classmates. Do what you can to make this an enjoyable experience for them as well.
- **Equipment:** If you plan on writing or drawing with the provided supplies today, let's remind ourselves that other students will be using these supplies after us.
- <u>Environment</u>: You are more than welcome to find yourself a good walking stick for today's class. Just make sure that it follows the 2D rule: dead and down.





- Bat Moth: This is a modified version of marco polo. A few students and parent/teacher chaperones are asked to represent the border of the play area. The size of the area of play is determined by how many students there are. One student is selected as a bat and blindfolded while the remaining students are moths. Using "echolocation," the bat yells "bat" and the moths must respond with "moth." The bat must then tag as many moths as possible. The students and chaperones on the border tap the shoulders of the bat and moths if they get too close to leaving the play area. As moths get tagged, have them switch spots with students on the border of the play area.
- *Fire Key-per*: Select one student to be the fire key-per and lend them your set of keys. Have the rest of the class form a circle and space themselves out by extending their arms out straight with each student touching each other's finger tips. Once they are spaced out, they can lower their arms. The fire key-per is blindfolded in the middle of the circle with the keys at their feet and. The instructor then quietly selects one of the students to try and steal the keys by pointing at them. As the selected student approaches, the fire key-per can point in any direction they believe the student is approaching from bases solely on sound. The fire key-per cannot just aimlessly point around them and the surrounding students cannot make any noise to mask the movement of the student trying to take the keys. If the fire key-per points at the stealing student, they must go back to their spot in the circle and you can select another student to steal the keys. Once a selected student gets the keys and moves back to their spot in the circle without getting caught, they become the fire key-per and the former fire key-per takes their spot in the circle.
- Park Ranger: This is a modified version of sharks and minnows. One student is selected as park ranger and the rest are asked to think (but not share) of an animal. Find a fairly open area and ask parent/teacher chaperones to stand in designated border spots. The park ranger starts in the middle of the area while the rest of the students stand in a shoulder-to-shoulder line on one side of the play area. The park ranger then says a characteristic that an animal may have (e.g., has four legs, can fly, is warm blooded). If the characteristic stated matches any of the animals selected by the lined-up students, they must run to the other end of the border area, avoiding getting tagged by the park ranger. Tagged students become trees in the play area and can tag students while remaining stationary, turning other students into trees as well. The park ranger keeps repeating animal characteristics until only one student remains. The last student then becomes the park ranger.
- Oh Deer: Animals need four main resources to survive: food, water, shelter, and space. Have the students come up with a hand sign for each and practice those signs. Once they know the signs, on one end an open field, have the students line up shoulder to shoulder. Have two students volunteer to be resources and stand on the other end of the field (20-25 yards) in a shoulder to shoulder line. The rest of the students are deer. Both lines of students then face away from each other and perform one of the four resource signs. Then, the instructor has all students turn around at once while continuing to perform their resource sign. The deer must run to a resource student making the same sign as them and tap them on the shoulder. Those deer students that successfully find a matching resource survive and the student representing the resource or are unable to get one before another deer student die and become a resource for the next round. After a few rounds, assign one or two students as wolves and instruct them to tag deer as they are running for the resources. If they are tagged by a wolf, they die and become a resource for the next round. Continue the game for however long you want.

After the students have broken the ice and gotten a little more warmed up to each other and being in a new place, ask them the following questions:

Think Pair Share \rightarrow If doing these kinds of activities is a good way for us to connect with each other, what are some good ways for us to connect with ourselves? How about the outdoors/nature?



EXPLORATION

CONCEPT INVENTION

Sensory Activities

Purpose: Students will use multiple senses to explore nature, connect with the outdoors, and think creatively. **Time:** 1 hour 45 minutes

A great way for individuals to connect with themselves and nature in a more holistic way is to incorporate as many different senses as possible. Some of these activities also promote creativity and curiosity. Try to incorporate three to four different sensory experiences into your class.

Facilitation Tip!

The following activities are scaffolded to allow for a steady progression of comfort in the outdoors. Start with activities that in the "low comfortability" category and move on to the more immersive activities on the next page once they feel more comfortable.

Low Comfortability

- *Color Hunt:* Students find as many different colored nature items as possible. You can lay out some paint chips and have students match their collected items to the paint chip colors.
- *Texture Hunt:* Students find as many different natural textures as possible. When they are done with finding items, you can also have students pair up and make blindfolded guesses of each other's items.
- *Silent Sit:* Students find a private spot and listen for as many different nature noises as possible. Let them know that closing their eyes helps. If they are unsure about a particular noise, the instructor has the student recreate it. This is a great activity to do by the river.
- *Deer Ears:* At some point in the silent sit, have students cup their hands behind their ears to see if it helps them hear.
- *Fox Feet:* To walk silently through the woods, have the students walk quietly by bringing down the outside ball of the foot, the rest of the ball of the foot, and then the heel on the foot. Having a slight bend at the knees helps with balance.
- *Owl Eyes:* In a wide open space, like on the bank of the river, have the students quickly scan what's in front of them. Then, have them hold their arms out to their sides with their thumbs up. They should be able to see their thumbs in their periphery. From there, ask them to focus on their thumbs while scanning the same area again and see if that changes their perception.
- Animal Sign Hunt: Students find as many different signs of animals as possible. If you find signs from different animals near each other, have the students come up with a story based on those signs.
- *Rock Skipping*: At the river, let the students throw rocks into or skip rocks across the water. Before they throw any rocks, have them look closely for any fossils and make sure there is nobody between them and the water.
- *Scattervations*: Similar to Scattegories, students make as many observations about a nature object as possible in an allotted time, with a point earned for each observation. If students came up with the same observation, they had to cross them out, encouraging unique answers. Students can use multiple senses.
- *Cloud watching*: Students think of things that the clouds looked like. This can be done in combination with the silent sit.



EXPLORATION

Sensory Activities (cont.)

APPLICATION

After a few of the "Low Comfortability" activities...

Think-Pair-Share: Which of those activities did you enjoy the most? What about that activity did you enjoy?

Think-Pair-Share: How did those activities make you feel about nature and about the outdoors? Why do you think being in nature gives us those feelings?

Now, let's do some even more immersive activities to enhance those feelings about nature and maybe experience some new ones!

Instructor Note

Some of these activities can be run at the same time to fit student interests.

Moderate Comfortability

- *Hug a Tree:* Students split into pairs with one student blindfolded and the other student guiding them. The guider brings the blindfolded student to an off-trail tree where they must create a mental image of the tree using their senses of touch and smell. The guider brings the blindfolded student back to the start point and lets them know that they can take their blindfold off. The formerly blindfolded student must then find the tree based on the mental image they created.
- *Foraging:* In the spring and summer, find some wild edibles that the students can try. Just make sure you are 100% confident that they can eat what you find!
- *Chickadee Central:* Bring your students to Chickadee Central, take down the bird feeders, and give each student a handful of seeds to see if you can get some song birds to land on them! Landings tend to happen more if they put seeds on their head but the choice is theirs. If you are struggling to get any landings, feel free to put the feeders back up. Patience is key!
- *Nature Jam:* Have the students find various nature items that they think will produce some stellar music. Once they all come back with their "instruments," take the role of conductor and let them jam out!
- Nature-tecture: In groups or individually, have the students gather natural materials to build any sort of structure they desire. If you're by the river, you can also have them try to build a vessel out of natural materials to send down the river.
- *Our natural world*: Students find objects in nature, come up with ways they are similar to that item, and how that item helps them.

High Comfortability

- *Goldenrod Gall Eating:* Find some goldenrod galls, cut them open, and see if any students are willing to eat the gall worms inside. Have the students that eat them describe the taste. This may convince some more students to try and eat them!
- *Get Muddy:* Down at the river, give the students time to get their hands in the mud! They can make structures with the mud, smear it on their faces, or just get elbow deep in it.
- *Create a Story*: Students found a nature object and come up with a story about their object. This can be done towards the end of class and can summarize their experiences from class.



REFLECTION

Bring it on Home

Purpose: Students will reflect on their experiences from class and come up with ways they can continue to rewild themselves at Eagle Bluff and at home. **Time**: 10 minutes

Back in the classroom, wrap up class by having students have various discussions reflecting on their experiences from rewilding class:

Whiparound: What emotions did you feel during this class? Which activity today was your favorite? What was one thing that you did today that you have never done before?

Finger Scale: On a scale of one to ten, one being not at all and ten being very much so, how much did you step out of your comfort zone today? Which activities allowed you to step out of your comfort zone? What could you have done to step out of your comfort zone more?

Think-Pair-Share: How can you continue to connect with each other while at Eagle Bluff? Yourselves? The outdoors? How can you continue to connect with nature after your trip at Eagle Bluff?

Group Discussion: If you don't have too many natural places around your house, what are some creative ways you can still rewild yourself?

If you enjoyed yourself today, there are still plenty of ways you can keep on rewilding yourself. For starters, take full advantage of the rest of your time here at Eagle Bluff. Once you are back home, keep thinking of more ways to connect with nature. Don't be afraid to do some research or ask your friends, family, and teachers for fun outdoor activities!

- Anderson, B. (2017). Using Dr. Howard Gardner's Theory Of Multiple Intelligences To Connect 4th-8th Grade Students To Nature. School of Education Student Capstone Projects. 89. https://digitalcommons.hamline.edu/hse_cp/89.
- McCallum, I., Kahn, P., & Hasbach, P. (2013). A Wild Psychology. In *The Rediscovery of the Wild* (pp. 139–156). essay, MIT Press.
- Payne, P. G., & Wattchow, B. (2008). Slow Pedagogy and Placing Education in Post-traditional Outdoor Education. *Journal of Outdoor and Environmental Education*, 12(1), 25–38. https://doi.org/10.1007/bf03401021
- The Regents of the University of California. (n.d.). *How Do We Approach Teaching?* Beetles Project. http://beetlesproject.org/about/how-do-we-approach-teaching/.
- The Regents of the University of California. (2015a). *Evidence and Explanations*. Oakland.

The Regents of the University of California. (2015b). Questioning Strategies. Oakland.

The Regents of the University of California. (2015c). Teaching and Learning. Oakland.

Thomas, M. (2020). Elemental Rewilding: Restoration and Reconnection to Self.

ProQuest Dissertations Publishing.