

David J. Kujawski
Boston Collegiate Charter School (formerly South Boston Harbor Academy)
11 Mayhew Street
Dorchester, MA 02125
12th Environmental Science

Boston: Where the Wild Things Are

When urban students think of the *Wild*, visions of *beastly* animals, such as bears and mountain lions – perhaps the recounting of a specific T.V. show or video game—dance in their heads. In a time when Play Stations and the Discovery Channel rule our students’ lives, there is no better time to introduce a sense of place to them.

In *Maine Woods*, Thoreau exuberantly exclaims, “Contact!” He stresses the importance of actively engaging with *Wild* places in order to understand, appreciate and emotionally connect with our natural world. The more that our students become distanced from their natural, *Wild* surroundings, the well-being of every species may be altered. However, given the proper encouragement, role modeling and exposure, students can become more connected to their home towns, and, as a result, begin to develop a sense of place. As Thoreau states in *Walden*, “Things do not change; we change.” I propose that this simple, yet poignant statement resonant throughout our classrooms and in the field! In that, outside class experiences are no longer deemed a treat, but rather a normal integration into the curriculum. Even in an urban setting, such as Dorchester, MA, students can develop a connection to nature and their communities’ history—they just need a good teacher and model to open their minds and eyes.

This unit plan uses journaling and mapping as a way to build an appreciation and understanding between students and their natural surroundings and local history. Through encouraging students to discover and see their surroundings in a new light, they will eventually make a detailed map of their home towns. A journal will be used to record their observations. As a result, the students will also develop a greater understanding of map interpretation and the mental associations they may conjure, not to mention the exceptional ability to read and interpret maps, too. The transcendentalists will be used throughout the unit to reinforce the purpose of the exercises and serve as models. In all, there is more to this unit than meets the eye. It will be exciting to see how it works out. Stay tuned!

Lesson one – “Do it like they do on the Discovery Channel”

Objective: To get kids outside, observe and recognize their natural surroundings.

Pre-assignment: Read the introduction to Transcendentalism¹ and the Introduction (first paragraph, including poem) to *Nature*² by Ralph Waldo Emerson.

¹ A brief synopsis of transcendentalism and H.D. Thoreau that will be developed by teacher

² Emerson, Ralph Waldo. *Nature*, 1848.

**The following format is utilized on a daily basis by every teacher at BCCS. We refer to it as the Black Board System (BBS) – we actually have dry erase boards... Our goal is to get students started/focused when they first arrive to class and keep them apprised of the day’s activities. We start off with a Do Now assignment that usually reflects the topic that will be covered that day. The students are expected to be working the moment the bell rings (if not before). The two main goals of the BBS are to get our students focused, acquaint them with the focus/agenda of the lesson, and inform the students of the homework assignment.*

I have footnoted various talking points and poignant tidbits whenever I feel something needs to be elaborated.

An “” signifies additional information that I think flows better if it follows directly after a statement.*

Do Now:

- Prepare your materials to be brought outside: Marbled notebook (journal), pencils/pens/markers and a ruler
- Re-read the introduction to *Nature* by Ralph Waldo Emerson*

* Possibly affirmation quotes from other transcendentalists

Focus:

Students will be able to:

- Recognize their natural surroundings
- Document and describe their natural surroundings
- Apply metric measurement system to establish scale of objects

Agenda:

- Do now – Read introduction to *Nature* (Time - 5 minutes)
- Rules, expectations and boundaries (Time – 5 minutes)
- Go outside, walk along Mayhew Street - **We will not pick/take the life of anything that is living (i.e. leaves, insects, etc) unless told to do so by Mr. Kujawski;**
- Individually and silently, write (poems; descriptions – weather, natural sounds, calls; short stories) and draw (to scale; use your ruler) about 2 to 5 natural organisms and objects (living/non-living) that you see (Time: approximately 15-20 minutes);
- Share with the class what we have each discovered (Time: 10 minutes);
- Walk silently, as a group, back to the classroom (Time: 5 minutes);
- Reflection time/Adjourn.

Homework:

- Read handouts/Excerpts from:

-Thoreau, Henry David. *A Year in Thoreau's Journal: 1851*.³

-View maps that Thoreau created from *A Thoreau Gazetteer*⁴ to determine where on the maps he could have viewed his various observations*

** Dear teachers, I intend on incorporating the journal entries of the same time period/date as the students are observing and recording in their journals. They may find similarities in what they see to what Thoreau recorded at a similar time of the year. I want them to observe and not necessarily know what it is, at first, but rather make discoveries.*

I also thought that it would be worthwhile to have the students make connections to what they are reading with maps. Thus, I am going to attempt to locate excerpts in his journal (possibly Walden) to maps from A Thoreau Gazetteer to preview the point of the next lesson.

Notes/Comments:

Continue to observe (record if you'd like) the natural world around you.

Lesson two – “Maps: I thought you said to make a left!?”

Do Now:

Individually, look at the different types of maps in your packet. Determine the main purpose of each map, the distinguishing characteristics of each map and note a few landmarks or interesting discoveries. Write your observations on the space provided on each page and prepare to discuss your findings with the class.

Focus:

Students will be able to:

- Distinguish between different types of maps and their purposes;
- Understand, apply and define: scale, ratios, contour lines, direction, geological features and grid systems; overall intent and purpose of maps
- Use a key to identify features on a map;
- Present their findings succinctly to their peers

Agenda:

- Do Now; hand in to be graded (5 minutes)
- Break into groups; each group will discuss a map that will be supplied by Mr. Kujawski.⁵ Answer the corresponding questions on the handout. (15-20 minutes)

³ Thoreau, Henry David. *A Year in Thoreau's Journal: 1851*.

⁴ Richard Stowell, *A Thoreau Gazetteer*, edited by William L. Howarth (Princeton: Princeton University Press, 1970).

⁵ Students will be handed a map without the name of the region that it pertains to and will be required to quantify what biome the map depicts, as well as answer questions, such as, if your group were to hike from “ABC mountain” to “DEFG flume” how many miles would it take, and how many feet in elevation would they have to manage? How many different streams will you have to cross, etc? If there are a lot of marshes and no mountains, the students might come to the conclusion that they are in a relatively wet area, etc. There will be enough questions and aspects of the exercise to last 15-20 minutes.

- Groups will plan a 3-5 minute presentation on their observations. (5 minutes)
- Present as a group your findings (2-3 minutes each group, 12-20 minutes total)
- Clean up (5 minutes)
- Hand in your worksheet to be graded
- Pick up a compass from Mr. Kujawski on your way out

Homework: You'll need your Journal

- Walk around your neighborhood during the day;
 - Look for natural features (animals, plants, trees, weather conditions, etc.), geological and geographical features; parks, rock outcroppings, buildings, historical landmarks or plaques, houses etc;
 - Record your discoveries in your Journal;
 - Note the distance between and of various features;
 - What do you associate with each discovery or landmark?
 - How has this area changed since you were a child?
 - How far is the nearest natural, living organism from your house (Other than a house pet)? What specific type of organism is it? How does the presence of this organism affect the lives of other organisms?
 - Use the compass to determine which direction is North*
- *A compass exercise/lesson could be added to this Unit Plan

Lesson three: "Observing, Mapping and Sharing"

Do Now:

Brainstorm ideas of what you would like your *own* map of your neighborhood to look like. What are the main features that you want to include on your map. Keep in mind that you may want to add more features/detail to your map that will be handed with your journal for a grade. The map that you construct in class will be a rough draft. Your final version of the map/journal combo will be handed in (insert due date).*

**I think that students need to understand that their best work will take time to develop, plus I want them to continue to observe and record what they discover. I will give the students more details for the project in class, but my rubric will focus on detail to design, scale, and incorporation of contour lines (approximations). I'm digressing, but a great lesson may include pictures of geographical features (i.e. Mt. Washington) and have them compare the picture to an actual contour map of the feature. That would allow them to develop a better understanding of scale and how to determine the ratio for contour intervals, etc.*

Focus:

Students will be able to:

Apply knowledge from previous lessons and activities to construct maps of their neighborhoods⁶;

⁶ *Students are from all 11 parts of Boston; it will be interesting to discuss similarities of each map and also see if the students can connect each map in its proper location in relation to other geographical areas. (If they are unable to correctly connect each area of Boston, they will be able to refer to another overview*

- Develop a more thorough understanding and appreciation of their *place* by the discovery of new and interesting natural phenomena that may have otherwise gone unnoticed or taken for granted;
- Continue to associate with their communities and understand the importance of place

Agenda:

- Individually, gather your supplies and start to design/construct your map;
- Discuss with Mr. Kujawski your intentions and any concerns you may have at this time;
- If you finish your draft, you may start to construct your map that will be graded

I will be teaching seniors, so I will challenge them to produce their best work. A map unit may seem like a simple-minded activity, but in a way, that is the point. I want my kids to appreciate where they are from and form connections to their surroundings. At the same time, I want them to further develop their observation skills for future class work. I plan on taking my students to local wildlife areas, such as Neponset River State Reservation. I do not want the natural world to be alien to them and I certainly do not want them to feel lost or disconnected. They can be timid and scared to touch an organism, but timidity and fear from not understanding are different. I hope to engage my students in fecund scientific studies and this unit is a prerequisite, in that, it is my attempt to encourage them to notice and comprehend the importance of **wild places.*

Homework:

- Work on your maps
- Have fun

Unit grading rubric:

- Collection of Do Now assignment will contribute to the students overall grade for Do Now activities throughout the semester;
- Participation in discussions and group activities
- Grade for handout in lesson two: Map activity questions
- Project grade for map activity

map of the area. If students happen to be from the same area, then they will be able to work together during this aspect of the lesson.