



Highlight Lesson: Lesson Plan 1: Rivers & Watersheds, the Huron River
Project Title: Learning from the Huron River

Essential Question/Questions for Inquiry:

Can a river be a teacher? What can our watershed and our local river teach us about history and ecology? How can we use visual arts to communicate our understanding?

Purpose: Introduce students to rivers and watersheds as topics. Students will be participating in the creation of a mural depicting the Huron River over time. Students first need to understand the key concepts of a river and a watershed, specifically about the watershed they live within. I also need to assess prior knowledge of both and this literacy strategy and particular resources can offer that. Because this unit will feature aspects of Ecojustice Education theory it will be important to use a literacy strategy that “focuses on the associations one has around the topic in terms of word, questions, and connections” (p.86). Eco-Justice relies on the historical deconstructing of cultural metaphors and as seeing culture as largely perpetuated through language. Eco-Justice sees cultural and ecological crisis as related and forming from the same roots. Almost all students have prior knowledge about rivers, while the concept of a watershed is sometimes difficult to understand. Watersheds are extremely important to understanding any one river in a place. Even if students have never heard the term they can imagine and hypothesize about its meaning, breaking down the word into two words, water and shed. They could make associations with both of these words and consider the combined associations.

Through these activities students will be pre-assessed in a way that is enjoyable and also intellectually rigorous, participate in exploratory learning, research information about local watersheds, draw connections and recognize metaphorical uses of language.

Concepts/Big Ideas/Skills:

Watersheds and aspects about our local watershed, including its name; that concepts and processes often relate to metaphors; certain metaphors we could apply to the concept of watersheds.

Lesson Plan 1: Rivers & Watersheds, the Huron River

Thinking Routine/Literacy Strategy: 3-2-1 Bridge, pg. 86, [Making Thinking Visible](#)

Print and video sources:

Activity 1

1. An Introduction to Michigan Watersheds for Teachers, Students and Residents, Michigan Sea Grant, NOAA
 - a. <http://www.miseagrant.umich.edu/downloads/bookstore/12-412-Watershed-Teaching-Guide-2012.pdf>
2. Michigan Watersheds Map, Michigan Sea Grant, NOAA
 - a. http://www.miseagrant.com/product_p/michu-13-204.htm

Activity 2

1. What is a Watershed?, Video: <https://www.youtube.com/watch?v=QOrVotzBNto>
2. The Watershed, What is a Watershed? <http://www.hrwc.org/the-watershed/>
3. Watershed Education, Curriculum for teaching watersheds & Soils, excerpt from lesson, pg. 68 <http://syracusecoe.org/coe/images/allmedia/classroom/Watershedcurriculum6thGrade.pdf>

Materials

Sketchbooks, writing utensils, print and video resources above

Activity 1, Pre-assessment/Exploratory Learning: Investigating Texts

Students will be given copies of various pages from the Introduction to Michigan watersheds. They can work in small groups or pairs. Ask students to pay most attention to the images in their part of the document. They can read the words associated with the image but don't mind the text. I want the students to be able to identify clues as to what the illustrations and maps communicate.

Focus questions: These can be given out in handout form, 3x5 index card questions, written on the board, answered in a list, etc.

What information can you get from an image/illustration or map?

Who made these illustrations? Do we know? What information does that give us? What do we not see? What information are we missing?

What information, ideas, and concepts or themes can you get from the titles of these illustrations or maps?

What do we recognize about these illustrations? Do they have names /titles that we can identify?

Do these illustrations make comparisons between things? Give examples.

Activity 2

Procedures:

1. Set up: introduce the topic/s to students: "To create the mural we were tasked with, we must be able to understand the Huron River in context and over time. But first we need to know what we know and don't know about rivers and watersheds. We are going to be learning about rivers and watersheds"; "how many of you have been to a river? How many of you think you know the names of the river or rivers near our school?"; "How many think they might have an idea what a watershed is? What does each word in this word mean on its own?"

- a. These are non-verbal responses only, don't take answers from students just ask for raised hands or thinking to your-self.
 - b. All student written responses will be recorded in their sketchbooks, to refer to later in the lesson and to use in assessing their learning.
2. Three words: Generate 3 words that come to mind when you think of the concept of a river and a watershed. Don't overthink, just jot down 3 words that come to mind when you think of this topic.
 3. What are two questions that quickly come to mind when you think of this topic? Emphasize surface ideas, don't overthink.
 4. Create a simile or metaphor for the topic: rivers or watersheds. A river is like... or Rivers are...A watershed is like... or A watershed is...
 5. Instructional period: Video & Read-aloud of sections of An Introduction to Michigan Watersheds for Teachers, Students and Residents, and answer a few student questions about watersheds.
 6. Repeat steps 2-4 above. Ask students to select words, questions, and metaphors "prompted or encouraged by instruction" pg. 88, MTV.
 7. Bridging: share with a partner your initial and new responses to the 3-2-1.

Possible Additional Activities:

What's your watershed address? Watershed Education, pg. 69. See attached copy of activity in appendix.<http://syracusecoe.org/coe/images/allmedia/classroom/Watershedcurriculum6thGrade.pdf>

Assessment:

Anchor chart from our conversation about images from texts/maps

Sketchbook entries (first and second 3-2-1-Bridge, formal), partner share (informal observation)

Class discussion and share out

1. How were your first 3-2-1 and second 3-2-1 similar? Different?
2. How did the instruction change your understanding?
3. What was surprising to you about what you read, watched, or listened to?