Oyster Habitat of Florida

Lesson Plan 1: History of the Oyster Industry

Topic: Florida Oyster Industry

Grade Level: 4-8

Time to teach lesson: 5-10 days

Concept: to gain a better understanding of a vital agricultural industry to the Florida economy.

Overview: Students will explore the internet and answer key questions about the oyster industry. This information will be used as the basis for a final presentation.

Objectives/Goals: Students will:
1. analyze primary sources (photographs) to answer a key set of questions.
2. gain a better understanding of the Florida oyster industry.

Materials:
1. set of questions
2. http://draweb.dos.state.fl.us

Procedures: Initiating Activity:
Teachers and students will complete a “KWL” chart to start a discussion about the Florida oyster industry.
The teacher can also have a brief discussion on how to use photographs or primary sources.

Strategies:
Once students have gone to the Florida State archives website and brought up images documenting the oyster industry, the teacher can then pass out the key set of questions for them to consider over the next couple of days.

Culminating Activities:
Students will present their report to class. Students should choose five pictures and present their answers to the questions. The teacher should also invite an oyster man or woman to class for a first-person interpretation on how it is to make a living harvesting oysters.

Evaluation: Students will be graded on the photos they chose to go along with the key questions.

National Standards:
Standard 14- How human actions modify the physical environment
Standard 17- How to apply geography to interpret the past.
Sunshine State Standards:
SS. A.6.2- The student understands the history of Florida and its people.
SS. B.2.2- The student understands the interactions of people and the physical environment.

FCAT:
- Reading sheets
- Drawing conclusions
- Reference materials

More websites to learn about the oyster industry:
http://www.assateague.com
http://hiltonheadisland.com
http://www.fl.-seafood.com/new-seafood/kids/industry.htm
http://www.baynawyater.com/BriefHistory/briefhistory12.ctm
http://www.nefsc.noaa.gov/fag/fishfaqs.html
http://www.cumauriceriver.org/downjersey/maritime/on-lesson1.html
http://www.forgotten-florida.com/seafoodapalach.htm

Set of Questions:
1. What kind of tools did they use?
2. Who made the tools? Local or were they bought and shipped from a faraway business?
3. Did the companies seem to be owned by locals? How can you tell?
4. What time of day do you think they started work?
5. Were employers hired locally or brought on?
6. How has the oyster industry changed? How has it remained constant?
7. How did the oyster industry change in response to the economy?
8. How did the oyster industry view the community and act toward it?
9. Who primarily works in the oyster industry? Men, women, children?
10. Does it seem like a prosperous industry for Florida? How can you tell?
11. What is the best time of year for the oyster industry?
12. How did the oyster industry change the physical environment?
13. How did the physical environment influence and change the oyster industry?
Lesson Plan 2: What is it Like Being an Oyster?

**Topic:** The Life of an Oyster

**Grade Level:** K-4

**Concept:** Students will gain an understanding of what life is like for an oyster.

**Overview:** Students will read and be read to about the important job an oyster has during its lifetime.

**Objectives/Goals:** Students will understand
1. what an oyster is made of
2. how a pearl is formed inside an oyster.

**Materials:**
1. Book- *Pearlie Oyster: A Tale of an Amazing Oyster* by, Suzanne Tate and illustrated by James Melvin
   Books 1-16
   Edited by Suzanne Tate and Susan Maloney

**Procedures: Initiating Activity:**
Teacher will introduce the book, “Pearlie Oyster” to the class and read it all the way through.

**Strategies:**
During a second reading, the teacher should write down any questions the students will have to encourage discussion after the reading.

**Culminating Activities:**
Students will write their own story about an oyster character or write a conclusion to Pearlie Oyster.

**Evaluation:**
Students will read their stories out loud to the class and provide a drawing of their oyster.

**Sunshine State Standards:**
LA.A.1.2- The student uses the reading process effectively.
LA.B.22- The student writes to communicate ideas and information effectively.

**FCAT:** Reading Skills:
Drawing conclusions
Read and organize information for multiple purposes

For further reading on organisms and animals lurking in the ocean, get the book *The Magic School Bus-On the Ocean Floor*, by Joanna Cole.
Lesson 3: The Habitat of Oyster

Grade level: 4-10

Concept: Students will gain an understanding of the vital habitat that oysters need to thrive and grow.

Students will explore the Internet to gather information.

Objectives/ Goals: Students will:
1. understand the need for a stable oyster habitat.
2. gather information on how contaminating water is hurting the oyster and habitat.

Materials: List of websites for students to explore:
1. http://www.mdsg.umd.edu/oysters
10. www.floridaaquaculture.com/SEAS/SEAS_centralgulf.htm
12. www.epa.gov/gmno/gmnet/oyster04.htm
18. www.hiltoheadisland.com/oysmap.htm
24. www.euromab.org/brprogram/origin.html
25. www.euromab.org/brprogram/who.html
27. www.euromab.org/misc/uscontact.html
28. www.ocrm.nos.noaa.gov/nerr/issues.html
29. www.ocrm.nos.noaa.gov/nerr/reserves/nerrrapalachacola.html
**Procedures: Initiating Activity:**
Divide the class into pairs and give them a list of the websites (see above). Each pair is researching the oyster industry and how it is being threatened (pollution, development, recreation). Develop a KWL with the class so that there is a brief discussion on what they know and what they want to know about oysters. This will help them to focus their research and the teacher can assess prior knowledge.

**Strategies:**
With each website the pair visits, have them document the website and write down 5 key concepts that the website provides.

**Culminating Activity:**
Each pair will then write a short story with pictures explaining the reasons why Florida’s oyster habitats may be threatened. Invite a lower grade level class so that each pair may read their stories to the younger children.

**Evaluation:** Students will be graded on documentation of the websites used for their project, concepts, and their final story.

**National Standards:**
Standard 14- How human actions modify the physical environment.

**Sunshine State Standards:**
LA.A 1.3- The student uses the reading process effectively
LA. B.2.2- The student writes to communicate ideas and information effectively.
S.C.D.2.3- The student understands the need for protection of the natural systems on earth.
S.S. A 6.3- student understands the history of Florida and its people.

**FCAT Reading Skills:**
Drawing conclusions
Read and organize information for multiple purposes