Bob Alderink, Lab Coordinator

North Carolina Museum of Natural Science

Podcast length: 16:03

THE walking classroom
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LESSON PLAN

SYNOPSIS

The Walking Classroom's Laura Fenn visits with Bob Alderink at the North Carolina Museum of Natural Science. Bob shares how his childhood passions for science and early cultures led him to his current role as Coordinator of an investigations lab at the museum. He shares the importance of learning about and understanding the natural world and getting the public involved in scientific exploration.

VOCABULARY

Review key vocabulary (included definitions are limited to the context of today's podcast)

- **rushes:** (noun) grass-like plants used in Colonial times as a type of candle
- **exponential growth:** (noun) growth at an increasingly rapid rate
- **specimen:** (noun) individual animal, plant, etc., used as an example of its species
- **bioremediation**: (noun) process of using microorganisms to clean up an environmental problem

QUESTIONS FOR THOUGHT & DISCUSSION

1. Does Bob Alderink's childhood sound like yours? Think about how you spend your free time. How is it similar and different from how Bob Alderink spent much of his time as a kid? How does the way we choose to spend our free time affect our lives?

2. Bob Alderink talked about interpretation, or explaining what the pubic is seeing out in nature. Have you ever been somewhere where a tour guide or park ranger explained what you might be seeing? Do you think it's important to have park rangers and others to give interpretations? Why or why not?

3. Bob Alderink designs experiments to try and get the public more involved with scientific exploration. What are some benefits to getting ordinary people involved in research and investigations?

BOOK SUGGESTIONS

Consider reading aloud or making some of these titles available to students to reinforce and extend some of the concepts covered in today's podcast.

Tiny Creatures: The World of Microbes **by Nicola Davies**
Find out how the smallest things on the planet do some of the biggest jobs in this fascinating introduction to the world of microbes.

The Invisible ABCs **by Rodney P. Anderson**
Learn about the beneficial role of microorganisms in this easy to follow, fact-filled book with over 250 eye-catching illustrations.

EXTENSION ACTIVITIES

The following activities are ways to build on and extend some of the topics discussed in the podcast. We strongly encourage you to always preview videos prior to showing them to your students.

Bioremediation Experiment: "Clean It Up!" **http://bitly.com/1HhV7b0**
Lesson plan from Teach Engineering
Students learn about bioremediation and its importance in cleaning up pollutant-spills.

Microorganisms **http://bbc.in/1y2ZIH7**
Reading & Activity from BBC [British Broadcasting Corporation]
Students can read & learn about harmful & helpful microorganisms, take a quiz, and play a follow up activity.

Oil-Eating Bacteria Engineered **http://bitly.com/10LETFV**
Video from National Geographic
Scientists are trying to develop microorganisms that can help clean up oil spills.

You are Your Microbes **http://bit.ly/N2CkIT**
Video from Ted-Ed (3:45)
Great video about how the millions of microbes in our body help us!