

Lesson Two: In-Class Demonstrations

Instructions:

Your facilitator has initiated this lesson through a discussion topic (post) on the group page. In this lesson you will respond in writing to several prompts (questions). Write your responses in a Word document and submit the document by attaching it with a reply to the facilitator's post.

AGRICULTURE AND WATER IN THE UNITED STATES , LORI BARBER, SEXTON HIGH SCHOOL, LANSING, MICHIGAN

In this portion of the lesson you will get a chance to view Lori Barber as she teaches two lessons about agriculture and water. The strategies she uses can be used in any context. Click on the [Lori Barber Profile](#) to learn more about Lori.

LESSON ONE: AMBER WAVES

- Next, work your way through the [Agriculture and Water in the United States](#) video, lesson by lesson. First watch Lori's first lesson, which focuses on having students explain the distribution of six grain crops in the United State. It begins with the title sequence and ends when the words "Lesson Two: Got Milk?" appear on the screen. Watch for the strategies she uses as you view the lesson.
- After you have viewed the segment, submit your responses to the following prompts to your facilitator.
 - Do you think that the use of cooperative learning (jig saw) was effective in this lesson? Why or why not?
 - Do you agree with Lori that some times students can teach each other better than teachers? Why or why not?
 - What was the advantage of using guiding questions in this lesson?
 - How do you go about teaching your students to interpret maps? NOTE: A map interpretation procedure is included in the teacher guide for **Amber Waves** on the project web site).
 - What is the teacher's role in this type of lesson?
 - Did you see any strategies that you currently use in your own classrooms? Which ones?
 - Were there any strategies used that you would like to use in your classrooms? Which ones?
 - What other strategies could you use to introduce the distribution of crops?

LESSON TWO: GOT MILK?

- Now watch the second lesson in the [Agriculture and Water in the United States](#) video, which involves a role playing activity. Watch for the teaching strategies that are part of this lesson. It begins when the words “Lesson Two: Got Milk?” appear on the screen and ends when the credits appear on the screen. As you view the segment, watch for the teaching strategies that are used.
- After you have viewed the segment, submit your responses to the following prompts to your facilitator.
 - What was the purpose of using guiding questions in this lesson?
 - What should be the teacher’s role in a role playing activity?
 - What are the instructional advantages of using role playing?
 - How would you prepare students to participate in a role playing activity?
 - How would you judge the overall effectiveness of this lesson? Why?

You can learn more about teaching about water and agriculture by visiting the project web site at http://geoteach.org/teacher_resources/index.php. The complete teacher guide for Lori’s lessons appears on the project web site at http://geoteach.org/teacher_resources/index.php.

AGRICULTURE AND WATER IN THE U.S. AND AFRICA, NICOLE VICKERMAN, CLARK HIGH SCHOOL, PLANO, TEXAS

In this portion of Lesson Two, you will get a chance to view Nicole Vickerman as she teaches four lessons about agriculture and water in a unit on Africa. The strategies she uses can be used in any context. Click on the [Nicole Vickerman Profile](#) to learn more about Nicole.

LESSON ONE: BY THE NUMBERS

- Next, work your way through the [Agriculture and Water in the U.S. and Africa](#) video, lesson by lesson. First watch Nicole's first lesson in which students examine and analyze maps, tables, and graphs dealing with agriculture in the United States and Africa. It begins with the title sequence and ends when the words "Day Two: Agriculture and Water" appear on the screen. As you view the segment, watch for the strategies that she uses in the lesson.
- After you have viewed the segment, submit your responses to the following prompts to your facilitator.
 - What advantages do you see in having students work in cooperative groups?
 - What procedures do you use to teach students how to analyze documents?
 - What are the instructional advantages of having students work at learning stations?
 - What was the advantage of having students use a similarities and differences graphic organizer in this lesson?
 - What was the teacher's role in this lesson?
 - How effective do you think the summative assessment was that Nicole used? How would you have assessed student learning in this lesson?
 - What did you like most and least about the lesson? Why?
 - Did you see any strategies that you currently use in your own classrooms? Which ones?
 - Were there any strategies used that you would like to use in your classrooms? Which ones?

LESSON TWO: AGRICULTURE AND WATER

- Now watch the second lesson of the [Agriculture and Water in the U.S. and Africa](#) video in which student read articles about water and agriculture in the U.S. and Africa and share what they learned. It begins when the words "Day Two: Agriculture and Water" appear on the screen and ends when the words "Day Three: The Geography of . . ." appear on the screen. As you view the segment, watch for the strategies that Nicole uses.
- After you have viewed the segment, submit your responses to the following prompts to your facilitator.
 - In this lesson Nicole used a ball toss strategy to determine who would share next. Do you think this is an effective strategy for maintaining student involvement? Why or why not?

- What are some other strategies that can be used to maintain student involvement during a sharing session?
- How did the climograph activity contribute to student learning in this lesson?
- What are some other strategies that could have been used to conclude this lesson?
- How would you judge the overall effectiveness of this lesson? Why?

LESSON THREE: THE GEOGRAPHY OF . . .

- Now watch the third lesson in the [Agriculture and Water in the U.S. and Africa](#) video in which students choose topics that interest them, do research on those topics, and present their findings to the class. It begins when the words “Day Three: The Geography of . . .” appear on the screen and ends when the words “Day Four: Dead Zones” appear on the screen. As you view the segment, watch for the strategies that Nicole uses.
- After you have viewed the lesson, submit your responses to the following prompts to your facilitator.
 - What are the instructional advantages of having students choose their own topics for study?
 - What do you see as the teacher’s role in this type of a lesson?
 - Do you agree with Nicole that even when students are working on their own, a graphic organizer, such as SHEEP, is helpful? Why or why not?
 - The lesson ends with students making presentations. Do you have students make presentations in your classes? How do students prepare to make their presentations?
 - How would you judge the overall effectiveness of this lesson? Why?

LESSON FOUR: DEAD ZONES

- Now watch the fourth lesson of the [Agriculture and Water in the U.S. and Africa](#) video, in which students learn about dead zones in the United States and Africa. It begins when the words “Day Four: Dead Zones” appear on the screen and ends when the credits appear. As you view the segment, watch for the strategies that Nicole uses.
- After you have viewed the segment, submit your responses to the following prompts to your facilitator.
 - How effective was the pair-share question writing and answering activity in getting students actively involved in reading?
 - Would you use the animal noises strategy for forming cooperative learning groups in the classroom? Why or why not?
 - What are some other strategies that can be used for forming cooperative learning groups?
 - What are the instructional advantages of using a Venn Diagram during the cooperative learning segment of this lesson?

- How have you used a Venn Diagram in your own teaching?
- How did you respond to Nicole's use of the popcorn activity in this lesson?

You can learn more about teaching about agriculture and water by visiting the project web site at http://geoteach.org/teacher_resources/index.php. The complete teacher guide for Nicole's lessons appears on the project web site at http://geoteach.org/teacher_resources/index.php.