

Sustainable Forestry Lesson Plan

Keywords: sustainable, forestry, regeneration, management practices

Lesson Plan Grade Level: 6th- 8th

Total Time Required For Lesson: 80 minutes (as two sessions)

Setting: Classroom

Subjects Covered: Science, Social Studies

Topics: Forestry, Sustainability

Goals For The Lesson:

Students will be able to explain the concept of sustainable forestry and how it is viewed differently by different people.

Students will investigate different practices of sustainable forestry.

Materials Needed:

Sustainable Forestry fliers (From The Woods Series)

Sustainable Forestry Pretest

Sustainable Forestry Posttest

Paper

Pencils

Chalkboard/ chalk (material to create class list to post in front of the class)

Appendix 1 (one for each student)

Appendix 2

State Standards Addressed: *E&E Standards:* 4.2.7, 4.3.7, 4.8.7

Teaching Model: Experiential Learning Model (Experience, Share, Process, Generalize, Apply)

Methods:

Preparation:

Read through the entire lesson to ensure your understanding of the material and activity.

Locate local foresters and loggers to invite to the class to speak with the students, providing the students with an opportunity to interview the guests.

Doing The Activity:

Introduction to the lesson:

Explain to the students that they will be learning about Sustainable Forestry during two sessions this week. Sustainable forestry is a simple yet complex concept.

Steps:

SESSION 1

(Experience and Share Stages 25 minutes)

1. Administer the pretest to the students; explain that the purpose of the pretest is to test knowledge the students already have acquired on the subject. (allow approximately 7 minutes for the test then collect)
2. Ask the students if they have any comments concerning the pretest.
3. Hand out the fliers and ask the students to read the information silently.
 - Ask the students to write a summary of sustainable forestry, after they have completed the reading.
 - Once all the students have completed the task allow time to share the summaries.
 - Ask the students what people they think may be concerned with sustainable forestry. Allow time to share and write the list on the chalkboard. (landowners, loggers, foresters)
 - Ask the students if they think all the people, on the list view sustainable forestry in the same respect. Allow time for sharing ideas.
 - Complete discussion questions (Appendix 2).
4. Explain to the students they will be working in groups to interview people regarding their perspective of sustainable forestry.
 - * Each group will be responsible for:
 - * creating their own questions (allow time in class)
 - * interviewing at least two people (preferably with different views loggers, foresters, landowners, saw millers, woodworkers, etc.)
 - ** remind the students that they may need to explain the actual concept of sustainable forestry to the interviewees. (their summaries may be an aide)
 - * Determine a due date and explain to the class that they will be presenting their information to the class.
 - * The students must answer the questions/ statements found in Appendix 1 after completing the interviews. Hand out and read directions with the class.
5. Ask the students if there are any questions concerning the material and assignment.
6. Allow time for the students to prepare their questions. Go over them as a class.
 - * If necessary provide examples: What type of forest management strategies do you incorporate? How do you plan for the future of your forests? What are your main objectives when working in the forest?
8. Introduce the guest speakers, (foresters, loggers, woodworkers, etc.)
9. Remind the students of the due date and explain that during the next session they will be presenting their information, completing a review and a posttest.

Second Session

(Share and Process Stages 30 minutes)

10. Ask for volunteers to share their information regarding the interviews. Allow time for each.

* Before they begin remind them to summarize.

11. Review for the pretest completing discussion questions, again. Appendix 2

(Generalize and Apply Stages 10 minutes)

12. Ask the students if there are any further questions.

13. Administer the posttest. Collect.

14. Ask the students if they have any questions or comments concerning the posttest.

Assessment:

The students will be evaluated through participation during discussions

Students will be assessed through the completion of the interviews and questions.

The students will be evaluated upon completion the posttest.

Conclusion To The Lesson: “This completes today’s lesson on sustainable forestry.

Does anyone have any further comments concerning the lesson?”

References and Resources:

Sustainable Forestry flier (From the Woods Series)

The Pennsylvania State University

112 Agricultural Administration Building

University Park, PA 16802

This lesson plan was prepared by Katie Roth, Middle School Teacher and Sanford Smith, Extension Specialist Penn State School of Forest Resources.

Appendix 1
Sustainable Forestry Approaches Interviews

Answer the following after you have completed your interviews, on the bottom of this page.

1. Describe the interviews. (explain the different understandings of sustainable forestry and identify each interviewee as a: landowner, logger, saw miller, forester etc.).
2. Compare the interviewees approaches to sustainable forestry.(similarities/ differences)

Appendix 2- Discussion Questions Sustainable Forestry

Ask the students to define the following terms:

1. Sustainable- (*maintain, continue, and keep*)
2. Forestry- (*the science and art of managing forests*)
3. Sustainable Forestry- (*caring for and managing forests to provide the resources we need now and in the future*)
4. Regeneration- (*seedlings, sprouts, saplings that grow into the future forest*)
5. Timber- (*growing or cut trees, usually those that can be used for a wood product*)
6. Buffer Strip- (*vegetation and trees left undisturbed near streams and wet areas*)

Ask students the following questions:

1. Explain four management practices. (*think about what trees to leave when conducting a harvest, protect forest streams and wet areas –buffer strip, maintain forest health-protect the forest from harm, protect unique areas, ensure there is enough regeneration occurring in the forest*)
2. Explain at least four concerns of sustainable forestry. (*forest regeneration, vegetation, soils, wildlife, water, people's needs*)