

Grade 9-12: YOU'RE A TEACHER TOO?

Students explore careers related to environmental education by developing a lesson plan for a science or environmental topic recently covered in their class.

CURRICULUM CONNECTIONS

Related Outcomes

This lesson will contribute to the student's ability to

- consider further studies and careers in science and technology-related fields;
- identify and describe science and technology based careers related to the science they are studying.

Related Coursework

This lesson works well in classes studying

- careers related to communication, education, sciences, governance, and environmental studies;
- application of academic studies to various environmental careers;
- presentations, particularly planning and preparing presentations.

PREPARATION

Learning Objectives

- During this lesson, students will
- compare and contrast different types of environmental education situations;
 - explore careers in the environment sector related to teaching and training using the profiles of various environmental educators;
 - research and prepare a lesson plan for a science or environmental topic recently covered in their class using the lesson plan template provided;
 - identify careers related to their lesson plan topic using the Aboriginal EnviroCareers website/CD-ROM.

Total Time 105 minutes

Material Required

- Copies of the profiles for high school science teacher, professor, environmental trainer, and science camp co-ordinator from the EnviroCareers section of the Aboriginal EnviroCareers website/CD-ROM (one of each profile per student)
- Copies of the lesson plan template provided (one per student)
- Classroom access to a computer preferably with Internet connection
- Access to the Aboriginal EnviroCareers website/CD-ROM

DELIVERY



TIME

20 minutes



PROCESS

1. **Introduction: Exploring Careers in Environmental Education**
(*Didactic Questions and Discussion*)
 - 1.1 Break the class into small groups. Assign a different environmental educator profile to each group. Direct groups to read the profiles and identify the following for their assigned occupation
 - a. Purpose of the occupation.
 - b. Types of information taught.
 - c. Target learners or audience.
 - d. Teaching environment, i.e. where the teaching is done.
 - e. Teaching methods, i.e. how is information communicated.



TEACHER'S NOTES

- 1.2 If necessary, guide students to consider potential reasons such as talent, interests, convictions, and abilities.
- 1.3 The target conclusion for this discussion is that people are more likely to enjoy their jobs and be successful in them if the jobs reflect their interests, values, and skills.



20 minutes



- 1.2 Ask each group to report their findings to the large group. Discuss how and why each of these factors is similar or different between occupations.

2. **Main Activity: Developing a Lesson Plan**
(*Structured Overview and Independent Study*)

Assessing Personal Interests and Skills

- 2.1 Introduce the main activity: "It's your turn to be the teacher. Assuming the role of an environmental education career of your choice, you will develop a lesson about (insert the assigned topic) and related careers."
- 2.2 Distribute the lesson plan template. Explain the purpose of a lesson plan. "Effective planning and preparation ahead of time is essential for a successful lesson. Preparing a lesson plan helps educators
 - identify what they want their audience to learn;
 - determine and organize the way they will present the information;
 - co-ordinate the materials they will use, such as handouts and overhead transparencies;
 - organize the activities or assignments students will do."
- 2.3 Review each section of the template. Draw students' attention to the EnviroCareers section of the template. Explain that this is the section students will use to notify their audience about careers related to the topic. Direct students to use the Aboriginal EnviroCareers website/CD-ROM to research these careers.
- 2.4 Remind students they are assuming the role of one of the four environmental educators explored earlier. Their lesson plans should reflect the teaching situations and audience unique to their chosen occupation.
- 2.5 Allow approximately 45 minutes for students to complete their lesson plans. Allow students to confer with you or with each other.



- 2.1 The focus of the activity is exploring various environmental education roles and situations. Assigning a topic with which the students are already familiar will enable them to focus on practicing the decisions and skills required as an educator instead of on learning the topic to be covered.

- 2.1 If necessary, review the key points or concepts related to the assigned topic with your students.

- 2.2 If time and the topic permits, encourage students to think about and develop a student handout to be used in their lessons.

- 2.2 If necessary, help students brainstorm creative learning activities and delivery methods they can include in their own lessons.

If Internet access is available in the classroom, you can also encourage students to explore resources such as the Friends of Environmental Education Society of Alberta website: www.feesa.ab.ca

- 2.5 To extend this lesson, have students evaluate their lessons in small groups in a subsequent period. Each group should select one lesson to develop and deliver to the entire class.



20 minutes



3. **Closure and Evaluation: Debriefing the Activity** (Group Discussion)

- 3.1 Invite students to describe their lessons briefly to the class.
- 3.2 Debrief the activity by discussing questions such as
 - “How were the lessons similar/different between occupations?”
 - “What occupational factors most influenced the teaching strategies you used? Why?”
 - “What environmental careers did you include in their lessons and how did they related to the lesson topic?”
 - “How might Traditional Ecological Knowledge be incorporated into each of these educational situations?”
 - “Where might each of these types of environmental educators work in our community?”



Evaluation Considerations

Evaluate students independently on their lesson plans. Did students

- consider the teaching situation, goal, and target audience of their selected occupation when developing their lessons;
- complete each of the required lesson plan components;
- demonstrate an understanding of the assigned topic in their lesson plans;
- organize information and tasks logically in their plans;
- identify careers that were relevant to the assigned topic?

SUGGESTIONS FOR ADAPTATION

- For Grades 11 and 12, have students select individual lesson plan topics and deliver their lesson to the class. Students should prepare any presentation materials and handouts they require as well.



LESSON PLANNER

LESSON TITLE:

TARGET AUDIENCE:

PREPARATION

Learning Objectives:

-
-
-
-
-

Total Time:

-
-
-
-
-

MY LESSON

TIME

STEPS IN THE LESSON

1. Introduction
2. Main Activity
3. Conclusion

ENVIRO CAREER FLASH