

Becoming an Environmental Steward through Writing
Lesson Outline

General Lesson Information

Title: Becoming an Environmental Steward through Writing

Overview/Annotation- *A short summary or description of the lesson including activities and science concepts.*

This lesson plan introduces students to the concept of environmental stewardship, how anyone can make an impact on their environment by speaking out, and how everyday people were able to bring about important environmental legislation by writing and speaking about issues that were important to them in their community. Students will be able to become environmental stewards themselves by writing and presenting a persuasive essay about a local environmental issue that they care about.

Setting or format (outdoors, in groups, lab, etc.): In a standard classroom

Intended group size (if groups are used): Individual or group (up to teacher discretion)

Intended grade level(s):
English - 7th

Approximate Time of Lesson (*Ideally break down into 20-50 minute periods*):
Four 50 minute periods

Researcher Biography

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<https://www.youtube.com/@trainthetrainers5857/videos>

Brief Description of Research Interests:

Through our program “Train the Trainers,” we aim to educate local teachers and students in the Tuscaloosa/Northport area about the importance of Environmental Engineering to bring awareness to its concepts and provide opportunities for K-12 students to engage with S.T.E.M. concepts at this critical learning period. We create videos, lesson plans, and activities to allow students to connect and learn about our water quality and filtration research at an approachable and engaging level.

Associated Standards and Objectives

Content Standards- *List Alabama Course of Study Standards that connect to lesson*

ELA21.7.R3 - Use digital and electronic tools appropriately, safely, and ethically when researching and writing, both individually and collaboratively.

ELA21.7.R4 - Utilize a writing process to plan, draft, revise, edit, and publish writings in various genres.

ELA21.7.R5 - Assess the formality of occasions in order to speak or write using appropriate language and tone.

ELA21.7.7 - Produce clear, coherent narrative, argument, and informative/explanatory writing in which the development, organization, style, and tone are relevant to task, purpose, and audience, using an appropriate command of language.

ELA21.7.7C - Write an argument to defend a position by introducing and supporting claim(s), acknowledging alternate or opposing claims, and presenting reasons and relevant text evidence from accurate and credible sources.

ELA21.7.DL.A - Use technology, including the Internet, to research, analyze, produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information, people, and resources and to display information flexibly and dynamically.

ELA21.7.LL.A.E.W/S - Create written work using standard English grammar, usage, and mechanics. Choose language that expresses ideas precisely and concisely.

ELA21.7.23 - Implement ethical guidelines while finding and recording information from a variety of primary, secondary, and digital sources.

ELA21.7.27 - Quote, paraphrase, summarize, and present findings, following an appropriate citation style and avoiding plagiarism.

Primary Learning Objectives- *Sentences beginning with "Students will be able to..." that describe what students will do in the lesson that relates to how students will be assessed.*
See attached lesson plan below.

Additional Learning Objectives- *Any learning outcomes that are not directly related to the content standards but may relate to other local or national standards*
See attached lesson plan below.

Preparation Information

Total Duration- *How many minutes will the lesson last?*

Four 50 minute periods – 200 minutes of instruction/activities

Materials and Resources- <i>List of materials teacher will need to gather or prepare for lesson</i> PowerPoint – see attachments below Paper Pencils
Technology Resources Needed- <i>What technology will teacher and students need for the lesson?</i> Smart board/projector for the attached PowerPoint.
Background and Preparation- <i>Description of information (science content, use of materials, etc.) teacher and/or students will need to know prior to this lesson; list steps for any preparation prior to the lesson</i> Review the resources provided and become familiar with different examples of environmental stewardship, especially those that are local to Alabama. A worksheet or additional materials may need to be created to guide your students on planning their persuasive essays based on the needs of your students and their familiarity with this writing structure.

Procedures and Activities
<i>Step-by-step description of lesson that would allow another teacher to successfully complete the lesson (suggest possible reflection or comprehension questions along with examples of correct answers or common misconceptions)</i> See attached lesson plan and PowerPoint below.
<i>Engagement</i> (sparking interest, introducing phenomenon, engage students’ everyday experiences) See attached lesson plan below.
<i>Main activity</i> (suggest possible reflection or comprehension questions along with examples of correct answers or common misconceptions) See attached lesson plan below.
<i>Wrap up and Reflection</i> (wrap up activity, reflecting on learning, informal assessments of student learning) See attached lesson plan below.
<i>Final product/Summative evaluation</i> (e.g. quiz, presentation, essay, etc., may occur during a later class period) See attached lesson plan below.

Attachments- *Any materials for the lesson such as video links, worksheets, etc., listed here*

SciREN Becoming an Environmental Steward through Writing – Lesson Plans

SciREN Becoming an Environmental Steward through Writing – PowerPoint

SciREN Becoming an Environmental Steward through Writing – Rubric

Day 1: Introduction to Environmental Stewardship and Persuasive Writing

1. Objective

Understand environmental stewardship and the elements of persuasive writing.

2. Warm-Up (10 min): Journal prompt: "What is something in your community or environment you would like to change? Why?"

3. Lesson (20 min):

- Define environmental stewardship with examples (e.g., clean water, air quality, waste management in underserved areas).
- Introduce persuasive writing (thesis, evidence, counterarguments, and call to action).

4. Activity (20 min):

- a. Small groups research one environmental stewardship issue from a provided list
 - i. What is the environmental problem? Who is most affected, and why?
What are the social, economic, and health impacts? What solutions are being implemented or proposed?
- b. Share findings with the class.

5. Review: Have students brainstorm three environmental issues they care about and explain why they're important.

Day 2: Research and Essay Planning

1. Objective

- Learn to gather evidence and outline a persuasive essay.

2. Warm-Up (5 min): Brainstorm: "What makes an argument strong and convincing?"

3. Lesson (20 min):

- a. How to find credible sources and cite evidence.
- b. Teach outlining: hook, thesis, body paragraphs, and conclusion.

4. Activity (25 min):

- a. Students choose their essay topics and begin research.
- b. Create an outline with thesis, main arguments, and supporting evidence.

5. Classwork/Homework: Finish their outlines and gather at least three pieces of evidence.

Day 3: Drafting and Peer Feedback

1. **Objective:** Write the first draft of their persuasive essay and provide peer feedback.
2. **Warm-Up (5 min):** Discuss: "What's the most important part of a persuasive essay?"
3. **Lesson (10 min):** Quick mini lesson on writing strong thesis statements and topic sentences.
4. **Activity (30 min):**
 - Students write the first draft of their essays.
 - Pair up for peer reviews using a checklist to evaluate thesis clarity, evidence, and argument strength.
5. **Classwork/Homework:** Revise drafts based on peer feedback.

Day 4: Finalizing and Presenting

- 1. Objective:** Edit and share their persuasive essays.
- 2. Warm-Up (5 min):** Reflect: "What is the strongest part of your essay?"
- 3. Activity (30 min):**
 - Students revise and finalize their essays.
 - Optional: Create a visual aid (poster, slide, or infographic) summarizing key points.
- 4. Presentation (15 min):**
 - Students share their arguments with the class.
 - Class votes on the most persuasive essays and discusses why they worked.
- 5. Submit final paper.**

Environmental Justice Awareness Project Rubric (7th Grade)

Criteria	3 Points	2 Points	1 Point
Content Accuracy	Thoroughly researched local environmental issue with precise, current data and specific community impact	Includes basic research with some details about the environmental problem	Minimal research; vague or generalized information about the issue
Persuasive Elements	Clearly presents 2-3 compelling, actionable steps with strong evidence and community-specific solutions	Provides 1-2 actionable steps with limited supporting evidence	Lacks clear or practical action steps
Communication Format	Professionally executed chosen format (article/video/skit) with clear, engaging presentation and excellent organization	Somewhat organized presentation with moderate clarity	Disorganized or confusing presentation
Community Impact Explanation	Deeply analyzes environmental issue's specific consequences for local residents, including health, economic, and social implications	Provides basic explanation of community impact	Minimal or superficial discussion of community effects
Visual/Verbal Presentation	Highly professional, creative approach with strong visual or verbal communication techniques	Adequate presentation with some engaging elements	Weak presentation with limited audience engagement
Source Documentation	Cites 3+ credible local sources with proper attribution and demonstrates advanced research skills	Includes 1-2 sources with basic documentation	Lacks proper source citation

Total Possible Points: 18

Passing Score: 12 points

Notes for Teachers:

- Encourage students to use local government reports, environmental agency data, and community interviews
- Support students in finding local environmental justice issues
- Emphasize the importance of actionable, community-specific solutions

Resources:

Video 1: [What is Environmental Injustice?](#)

Video 2: [**Environmental Justice Challenges in the Alabama Black Belt**](#)

Video 3: [**Close to home: Environmental justice in Alabama**](#)