Exploring North Carolina’s Government and Environment with The Lorax

Overview
Students will examine the impact of North Carolina’s economic and technological advances on the environment, as well as North Carolina organizations and laws created to address such impact, by connecting these issues to those posed in Dr. Seuss’s The Lorax. Though classified as a children’s book, The Lorax contains mature themes regarding the increasing negative effects human action and irresponsibility is having on the environment. In this lesson students will read the story or watch the movie and hold a mock hearing of the North Carolina Environmental Management Commission about the damage the Once-ler has done to the environment.

Grade
8

North Carolina Essential Standards
• 8.G.1.3 - Explain how human and environmental interaction affected quality of life and settlement patterns in North Carolina and the United States (e.g. environmental disasters, infrastructure development, coastal restoration and alternative sources of energy).
• 8.E.1.1- Explain how conflict, cooperation, and competition influenced periods of economic growth and decline (e.g. economic depressions and recessions).
• 8.C&G.2.2 - Analyze issues pursued through active citizen campaigns for change (e.g. voting rights and access to education, housing and employment).

Essential Questions
• How has the continued growth of North Carolina’s businesses and industries, such as textiles, tobacco, and furniture, created opportunities as well as challenges for the state?
• What environmental issues is our society confronting, and how do governmental agencies address these issues?
• What are the positive and negative affects of development, such as that of Research Triangle Park, on North Carolina?
• What impact does economic development have on the environment? How do governments balance economic interests with environmental concerns?
• According to the 2000 census, North Carolina’s population increased by more than one million people since 1990. What effect has this increase had on the state?
• What federal, state, and local government agencies exist to protect the environment?
• What is the role and responsibilities of the North Carolina Environmental Management Commission?
• What areas of improvement were addressed in Governor James Hunt’s 1981 Commission on the Future of North Carolina?
• Whose responsibility is it to protect the environment?
• How can citizens affect environmental legislation and voice their concerns regarding the environment to government officials?

Materials
• One or more copies of the book The Lorax, by Dr. Seuss
Duration
One hour

Procedure
1. As a warm-up, have students brainstorm the following three questions, jotting down their thoughts:
   - What comes to mind when you think of the word environment?
   - What issues or problems are our community and/or world at large faced with regarding the environment?
   - Whose responsibility is it to protect the environment?

2. After a few minutes, ask students to share their thoughts with the entire class and discuss. Expand the discussion by prompting:
   - What are some environmental issues our state faces? (Discuss issues such as acid rain, erosion, air pollution, water pollution, diminished forests and wetlands, global warming and climate change.)
   - Whose responsibility is it to protect the environment? (Discuss the balance between federal, state, and local governments; non-profit and advocacy groups; communities; and individual citizens)
   - What federal agency is designed to protect the environment? What are the responsibilities of this organization?
     - Discuss the Environmental Protection Agency:
       The Environmental Protection Agency is an agency charged with protecting human health and with safeguarding the natural environment: air, water, and land. The EPA began operation on December 2, 1970, when it was established by President Richard Nixon. It is led by its Administrator, who is appointed by the President of the United States. The EPA is not a Cabinet agency, but the Administrator is normally given cabinet rank.
     - What North Carolina state agencies are designed to protect the environment?
       - Discuss the North Carolina Department of Environment and Natural Resources:
         The N.C. Department of Environment and Natural Resources (DENR) is the lead stewardship agency for the preservation and protection of North Carolina’s natural resources. The organization, which has offices from the mountains to the coast, administers regulatory programs designed to protect air quality, water quality, and the public's health. DENR also offers technical assistance to businesses, farmers, local governments, and the public and encourages responsible behavior with respect to the environment through education programs provided at DENR facilities and through the state’s school system. The department is organized into the Secretary's office and staff, administration, divisions, programs, regional offices, boards, councils and commissions.
       - Discuss the North Carolina Environmental Management Commission:
         The NC Environmental Management Commission was created in 1973 by the North Carolina General Assembly. It is a 19-member Commission appointed by the Governor, the Senate Pro Tempore and the Speaker of the House. The Commission is responsible for adopting rules for the protection, preservation and enhancement of the State's air and water resources. Commission members are chosen to represent various interests, including the medical profession, agriculture, engineering, fish and wildlife, groundwater, air and water pollution control, municipal or county government, and the public at large. The Commission oversees and adopts rules for several divisions of the Department of Environment and Natural Resources, including the Divisions of Air Quality, Land Resources, Water Quality, and Water Resources.
     - What local and non-profit agencies help protect the environment? What are their roles? (e.g. the North Carolina Coastal Federation, the North Carolina Conservation Network, the Sierra Club, etc.)
     - Can you think of any North Carolina laws that have been enacted to protect the environment?
       - Discuss the North Carolina Environmental Policy Act: Passed in 1971, this Act was passed to regulate land use in response to North Carolina’s erosion problems.
       - The North Carolina legislature passed a clean air law in 1999, designed to reduce car and truck emissions.
• In 2000, NC legislators approved a plan to **preserve** one million acres of open space over the next decade.

• What are the responsibilities of **individual citizens** in protecting the environment?  (*Culminate the discussion by tying together citizens with state, local, and federal governmental responsibilities. Discuss how private citizens and government agencies are involved in protecting the environment. Laws are passed on the local, state and federal level to provide protection for the environment and the EPA as well local agencies are supposed to enforce those laws. Often, citizens must advocate for such laws to be considered however.*)

3. Show students the cover of *The Lorax*. Ask them to make a prediction of what they think the book will be about based on its cover. After students have made their predictions, explain that the book involves environmental issues. Tell them that you are going to read them the story, and afterwards they will take part in a hearing held by the **NC Environmental Management Commission** to determine a responsible solution to an environmental problem. (Teachers are encouraged to be creative and read the book in dramatic fashion – even middle school students will enjoy it.) After reading, discuss:

• Describe the Land of the Truffula Trees before the Once-ler came.
• Identify the main problem in the story. Who created this problem? Would you say anyone else is responsible for this problem other than the Once-ler? *(encourage students to consider the other citizens who did not stop him, and those who bought the thneeds)*
• Who was negatively impacted by the Once-ler’s thneed production? (*The Lorax, the trees, Brown Bar-ba-loots, Swomee-Swans, Humming Fish*)
• Do you agree that biggering is better for everyone? What types of biggering have happened in North Carolina? How do we all contribute to biggering? *(Discuss development in North Carolina, such as the creation of Research Triangle Park in Raleigh-Durham. Completed in 1961, the park continues to grow. Discuss the park’s positive impacts (home to businesses from all over the world, state and federal agencies, and prominent groups who study and develop of new medicines, create solutions to worldwide problems, offer a multitude of employment opportunities, etc.) and the parks negative impacts (pollution, emissions, traffic, etc.)*
• How would you characterize the Lorax?
• Why do you think no one listened to the Lorax? How do you think it would feel to care very deeply about something, but as you told people no one listened?
• Does the need for thneeds give the Once-ler the right to harm the environment?
• What could the Once-ler have done differently?
• What would you do if you were the boy at the end of the story?
• What do you think the Once-ler’s message “Unless...” means?

4. After discussion, have the students count off by sixes and assign the following groups:

• The Lorax = 1’s
• Brown Bar-ba-loots = 2’s
• Humming Fish = 3’s
• Swomee-Swans = 4’s
• The Once-ler = 5’s
• Environment Commission Members = 6’s

➢ **Teacher note:** If you are working with a smaller group of students, you may wish to combine the Humming Fish and Swomee-Swans, thus counting off by 5 instead.

5. Explain to students that they are to prepare for a hearing of the North Carolina Environmental Management Commission. Tell students that citizens living in the Land of the Truffula Trees filed a complaint with the Director of the **Department of Environment and Natural Resources**, who in turn
referred the complaint to the Environmental Management Commission. After reviewing initial information, the Commission has deemed the situation in the Land of the Truffula trees serious enough to hold a hearing.

At this hearing, the Commission will listen to all parties with interests in the situation occurring in the Land of the Truffula Trees at the time when the Once-ler has just build his thneed factory. The commission members will determine if damage is being done to the environment, if so how much damage, and how the situation can be resolved.

6. Give the following specific instructions:
   • **Commission members**: You must prepare for the hearing you are holding today. First, select a Chair who will lead the hearing. Then, infer what you think the presenting groups may say based on your prior knowledge of the situation occurring in the Land of the Truffula Trees and prepare questions to ask each group. At the end of the hearing, you must come up with a solution to the problem happening in this community. Think realistically about looking out for the “common good”, and your desires to promote environmental friendliness and a growing economy.
   • **Citizen groups (The Lorax, Brown Bar-ba-loots, Humming Fish, Swomee-Swans, The Once-ler)**: Each group should prepare a statement from the perspective of its members including: a statement of the problem; details about how your group has been injured; and a specific request for some relief or improvement of the situation. (For example, while the Once-ler’s problem may be the Lorax interfering with his business, the Humming Fish may complain that their water is polluted. Requests for relief/improvement could range from a demand in emissions reduction to reparations.) Complete statements should be 2-3 minutes long. Each group should also select individuals to serve the following roles: a recorder to write down the statements and requests; reporters who will read the statements to the committee members; and responders who will respond to any questions from the commission members.

7. Circulate among groups as they prepare, offering assistance as needed. Spend a few moments with commission members and advise them on how to conduct the hearing in “political character”. After students have had 15-20 minutes of preparation time, arrange your room appropriately and conduct the formal hearing, allowing for around 20 minutes. (Place commission members at a table facing a presenter’s table, with all citizens sitting on either side of the room. The Chair will call the citizen presenters up to present group by group.) The selected Chair should call the hearing to order, summarizing the purpose of the hearing by saying something such as:
   • Welcome everyone. I would like to call this hearing to order. We are all gathered today to investigate environmental complaints from those residing in the Land of the Truffula Trees. At this hearing we will hear from all interested parties. You may make a 2-3 minute statement and will then be questioned by the members of the commission. Please remember to be respectful of all participants and hopefully at the end of this hearing we will know how to resolve this issue.

8. The Chair will then call each group one by one to come to the table and present their 2-3 minute statement. Afterwards, the Chair will open the floor for each commission member to ask a question. After the committee members have heard all the testimony, the Chair will lead them in an open discussion of how to resolve this situation. Once an idea has been formulated, the Chair should call for a vote, thus ending the simulation.

9. Once finished, have everyone give themselves a hand for their hard work, and debrief:
   • What happened at the hearing? Do you agree or disagree with the Commission’s decision and why?
   • What did you learn about the responsibilities of communities when they encounter problems? What are some appropriate methods and places for voicing concerns?
• What consequences might citizens face if they do not make their concerns known to their governing bodies?
• Why is it important for citizens to participate in public hearings?
• What skills do citizens need to possess to develop and deliver a successful presentation to a governing body?
• What did you learn about the responsibilities of government for providing an appropriate agency and a setting for hearing the concerns of the people?
• Will all parties be happy with the decisions made? Are there ways to appeal decisions that groups do not agree with?
• What is a present-day example that requires responsible action by citizens and/or government to protect the environment? (Examples might include global warming issues, drilling for oil in Alaska, the need for energy conservation, pollution controls, destruction of the rainforests, etc.)
• Why is it important to protect our environment? Why should we care about issues such as these?
• What are various ways we can work to protect the environment as individuals and communities?

Optional Culminating Activities
• Have the students find articles in newspapers, magazines, and on the Internet about preserving or cleaning up the Environment, articles that address harm being done to the environment, and/or governmental and citizen involvement in such.
• Invite one or more of the following people to your classroom and have them talk about what they do and how they help to preserve or clean the environment:
  ▪ an environmental lawyer
  ▪ a member of a local governmental environmental agency
  ▪ a Sierra Club member or another environmental group member
• Tell students to choose a character from the book and write a speech from that character’s perspective advocating for or against environmental restrictions/legislation in the Land of the Truffula trees. Students can also write a letter from one character’s perspective to another character in the book.

Resources
• North Carolina Department of Environment and Natural Resources: http://portal.ncdenr.org
• NC Environmental Management Commission: http://portal.ncdenr.org/web/emc/
• US Environmental Protection Agency: http://www.epa.gov/