Lesson Plan - Environmental Justice and Urban Brownfields

Center for Urban Resilience

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LESSON 7: ENVIRONMENTAL JUSTICE AND URBAN BROWNFIELDS

OVERVIEW:
In this lesson, students will explore the environmental and social justice issues around the placement, development, and revitalization of urban brownfields. Students will take a stand on the resolution of the case of one urban brownfield given incomplete information based on their knowledge of scientific, environmental and social justice issues. They will discuss the merits and drawbacks of each others’ stances, and students will then compare their stance with what happened in the case.

SUB-QUESTION:
How can we impact land use in our neighborhoods?

Ways of Knowing Urban Ecology:

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<thead>
<tr>
<th>Understand</th>
<th>Students will…</th>
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<tr>
<td>• Understand the complexities and diversity of stakeholders involved in a real case of urban land use and environmental justice (ecosystem state and structure, forces and drivers).</td>
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<table>
<thead>
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<th>Talk</th>
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<td>• Share, discuss, and prioritize different stances on a critical and authentic urban environmental issue.</td>
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<tr>
<td>• Compare their stances on a critical and authentic urban environmental justice case.</td>
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<th>Do</th>
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<td>• Develop a stance on a critical and authentic urban issue.</td>
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<th>Act</th>
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<td>No specific goals connected with acting on urban ecology in this lesson.</td>
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SAFETY GUIDELINES:
No safety precautions are needed.

PREPARATION:
Gather and place signs and materials

Time:
1 period

Materials:
Activity 7.1
White board or chalk board
Activity 7.2
Environmental Justice Case Study
Strongly Agree-Agree-Disagree-Strongly Disagree signs, placed in different locations in the classroom
Optional: poster board, white board, or chalk board, and markers

INSTRUCTIONAL SEQUENCE

Activity 7.1: Defining Brownfields

1. Write the word “brownfield” on the board. Define the term for students as land that had previously been used for business purposes that is now unused, but the soil likely contains contaminants such as petroleum (gasoline), lead, or mercury.

2. Ask students to share places around the school, in their neighborhoods, or around the city that they think may be brownfields. State departments of the environment usually have online databases of sites requiring or undergoing cleanup, such as the one for Massachusetts (http://db.state.ma.us/dep/cleanup/sites/Search.asp, with the definitions at http://www.mass.gov/dep/cleanup/sites/statdef.htm). You can either check students ideas of brownfields against these lists, or find places they did not name.

3. Tell you students that they will be reading a case study called “Take A Stand, Own The Land,” taken from a real event concerning a brownfield.

Activity 7.2: The Environmental Justice Case Study

4. Tell students that they will be reading just the first page of the case study, and then they will break into small groups to develop a response to the problem and present their approach to the class.

5. Before reading the passage, ask students to keep the following questions in mind:
   - What are the problems in terms of biophysical drivers?
   - What are the problems in terms of social drivers?
   - What would you do about it?

6. Read the first page of the case study out loud, as a class, or individually.

7. When the class gets to the bottom of the first page, have the students stop reading. Ask them to work together to craft what an appropriate position statement might be from the following stakeholders in response to the brownfield in the case study:
   - The father
   - City official (city councilor? mayor? bureaucrat?)
   - The local community organization
   - The trash management company

Remind students that all of the parties involved may all believe that they are “doing the right thing” from their own perspective, and are in some ways
benefitting the greater good by doing what they are doing and have evidence of some kind to back up their position.

8. Ask students to think about and share evidence each of the stakeholders may be drawing upon to make their cases.

9. Write these position statements on the board.

10. Re-read the positions one by one. Ask students to arrange themselves according to whether or not they strongly agree, agree, disagree, or strongly disagree with the statement. Ask at least one or two students from each group to explain why they have taken their position.

11. Once you have discussed all position statements, regroup the class and complete the reading of the case study.

Conclusion

1. Upon completing the case study, ask your students to compare the position statements they articulated for the various stakeholders to the positions taken by those stakeholders in the case. Ask them if they would modify them in any way. Also, ask them to consider if they would have changed their positions on the position statements. Remind them about multiple perspectives and the use of different kinds of evidence, including those that deal with biophysical drivers and social drivers, to make a case.