Final Project – Primary Source Learning Activity

Section I

1. **Title of Lesson:** Cause and Effects of Pollution

2. **Overview:** Pollution is everywhere and it affects us all in some way. For this learning activity, students will analyze primary source images and read and analyze three scientific articles about pollution. Afterward, students will analyze causes and effects of pollution. Finally, students will write an essay that identifies five causes and effects of pollution and discusses effective ways to stop pollution and the benefits of stopping pollution.

3. **Learning Goals:**
   A. Given three scientific articles, students will write an essay that includes the following:
      a. Identifies the causes and effects of pollution
      b. The implications of polluting (what happens if we continue polluting)
      c. Evidence from the texts to support their reasoning and discussions.

4. **Time Required/Duration of Activity:** Ideally, the duration of the activity will be 2 class periods (1 hour 30 minutes each period; 3 hours total). However, if a significant portion of my population is struggling either with the essay or with the reading of the articles, more time can be given.

5. **Recommended Grade(s):** Grades 9 – 12.

6. **Subject:** Science, English/ Language Arts

7. **Credits:** Zachary Dice- Uniontown Area High School

8. **LDC Teaching Task:** How is pollution affecting your life? After analyzing primary source images and reading three scientific primary source articles on pollution, write an essay that identifies the causes and effects of pollution. What conclusions or implications can you draw? Support your discussion with evidence from the texts.
Section II

9. **PA Common Core Standards:**
   CCSS.ELA-Literacy.RI.9-10.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

   CCSS.ELA-Literacy.W.9-10.2f Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).

   CCSS.ELA-Literacy.L.9-10.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

10. **Materials Used:**
   - Danger to Fisheries from Oil and Tar Pollutions of Water by J.S. Gutsell (book)
   - The Disposable Society by Herb Block (picture)
   - Stream Pollution. City Dump by John Vachon (picture)
   - Teacher on the Shoulder graphic organizer
   - TPS Primary Analysis tool

11. **Resources Used:**


Section III

12. **Instructional Procedures:**

    - **Mini Task Discussion:** This will be utilized in the beginning of the lesson to allow students to begin thinking about causes and effects of pollution. I expect the students to be able to:
      - Successfully analyze an image using the TPS analysis tool (as this will be integral later in the lesson)
      - Identify causes and possible effects
      - Make inferences based upon evidence within the picture.

    - **Mini Task:** After analyzing a picture of a city dump in regards to pollution write a report (10-15 sentences) that examines the causes and effects of the pollution depicted in the picture. What conclusions or implications can you draw? Support your discussion with evidence from the picture.
      - The teacher will display the picture of a city dump on a projector or PowerPoint.
        - Link to image: [http://lcweb2.loc.gov/service/pnp/fsa/8c17000/8c17000/8c17028r.jpg](http://lcweb2.loc.gov/service/pnp/fsa/8c17000/8c17000/8c17028r.jpg)
      - The teacher will pass out the TPS analysis-tool (paper based) to the students and will model a possible way to complete their analyses of the image.
Students will fill out the TPS analysis–tool and then share responses with the class. The teacher will explain that students, using their TPS analysis–tool and the picture, will write 10-15 sentences about the causes and effects of the pollution depicted in the picture. Furthermore, the students should include what implications that can be drawn from this picture.

Close Reading Analysis Discussion: The close reading analysis will be completed immediately following the picture analysis mini task. This is because the students will be doing much of the same thing: analyzing a primary source (informational text) in order to determine causes and effects of pollution and the implication of pollution in regards to fisheries, fisherman, fish, and the general economy. The skills that will be developed are:

- Analysis of informational texts
- Application of informational text to everyday life
- Identification of causes and effects
- Inferential implications of pollution

Section IV

13. **Assessment:** The LDC rubric I will use to assess students on their writing assignment will be the LDC Informative/Explanatory rubric.

Students will be assessed on the following: cause/ effects, grammar usage, length, and implications after they complete their primary source analyses using the images and the informational texts.

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<th>1</th>
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<tbody>
<tr>
<td><strong>Content:</strong></td>
<td>Student didn’t list any causes or effects / Listed causes and effects weren’t about pollution</td>
<td>Student listed either 1 cause or 1 effect in regards to pollution</td>
<td>Student listed 1 cause and 1 effect in regards to pollution</td>
<td>Student listed 2 causes and 2 effects in regards to pollution</td>
<td>Student listed 3 or more causes and 3 or more effects in regards to pollution</td>
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<tr>
<td><strong>Grammar:</strong></td>
<td>4 or more grammatical errors</td>
<td>3 grammatical errors</td>
<td>2 grammatical errors</td>
<td>1 grammatical error</td>
<td>0 grammatical errors.</td>
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<td><strong>Length:</strong></td>
<td>Student’s paper was blank</td>
<td>Student wrote 1-2 sentences</td>
<td>Student wrote 3-5 sentences</td>
<td>Student wrote 6-9 sentences</td>
<td>Student wrote 10–15 sentences.</td>
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<td><strong>Implications:</strong></td>
<td>Student didn’t list implications</td>
<td>Student listed implications but didn’t support it with evidence</td>
<td>Student listed implications, but the evidence given didn’t support the implication</td>
<td>Student listed implications, but the evidence only supported part of the implication</td>
<td>Student listed implications and supported each one fully with evidence</td>
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