

Wednesday 3/19/14

**Performance Task:
Environmental Impacts of Belo Monte Dam in Amazon Basin (Brazil)**

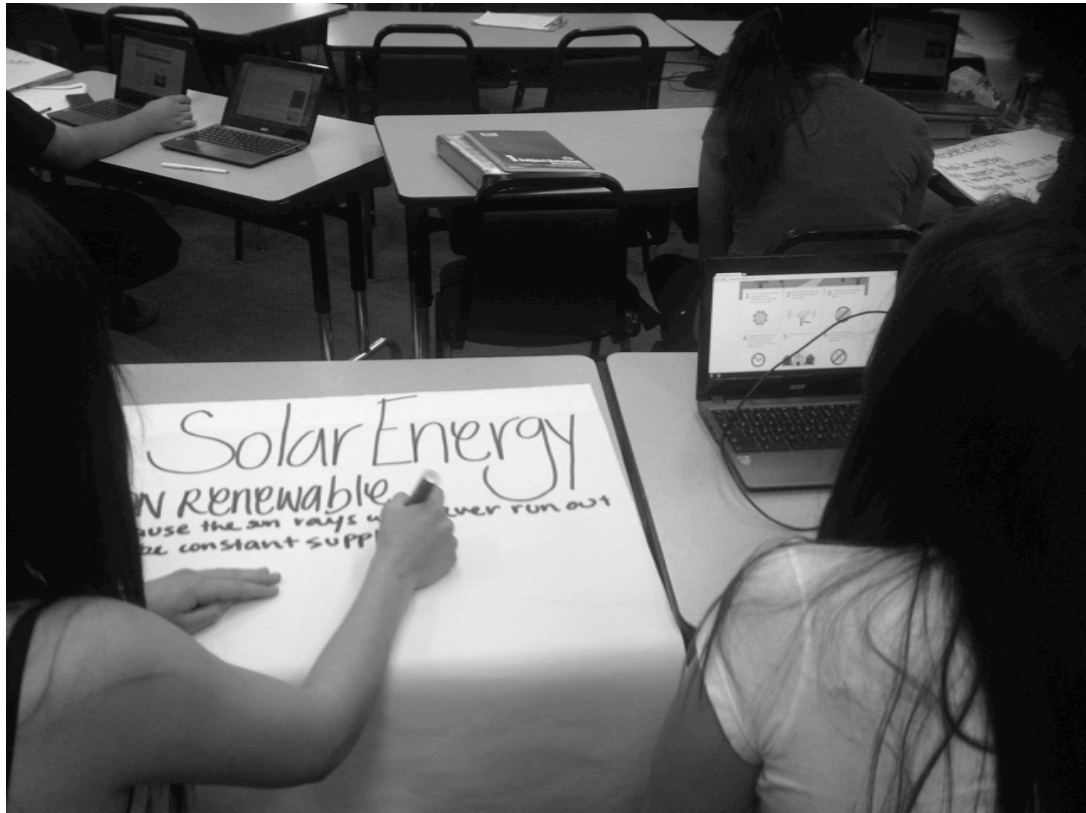
NGSS Standards Addressed:

LS2.C: Ecosystem Dynamics, Functioning, and Resilience

- A complex set of interactions within an ecosystem can keep its numbers and types of organisms relatively constant over long periods of time under stable conditions. If a modest biological or physical disturbance to an ecosystem occurs, it may return to its more or less original status (i.e., the ecosystem is resilient), as opposed to becoming a very different ecosystem. Extreme fluctuations in conditions or the size of any population, however, can challenge the functioning of ecosystems in terms of resources and habitat availability. (HS-LS2-2),(HS-LS2-6)
- Moreover, anthropogenic changes (induced by human activity) in the environment—including habitat destruction, pollution, introduction of invasive species, overexploitation, and climate change—can disrupt an ecosystem and threaten the survival of some species. (HS-LS2-7)

Part 1: (20-25 minutes)

Pairs of students, each with Google Chrome tablets, investigate a fuel source, make poster display and each group share out to class findings (was it renewable, non-renewable, description, etc) *(7 minute limit to research and create poster)*



Vocabulary: renewable resource, nonrenewable resource, fossil fuels, carbon dioxide, global warming.

Poster Activity: Grade: _____

Google Forms **constructed response** questions on Haiku: C.R. Grade: _____

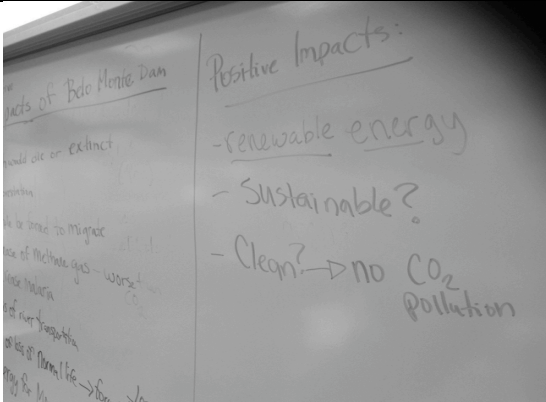
Part 2: (15-20 minutes)

"Brazil as Leader of Sustainable Energy" (youtube video shown to class)

Vocabulary Introduced or reinforced: Sustainable, Clean Energy

Class discussion on Brazil's praised use of 90% "clean, renewable energy, and domestically produced energy" and then Google Form **Constructed Response** Questions on Haiku page

C.R. Grade: _____



Part 3: (45 minutes)

Youtube video "Defending the Amazon Rivers with Sigourney Weaver" (8 minutes) and first 4 minutes of "Damocracy"

Student take **guided cornell notes** during videos, listing the **IMPACTS** of the proposed Belo Monte dam in Amazon basin.

Vocabulary Introduced or reinforced: Sustainable, Clean Energy, Carbon Dioxide, deforestation, extinction.

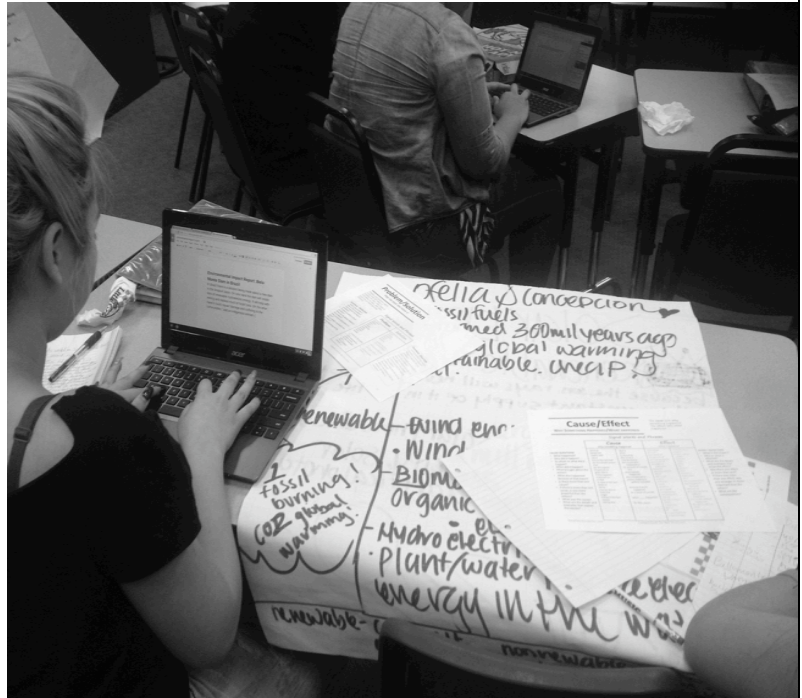
Grade (**notes**): _____

Class discussion and whiteboard listing of positive and negative impacts of proposed dam.

Final Product Performance Task:

20 minute timed writing assignment. Student takes the position of being the environmental scientist and must write the **project summary** of an **Environmental Impact Report**, stating both positive and negative impacts of proposed dam while making their claims in favor or opposing the project.

Resource Given: **"Text Structure"** cards on "Problem/Solution" and "Cause and Effect" to aid in writing.



Evaluation of Performance Task (EIR Project Summary): _____

Notes/ Comments:

