Global climate change assignment 4

State Standards:

**9-12.E.1.2.** Students are able to **describe** how <u>atmospheric chemistry</u> may affect <u>global climate</u>.

**9-12.E.1.3.** Students are able to **assess** how <u>human activity</u> has changed the land, ocean, and atmosphere of Earth.

This lesson will be included in an environmental science class of mostly juniors.

I plan on having my students break into two groups: those that believe that global warming is occurring and those that don't believe that global warming is occurring. If most students believe that it is occurring, I will randomly divide the class into these two groups.

The students will defend their positions with scientific data gathered by doing research on the computer using the internet. They will need to answer the following questions in doing the research:

What is the greenhouse effect and how does it work?

What is the difference between the greenhouse effect and global warming?

What is the cause of supposed increased global temperature?

If global warming is or is not occurring, what evidence exists to verify or refute the claim?

If global warming is real, what do we have to worry about?

What has global climate been like in the past?

What are humans doing to try and reverse global warming and what effects may these changes have for humans and the environment?

Each group of students will be a member of their own wiki, where they will have to each post answers to the above questions. This will be 50 points of this assignment.

On the wiki, the group of students will create a concept map that illustrates their position. Contribution to the concept map will be 20 points.

After the students have completed their tasks of posting to their wiki, each group will defend their position by posting to a discussion board why they believe or don't believe global warming is real and is a problem that we all need to worry about. Posting to the discussion board and replying to at least one post will be 30 points.

By having the students decide for themselves whether or not global warming is taking place gives them the opportunity to research evidence collected by scientists. This could be taught by lecture, but would not include the students and what they think and know about the issue. Utilizing this method will allow them to make an informed decision for themselves.