In my current 6th grade social studies chapter, we are covering natural resources in Europe. The particular lesson we’re covering focuses on renewable and non-renewable resources. After reading the lesson in the text book, and having a class discussion about it, I used the material from the Gallery of Energy. This gave us the opportunity to look at various types of energy and to see whether or not each is harmful to the environment. We were able to highlight each picture, and using white boards and dry erase markers, I had the class draw a thumbs up for renewable energy and a thumbs down for non-renewable energy and write a sentence why they chose as they did. (For those not able to draw a hand and thumb, they could choose to draw an arrow point up for thumbs up, and an arrow pointing down for thumbs down.) Of course, students know by now that every class member’s opinion is valid, and not to ridicule or make fun of students with whom they disagree.

Renewable and Non-renewable Energy Sources

Objectives: Identify natural resources used to produce energy. Determine if a resource is renewable or non-renewable. Identify things that are good for the environment or that can reduce global warming.

Materials: Smart Board; Climate Bingo! Cards; white boards; dry erase markers w/erasers

Procedure: 1.)After reading the lesson in the text book and ensuing class discussion, the class will view the Gallery of Energy slide show on NASA’s website.

2.) As each picture appears, students will draw a thumbs up for a renewable resource or a thumbs down for a non-renewable resource.

3.) Students will then write a brief explanation why they chose what they did. There will be a thorough class discussion after each slide is shown and student answers are shared within the class.

4.) Upon completion of the slide show, the class will be given their own Climate Bingo! card (which is laminated for future use). The class will be told to take this with them on their upcoming field trip and to mark off each item they see. We will go over the rules at the bottom of the card in class, and once again before they leave for the field trip (I will collect the cards and hold on to them so they don’t get lost).

Assessments: The class will discuss the lesson in the textbook. The class will write (on white boards) whether a resource is renewable or non-renewable, and defend their answer with a brief explanation. Responses will be discussed. The class will determine whether or not the resource harms the environment. The class will play Climate Bingo! on the upcoming field trip to see what can reduce global warming and is good for the environment. (Students will receive prizes when we get back to school and everyone who has a filled line wins-because Earth wins!)

Upon showing the Gallery of Energy slide show from NASA’s website, the students were a bit perplexed about the burning of the peat, as most didn’t have a clue what peat was. After I explained that it really isn’t too common in our area of the world, but that it is quite common in the region we just studied. I could sense a few light bulbs that came on. Students were surprised about the use of mirrors for super-heating water to produce electricity, and a fun discussion followed that slide. But the best part came on the bus during the field trip. The students were focused on finding the items on their bingo card, so they were quieter than usual. That is, until the first few started getting their bingo, and then the shouting ensued. After apologizing to the bus driver profusely, I was able to get the students to understand raising their hand was sufficient, but since everyone could win a prize when we got back to school, no one had to shout out they were first (but being kids and competitive with each other-they, of course, did claim who was first, second, and on and on. But, really, they were well behaved as the bus driver didn’t have to threaten them (as he shared with me). He was also impressed in overhearing the kids as they found different objects about how much they knew about conserving and trying to make a difference in global warming! Major win as we were able to get another convert. Back at school, after we discussed the field trip, we discussed the Climate Bingo! cards. How fun it was to see the students understand what they can do to help reduce global warming. They were so excited about it, that I have a renewed belief that we, as people, can overcome the damage that has been done, and take the proper steps to set things right for the Earth. It was very easy for us to tie all of this lesson in to being stewards of God’s creation! I think in the future I will have the kids type their explanations to the Gallery of Energy on the computers so we can keep their ideas instead of erasing the white boards for each picture and thus losing the great ideas of which the kids thought and came up with. These can be used for future lessons and for future classes. All in all, I’m quite pleased with how well the students did with this lesson!