

What's Your Source? Energy Reflection

1/5/11

For the past couple of months, we have been working on a "What's Your Source?" Energy Project. We split up into eight different groups to learn about eight different energy sources. The energy sources we learned about were tidal, biomass, coal, oil, solar, hydropower, geothermal, and wind. There were both individual and group assignments that need to be completed for our project. The individual projects were a history report, an economic report, and a creative writing piece. Also, we did individual weekly journals on our wikispaces about what we had learned so far, and we did a weekly self evaluation on our accomplishments that week. The group projects we had to do were a 3-D representation of our energy source and invitations to our energy fair. To go along with our energy project, we read a book called *Phoenix Rising*. It was about a radiation accident in a town, and that town and all the towns near it have to suffer through the radiation. It talks about a girl's life living in the radiation. With this book, each group had to make a connection to *Phoenix Rising* and our energy source.

The energy source that I had was tidal power. I chose to learn about this source because it was an energy source that I hadn't learned anything about. It also looked very interesting, and it is not used in many places in Maine. Tidal power is used in two different ways. The first way is by putting barrages in the water to block off a section of water, but this pollutes the water because the water isn't being circulated. The other way tidal power can be used is by putting turbines in the water to circulate the water and create energy. The most interesting fact that I learned about tidal power is that the fish are not harmed by the turbines because they move so slow. In some cases, tidal power plant workers have found seals play with the turbines. The set up cost of tidal power is very expensive, but after it is set up, there are only maintenance fee. A tidal power station needs maintenance every 60 years. After those 60 years, the investment is then \$2 million. Tidal power was first discovered by M. Jannaschii on November 26 1966. However, this isn't the first use of tidal power, back in the day, tidal power was used to grind grain into flour. Another interesting fact about tidal power is that it renewable and non-polluting in most cases.

One of my favorite part of this project was having the energy fair. I thought it was cool to show everyone what my group and I had done with our projects. For the energy fair, we had to put some of our groups members economic, history, and creative writing pieces on a giant canvas trifold. My group decorated our trifold with pictures and made the words tidal power out of construction paper. With our trifold, we had to put our 3-D model on a table in front of it. My group also used my creative writing piece, which was a brochure, to pass out to the guests so they could learn more about tidal power. Another one of my favorite parts was creating the 3-D model with my group. We worked really well together to come up with a great idea and to get past any struggles we had along the way. For our 3-D model, we decided to create a tidal power turbine. We filled a tub up with water, and put a bottle hooked to a piece of copper wire in it. Then to make the bottle spin, we had someone push the water with a ice cube tray to make

waves. We also had a cardboard box with a house on it behind the tub. In the house we put a lightbulb that was hooked up to a battery. When someone made the waves, another person would hook the wire from the lightbulb to the battery. Then the light would turn on making it look like we were actually produce the energy ourselves. We also put rocks on the bottom of the tub to make it look like an actual sea floor. We also got a fish to put in the tub to show how the turbine doesn't disturb the fish; but since we didn't want to harm the fish with the waves, the group decided to put the fish tank behind the tub so if a viewer were to look at the tub at a thumbnail view, it would look like the fish was actually in the water. A struggle my group had with the model was that we couldn't find a way for the turbine to spin around and stay in one place. There were multiple ways that were tried, but finally we found a way for it to work with the help of our teachers.

If I had to do this project over, there would be very little that I would want to change. First, I would want to rework my history report. I would want it to have more dates and to be bigger. Also, I would want to color it. Another thing I would want changes would be the books we read in our lit circles. The book we read, *Phoenix Rising*, wasn't a great book. I think it would have been more fun and interesting if each group read a book about their energy source. Although it might be hard to find books written about each energy source. Also, I think it would have been fun to have the whole school see it. It might have worked better if we were in the gym, because I think a lot of people felt crowded. There would be a lot of people on one room and barley anyone in the other. I also think it would have been nice to see the other kids work. I got to see a few groups when no one was at my table, but not all of them. Some of the other kids rarely or never even left their table. So it would have been more interesting to learn about other sources, because we had been focusing on just one energy source for the past couple of months.

Overall, on a scale of one to ten, I would rate this project as an 8. I loved the idea of the project and it was really fun. But I just think there were some parts where it was really stressful because we had all of that work plus work from our other classes. Although, this project combined our social studies, science, and language arts class. So we didn't have as much homework, but it still got pretty stressful. My participation in my group would be a 9. I worked pretty well with my group. There were a couple of times were we would get off task, especially during lit circles. It was sort of hard for my group to communicate because we all were so quiet and no one wanted to take control and be the leader. But when we knew what we were going to do, we got to work quite well. My individual final products would have to be a 7. I think my creative writing piece and my economic report came out very well. But my history report didn't come out quite as well; it was a little sloppy. The group final products were an 7 as well. We worked very hard and I think our 3-D model came out very great. Our *Phoenix Rising* connections could have been worked on a little more. Then our invitations weren't very great, they were a little informative about the reason we wanted the person to come. What I learned would probably be a 10. I learned a lot of information. There's always more information I could of used, but I had more then enough to do the projects I needed to. The overall rating of

the lit circles is a 4. I did not like the book one bit. When we discussed what we read, we ran out of stuff to talk about fast.

The piece I am most proud of is my creative writing piece I made. For the creative writing piece, I made a brochure for tidal power. It has every thing I learned about tidal power throughout this project. There is a page for just interesting facts, for the economics of tidal power, the history information I learned, and how tidal power is used. The reason I am very pleased with this piece is because it is very neat. I worked very hard on it, and it has a lot of interesting facts about tidal power in it. I thought it was pretty cool when my group members asked me if it was okay to give out copies of my brochure to the guests.

Throughout this project, there have been great times and stressful times. I was happy when it was over but I still had liked the project. I didn't like how it had taken up three out of the four classes we have with our teachers. Though in the end, it was worth it. It was interesting to have our team be on the news. I think with a team like ours, the news reporter had a very interesting visit. But in the end, I really enjoyed taking the past couple of months to do this project.