Elizabeth Anderson Jeff LaPlant NR 734

Energy Action Plan

Action Plan Summary

The object is to increase student and staff awareness of Ben Franklin Junior High's energy consumption. Our project is a twofold process, the first being to educate the school staff through a school-wide in-service and the students in their homerooms. Lastly we plan to approach our principal about a partnership with the green and healthy schools program, and plan on implementing the energy component of the program.

Project goals and objectives

- Decrease energy consumption at Ben Franklin Junior High School and lower the demand charge for the year.
- Educate the Ben Franklin Junior High school community regarding its energy use and consumption.

Problems

- Need to increase staff and student knowledge and awareness of worldwide energy issues.
- Need to inform teachers and students of energy use at Ben Franklin Junior High School.
- Need to empower staff and students with knowledge that they can make a difference concerning energy consumption.
- Need to create a system to increase energy efficiency.

Methods and Timeline

- Do a walk-through energy audit of the school
- Collect past data to determine baseline energy use for Ben Franklin Junior High school
- Develop energy saving tips for the school listed in the school paper, weekly bulletin or PA system.
- Create a survey of energy awareness and administer to students and staff in our school.
- Take-home information about using energy efficiently through the school newspaper, or parent organization.
- Research the actions for increasing the energy efficiency of school windows, doors, lighting, and food service.
- Apply for new recycle bins to place throughout the building.
- Apply for a focus on energy audit.
- Buy energy-saving stickers and place them throughout the building

• Track monthly energy savings with posters on a bulletin board and through daily announcements.

Evaluation criteria and process

- Show a measured increase in staff and student knowledge and awareness of worldwide energy issues through results of pre-and post-energy use surveys
- Analysis of quarterly data from Wisconsin public service should show a 5% decrease of energy use and a reduction in the yearly demand surcharge level.

Budget

- 15-25 surge protectors \$180
- 1 package of adhesive paper \$20

Ben Franklin Energy Action Plan

Would you like to save money and help the environment? This win-win proposition can be easily accomplished if we all commit to consuming less electricity. As a part of a KEEP (K-12 Energy Education Program) course offered through UWSP, two Ben Franklin teachers, Elizabeth Anderson, and Jeff LaPlant, put together an Energy Action Plan to help reduce energy costs at Ben Franklin. Over the next few months your child will be learning about energy usage and the importance of energy conservation.

Through simple steps like shutting off lights and computers, the staff and students will be able to reduce the school's energy consumption, which will save the school district money, while helping to reduce pollution from coal-fired power plants. The school has already taken several steps to reduce energy consumption, including more efficient florescent light bulbs in the classrooms, smaller and more efficient boilers, and new lights in the gym. However, the school's electricity costs still average about \$90,000 per year, and we would like to see that number reduced.

It is also important for students and their families to be aware of energy conservation in the home. Everyone likes to save money and there are some easy ways you can do so by reducing your energy consumption. The first is to replace incandescent light bulbs with compact florescent bulbs (CFL's). Approximately 90% of the energy used by incandescent bulbs is released as heat, making them very inefficient. CFL's are much better today than when they were first introduced, and are now available as dimmable bulbs and flood lights. While CFL's do contain small amounts of mercury, used CFL's can and should be dropped off at Frank's Hardware in Stevens Point to be recycled. The energy and pollution savings that CFL's bring far outweigh the chances of contamination from the mercury they contain.

Other simple steps you can take at home are to use power strips for computers and other electronic devices so that they do not consume electricity even when they are "off." If you are looking to replace old appliances make sure that you look for new appliances with an energy star rating. You should also turn off lights and TV's when you are not in the room. Lastly, you can save on heating and cooling costs by using a programmable thermostat and fans during the summer. By following these simple steps the school and our community can reduce our energy consumption, saving both money and the environment.

Test Your Knowledge of Energy Usage!

Mark these Common Energy Myths (or are they Truths?) with a T if you think they are true, and an F if they are false.

- 1. Computers should be left on when you're not using them
- 2. Electronics and Appliances like TVs and VCRs use no energy when turned off
- ______ 3. Ceiling fans don't save energy.
- 4. It's less expensive to leave lights on than it is to turn them off and then back on
- _____ 5. Keep your thermostat on the same setting day and night

6. The higher you set your thermostat in the winter the faster the house will warm up and the lower you set your thermostat in the summer the faster the house will cool off.

____7. You can turn up the thermostat in the summer and turn it down in the winter to cut down on heating costs.

8. Compact Fluorescent Lights (CFL's) don't provide good lighting and they buzz, flicker, and have a delay when they are turned on.

9. When a cell phone power charger is left plugged in, but the phone is not attached, it will not use electricity.

10. Electricity costs for Ben Franklin last year were almost \$100,000.

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