

NR 734: School Building Energy Efficiency
WI K-12 Energy Education Program (KEEP)

Action Plan

Submitted by: Patty McGibbon
PJ Jacobs Jr High

Action Plan Summary

The purpose of our action plan is to bring awareness to staff and students concerning electricity and natural gas usage in our school. Our plan will actively involve students in informing peers and staff of the cost of PJ Jacobs electrical and natural gas use/consumption during the school year and challenge them to help reduce that cost. Information shared will include both cost in terms of money spent and cost to the environment from using electricity and natural gas.

Implementation of this plan will consist of two phases. Phase One will introduce our students and staff to the cost of electricity and natural gas use in our school and simple solutions to help reduce that cost. Phase Two will inform students of the environmental cost and provide a way for students and staff to take action outside of the classroom/school setting.

There will be minimal cost involved. Materials used to inform and promote this plan include materials readily available in our school setting and student volunteers will create informational posters, "public service announcements", and short "info-mercials" to be shown to all students (and available for staff to watch). We will award the top 5 student sellers at our school with 2, 12 foot multi-color LED holiday lights for a total cost of \$52.50. Cost for the LED holiday lights reward will be covered by money earned from our "Bright Idea" fundraiser conducted during the 2007-08 school year.

Introduction to the Audience

Our audience will include the entire student body (750) and all staff (75) at PJ Jacobs Jr. High in Stevens Point. Our audience will extend out to all student families during the Phase Two "Bright Lights" fundraiser. In the past we have run a "Bright Lights" fundraiser with great response from students (their families) and staff. To expand on this success, we will now include specific focus on our energy consumption at PJ Jacobs Jr. High and offer an award (multi-color LED holiday lights) for the top 5 student sellers during the "Bright Lights" fundraiser.

Statement of Problem or Need

As we learned during our NR 734 course, the cost of energy use in our district is remarkably high. We also learned that there are simple solutions to reducing this cost. For one year, the cost of our electricity use at PJ's alone is around \$99,000

and our cost of natural gas consumption is around \$107, 000. Our action plan will help to bring awareness of this cost and encourage all of us to be more mindful of our impact on that cost and act on reducing it – not only for the district budget (and local taxes), but also for the health of our environment for future generations!

Project Goals and Objectives

The purpose of this action plan is to inform staff and students of wasteful energy usage at PJ Jacobs and provide easy solutions to reducing it. We will also address the environmental impact of using natural gas and electricity produced with fossil fuels and/or nuclear power. A long-term goal would be to eventually make PJ Jacobs a “Green and Healthy School”.

Evaluation Criteria and Process

When introducing students and staff to this problem of wasteful electricity use in “Phase One”, we will provide the cost of the electricity used at PJ Jacobs in one month. One or two months after our campaign, we will share any savings observed/gained on our electrical bill with staff and students. At that time, we will enter into “Phase Two” where we will hold a school-wide “Bright Lights” campaign/fundraiser. This will involve student action for conserving energy beyond school.

Methods, Timeline, Evaluation

Phase One – John Weisbrod

This plan is designed to create a greater awareness of energy usage among staff and students at P.J. Jacobs Junior High School. This increased energy awareness will form the foundation for changing habits related to energy consumption. This in turn will create better conservation of energy resources and a reduction in energy costs to the school district.

Students organized by John Weisbrod will develop and implement an educational campaign that addresses the economic and environmental costs of our school’s current energy consumption habits. Student volunteers will develop public service announcements and posters which state facts about P.J. Jacobs’ 2007-2008 energy bills. Additionally, students will offer simple recommendations for staff and students to follow in order to conserve energy.

This action plan will take place November through February of the 2008-2009 school year. If possible, any measurable reduction in energy consumption will be communicated to students and staff at the end of this project. (For more detail, see John’s Action Plan sent separately)

Phase Two – Patty McGibbon

In February, I will enlist the help of my Accelerated Science students to implement “Phase Two” of our action plan. The work my students do on the following will be an extension of our “Problems & Solutions” unit, giving them experience with the “Action” phase of studying environmental issues. Students will be engaged in the following projects, which will present information about the benefits of reducing our electricity consumption to staff and students at PJ's:

- Creating and hanging up posters
- Create “Public Service Announcements” during school announcements to promote the “Bright Idea” fundraiser
- Creating Commercials/”Info-mercials” which will be shown to all students (via all of our science classes) during the “Bright Idea” fundraiser
- Creating placards to wear during the week we run the “Bright Idea” fundraiser
- Create and conduct a lesson (to all science classes, a.k.a. all PJ students) on CFL's versus Incandescent light bulb energy consumption with the KEEP Energy Cycle
- Film the lesson with the Energy Cycle and show to staff at a staff meeting.
- Create an educational display in the school cafeteria to promote conservation of electricity and natural gas at PJ Jacobs
- Distribute electricity conservation information to all students (their families) and staff

The success of this phase will be measured in terms of how successful our “Bright Idea” fundraiser is and the continued awareness and actions by staff and students to turning off lights when classrooms are not in use, keep classroom doors closed to help with heating/cooling efficiency, and a continued reduction in our energy consumption/cost at PJ's during the 2008-09 school year.

Some of the money earned during this fundraiser will be used to purchase power strips for teachers to put in their classrooms. We learned/ discovered that there is still electricity being used by our computers and printers even if they are turned off. The power strip will totally cut off this unnecessary electricity use.

Calling all PJ Jacobs Patriots

Help our school save money!
Help our environment stay healthy!

Did you know that the electrical systems' bill for PJ Jacobs was **\$6,800.10** for last November?

... **\$7603.55** for last December?

... **\$7,603.55** for last January?

... **\$7,839.29** for last February?

What can we do about reducing our electrical systems' bills and the negative impact electrical production has on our environment?

- **Turn off the lights when classrooms are not in use.**
- **Turn down the lights when appropriate during classroom instruction.**

FACT: 65 % of all electricity is used to power the lights.

FACT: 15% of all "energy" used is to power the lights.

Did you know that the natural gas systems' bill for PJ Jacobs was **\$11,967.30** for last November?

... **\$16,316.91** for last December?

... **\$19,413.78** for last January?

... **\$18,276.00** for last February?

What can we do about reducing our natural gas systems' bills and the negative impact natural gas systems' have on our environment?

- **Keep doors and windows closed in order to enhance the efficiency of heating and cooling systems.**
- **Report inappropriate classroom temperatures to our head custodian, Randy Spurlin.**

FACT: Natural gas systems' bills are nearly three times higher than electrical systems' bills in the winter month.

Staff—please follow these simple suggestions for economic and environmental reasons.

Students—you may politely request your teacher follow these suggestions. We are all in this together.