Impacts and Behavior Changes of Energy Education

The Wisconsin K-12 Energy Education Program (KEEP) has been offering professional development courses for K-12 teachers since 1997. By the end of 2014, more than 6,000 teachers had participated in KEEP courses. To document the impact that our courses have on participants, we implemented a pre- and post-course survey of our three main face-to-face courses (NRES 630, 632, and 634) starting in 2013. The goal was to determine whether course participants’ beliefs and behaviors related to their teaching about energy in the classroom and their own personal consumption of energy both at home and school are impacted by KEEP. The pre-course survey is completed before they participate in the course and the post-course survey is sent out and voluntarily completed six months after the course. Below is a snapshot of the impacts of three of KEEP’s courses.

Changes in Personal Energy Conservation Behaviors

Participants in NRES 630 Energy Education in the Classroom were asked to indicate how frequently they engaged in certain energy conservation behaviors and thought processes. Results show a significant increase in participants’ personal energy conservation behaviors post-course, such as turning off the lights when leaving a room or purchasing ENERGY STAR® appliances.

Changes in Energy-Related Teaching Practices

A large majority of participants in any of the three courses reported teaching about energy after taking a KEEP course and most plan to use the materials and resources provided by the courses Energy Education in the Classroom, School Building Energy Efficiency Education and Doable Renewables.
Changes in Views on Energy Conservation

Participants in NRES 630 Energy Education in the Classroom and NRES 634 School Building Energy Efficiency Education were asked whether they believe energy education should be considered a priority in our K-12 education system, have adequate experience to teach about energy, believe saving energy should be a priority in their community, and can contribute to solving energy problems by making appropriate energy-related choices and actions.

Results showed a statistically significant increase in agreement with each of the statements post-course, indicating that participants considered energy education and conservation a higher priority and felt more confident in their ability to take action.

Beginning in 2015, the surveys for all three courses have been re-designed to ask many of the same behavior-related questions in each course, with just a few questions being specific to a particular course.

For a copy of the full 2013-2014 Pre/Post-Course Survey Report, please email jmollica@uwsp.edu.