

Energy Efficiency and Energy Education for Low-Income Households

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Introduction

This poster presents the implementation and results of several low-income energy efficiency/energy education programs in different parts of the country. The programs highlighted combine a highly interactive energy education curriculum with low-cost, energy efficiency measures that clients install in their own homes. The goal of these programs is to empower low-income families to reduce their energy usage and consequent energy burden.

Energy Education

Interactive energy education appealing to all adult learning styles benefits both families and program sponsors. On a fundamental level, adults usually learn best by one of three methods: visual, auditory, and kinesthetic. An energy education curriculum designed to engage all learning methods will have the best chance of success. Interactive energy education programs that seek to appeal to different learning styles generate more client interest and engagement.

Energy Efficiency Measures

A kit of do-it-yourself energy efficiency measures, supplied along with energy education programs, can provide great benefits to the program and participants as participants are able to take immediate action to reduce their home energy usage. The kit's measures introduce households to the Energy Star® label and encourage them to seek similar products in the future. Typically, the kit includes compact fluorescent lamps (CFLs), a high-efficiency showerhead, high-efficiency faucet aerators (both bathroom and kitchen), a furnace filter alarm, and tools for measuring temperatures of rooms and temperatures of water heaters, refrigerators, and freezers. Some kits also include: high-efficiency, hand-held showerheads; infiltration reduction tools, such as caulk, plastic window covering, light switch plate and outlet gaskets, and rope putty (backer rod); an LED night light; and a shower timer. The ease of installing the do-it-yourself energy efficiency measures can be the first step toward saving energy in a home. Energy educators also share a variety of other low-cost measures participants can purchase and install on their own to save more energy and money.

Impacts

With the energy education and energy efficiency measures installed, an engaged household can potentially save over \$200 per year. This can contribute greatly to lowering a household's energy burden.

The benefits for a utility or state implementing an energy education program can be substantial, one program, serving 4,000 households generated savings of 1 million kWh and 140,000 therms.¹

¹ Quantec, LLC, [Iowa Energy Wise 2005-2006 Program Analysis](#), March 2007.

Additionally, low-income communities increase their awareness of energy usage and energy efficient behaviors, and simultaneously, these values are instilled in the next generation.