



Incorporating Innovative Behavior Insights into Traditional Efficiency Programs

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Evaluation, Research & Behavior
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Costa Mesa, CA

Agenda

▶ Purpose

▶ Background

▶ Program Examples

- Robin Sempf, Alliant Energy
- Melissa Leymon, PNM
- Susan Coleman-Smith, Efficiency Vermont

▶ Q&A and Discussion



Program Examples

▶ Robin Sempf, Alliant Energy
PowerHouse Program



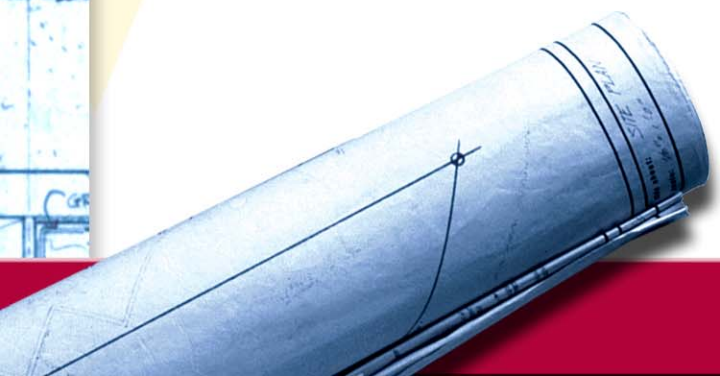
▶ Melissa Leymon, PNM
NEED School Program



▶ Susan Coleman-Smith, Efficiency Vermont
E3 Challenge

W E L C O M E T O P O W E R H O U S E

Lights, Camera, Action ...



We're on for you.™



What is PowerHouse?



SOCIAL MEDIA



TV SHOW



WEB SITE



Presented by ALLIANT ENERGY.

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Goals of the program

- Help customers reduce their energy bill
- Increase customer satisfaction
- Reduce demand for energy
- Encouraging safe use of electricity and natural gas



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Program Design

- Key partnerships
 - TV stations
 - Production team
 - Hosts
- Getting Started
 - Buying a ½ hour TV show
 - Promoting the show



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Program Design

- Tape show in high definition (HD)
- Free DVD copies of shows to libraries in our service territory
- Free DVD copies to low-income agencies
- Leverage the value of the Web site to promote the show and the show to promote the Web site



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Where does the show air?

Mason City/Albert Lea:

KAAL-TV, Channel 6 (ABC)
5:30 p.m. Sundays



Madison:

WMTV-TV, Channel 15 (NBC)
5 p.m. Sundays



Milwaukee:

WTMJ-TV, Channel 4 (NBC)
10 a.m. Saturdays



Cedar Rapids/Dubuque:

KCRG-TV Channel 9 (ABC)
11 a.m. Sundays



Ottumwa/Kirksville:

KTVO-TV, Channel 8 (ABC)
5 p.m. Sundays



Des Moines:

WHO-TV
Channel 13 (NBC)
5 p.m. Saturdays



Presented by ALLIANT ENERGY

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Roll the Tape ...

- PowerHouse Hosts
 - Pete Seyfer
 - Megan Turner
- How-To Segments
- Energy Conservation
- Expert Interviews
- Factory Tours
- To view video clips of the show:
<http://www.youtube.com/user/AEPowerHouseTV>



Behavioral Strategies

- **Anchor Bias** – providing new information to influence customers context or starting point
- **Single Action Bias** – people's tendency to respond to take action by making just one change
- **Messenger** – messenger of the desired behavior needs to be someone the audience will identify with or will want to be like
- **Prompts** – reminders to make a behavior change



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Anchor Bias

- PowerHouse showcases information and experts that help explain the benefits of energy efficiency behavior changes
- Helps viewers understand how making an energy efficient purchase decision can benefit them



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Single Action Bias

- Emphasize that just one small change can add up big
- Helping customers see the benefit of one simple step to improve their overall energy efficiency
 - Suggest complimentary steps to take to continue to improve



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Messenger

- Showcase likable, credible experts that are good at providing information people can relate to
- Customers share their own energy issues that viewers can relate to then hosts show them how to fix the problem
- Hosts are enjoyable to watch and walk viewers through how-to do projects



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Prompts

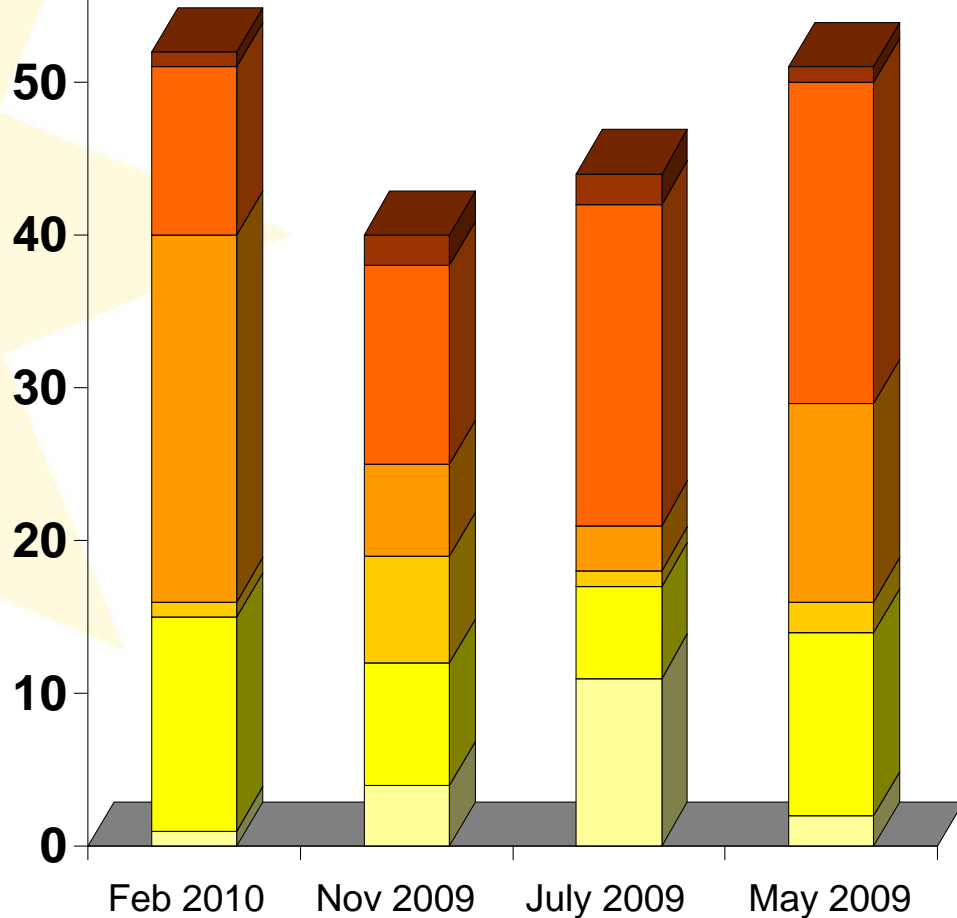
- Consistent messaging to remind viewers how they can make their house a PowerHouse
- Through the weekly show and the 30-second commercials, remind viewers of the importance and value of making a change in their energy behavior



Who's watching the show?

Weekly Viewers in Thousands

- Ottumwa/ Kirksville
- Milwaukee
- Des Moines
- Mason City/ Albert Lea
- Madison
- Cedar Rapids



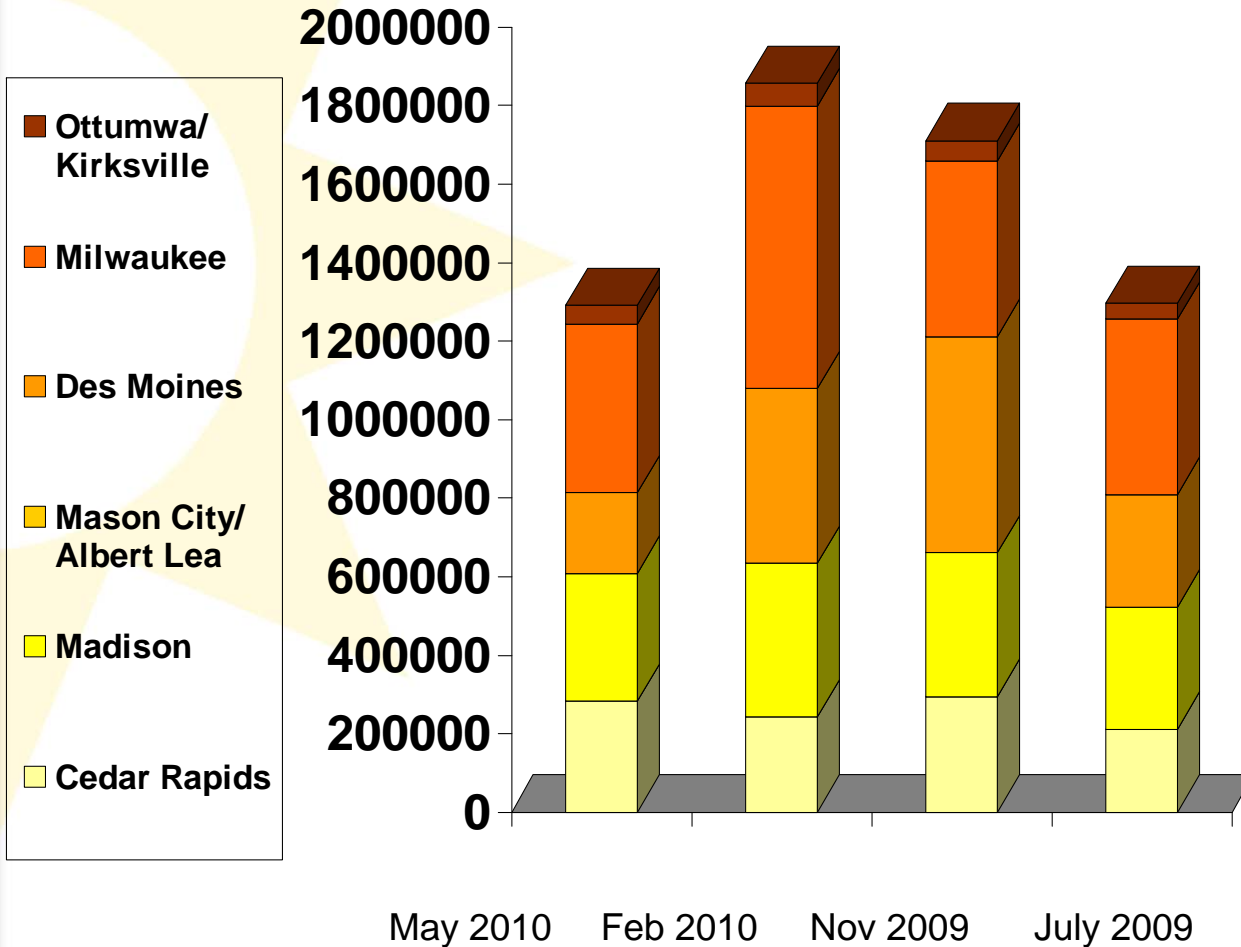
Approximately 50,000 people watch *PowerHouse* each weekend – that's 2.6 million viewers annually.



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Who's watching the promos?

Weekly Impressions in Thousands



Average weekly impressions of 1.5 million – that's a total of 80 million impressions annually.

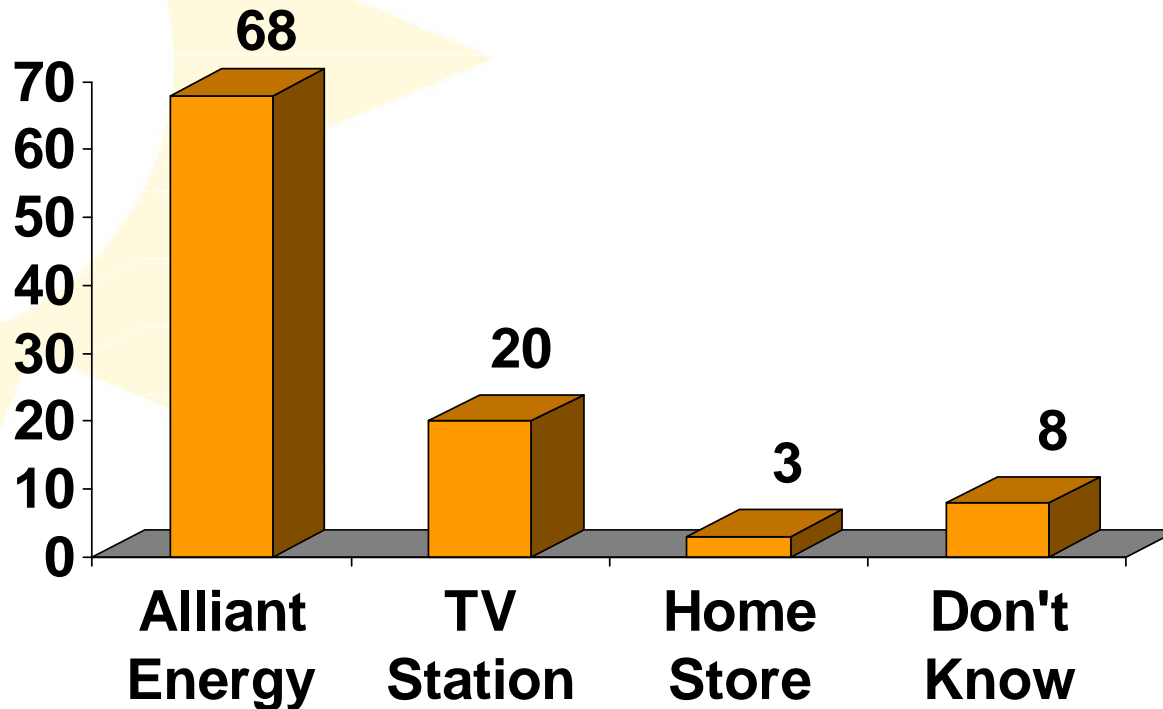


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Connection with Alliant Energy

Are viewers making a connection between PowerHouse and Alliant Energy?

Perceived sponsor of PowerHouse



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Changing behavior

Is PowerHouse influencing customers to install energy saving measures?

Findings from our 2007 Internet survey:

- As a result of watching the PowerHouse television program, **49 percent** of viewers have weatherized their homes, **29 percent** have used heating tips they learned on the show.
- As a result of watching the PowerHouse television program, **74 percent** of viewers plan to install an energy efficient product in their home in the future.



Improved customer satisfaction

Does PowerHouse improve the way customers feel about Alliant Energy?

Key finding:

- The majority (**52 percent**) of viewers say the fact that Alliant Energy produces PowerHouse makes their attitude toward Alliant Energy more positive. Virtually none (**2 percent**) say it makes their attitude more negative.

(2000 telephone survey, Frank N. Magid Associates, Inc.)



The End

- Robin Sempf
PowerHouse Producer
Alliant Energy
(319) 786-4199
robinsempf@alliantenergy.com



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Please save the planet.
It's the only one with polar bears.

Reflections on teaching kids about
energy and efficiency.

Melissa Leymon
CEE Winter Meeting
January 2011



1 out of 3

kids between the ages of 6
and 11 who fear earth won't
exist when they grow up

Source: Habitat Heroes poll, April 2009



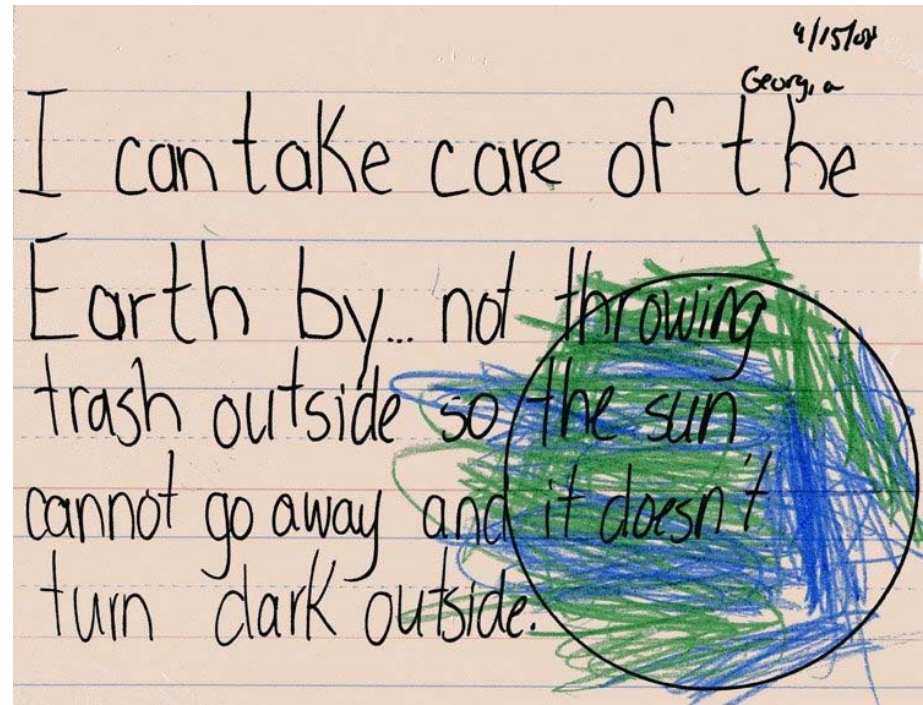


28%

kids between the ages of 6
and 11 who fear that polar
bears and penguins will
become extinct very soon

Source: Habitat Heroes poll, April 2009





67% vs. 57%

Girls between the ages of 9 and 11 versus boys the same age who fear the earth won't be as nice a place to live when they're adults

Source: Habitat Heroes poll, April 2009

Why spend money and time educating kids?

According to the study “Green at Fifteen: How 15 year-olds perform in environmental science and geoscience,” US students ranked 34th out of 57 countries surveyed in both environmental science and geoscience.

**But they are learning
about energy efficient
behavior at home,
right?**

Last

The ranking of US consumers against 17 countries in National Geographic's Greendex (June 2010), which tracks global consumer choice in regard to the environment.



If we don't teach them, who will?

A potential for discord exists between the next generation and the rest of us if a higher commitment is not soon made to embrace environmental literacy.

We must start educating our children today to ensure that they are responsible, engaged consumers in the future.

It's not all bad news.

“Green” has become the new face of youth activism, and millions of young people around the world are participating in environmental initiatives of varying size and scope.

They are also seeking information on their own to find out what they can do and how they can make a difference.

But they can't do it alone, so we stepped in to help.

Giving teachers the tools they need

135

NEED “Learning and Conserving” kits distributed by PNM in 2009 and 2010 to middle-school teachers.



Program overview

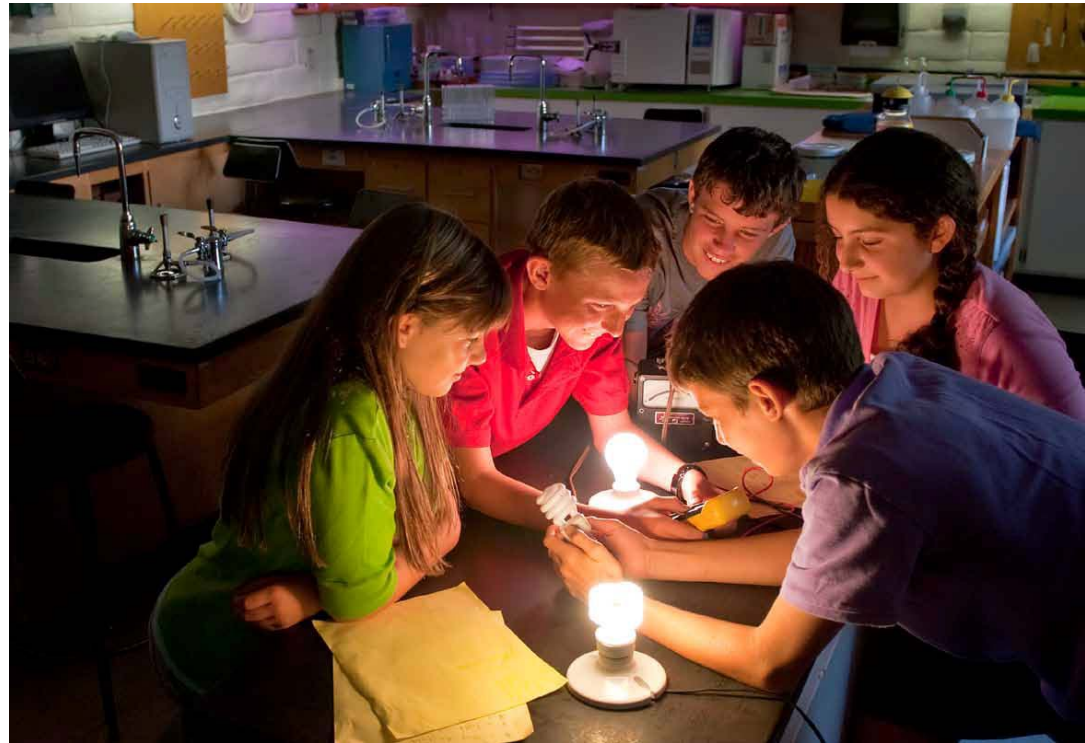
Two training sessions were held to help teachers get hands-on experience using the kits. An instructor from NEED led the classes.

An inherent challenge is present when trying to measure impact with kids because we can not truly assess how they behave at home after learning about efficiency in the classroom. However, some conclusions can be made based on teacher feedback.



1,105

Number of students that used
the kits between 2009 and
2010





6th – 9th

Grade levels that were
exposed to the materials



How behaviors were obtained

In October 2010, we sent a survey to all of the teachers that had received the kits in order to gain some measure of their success.

The survey was sent by email to encourage easy response.

Approximately half the teachers responded.

Questions covered program logistics as well as behavior change inquiries.

Survey questions

1. When did you incorporate the kits into your lesson plans?
2. How many students used the kits?
3. What grade levels used the kits?
4. Have the kits been helpful?
5. Do the kids seem excited to learn about energy and the world they live in?
6. Share your thoughts about receiving the kits.
7. Any advice on improving implementation of the kit program?

Survey questions

8. Any stories you'd like to share about the kits and how your students reacted to them?
9. If you haven't used the kits, do you have a timeframe for implementation?
10. To your knowledge, have the kits influenced how your students use energy in their home or how energy is used in your school?

Question #2

Do the kids seem excited to learn about energy and the world they live in?

100%

Teachers who responded yes



Question #10

To your knowledge, have the kits influenced how your students use energy in their home or how energy is used in your school?

70%

Teachers who responded yes



Behavioral strategies

- **Interpersonal Communication:** Uses the power of person-to-person interaction to change behavior
- **Competition:** Encourages groups of participants to work together to compete against other teams in order to encourage behavior change
- **Self Efficacy:** Whether people think a given behavior change is possible for them
- **Representative Heuristic:** The tendency to compare new information or situations to other, similar information or situations
- **Existing Values:** What's important to an individual can play a role in how they view personal behavior

Interpersonal Communication

- Using the kits:
 - Students worked in groups to conduct exercises and share ideas.
 - “At our high school, students work together to take measurements and then discuss how to save energy based on their findings.”
 - Students learned about efficiency and then discussed it with their family once they got home.
 - “Some of my students told me they went home and talked to their families about saving energy.”

Competition

- Using the kits:
 - Students broke into groups to use the kits and assess how energy is used in the school. At some schools, students were rewarded for their ideas to save energy with extra credit points.
 - “The kits helped kids look for ‘energy vampires’ around the school. They had ideas for things that might ‘suck’ energy that I hadn’t thought of.”

Self Efficacy

- Using the kits:
 - Students were able to assess usage of their favorite devices and see how little changes to their use (i.e. unplugging their Xbox when they're done using it) could make a difference
 - Students could compare usage of a traditional incandescent bulb against a CFL and see how just that one change in their home would save energy and money at home.

Self Efficacy (cont.)

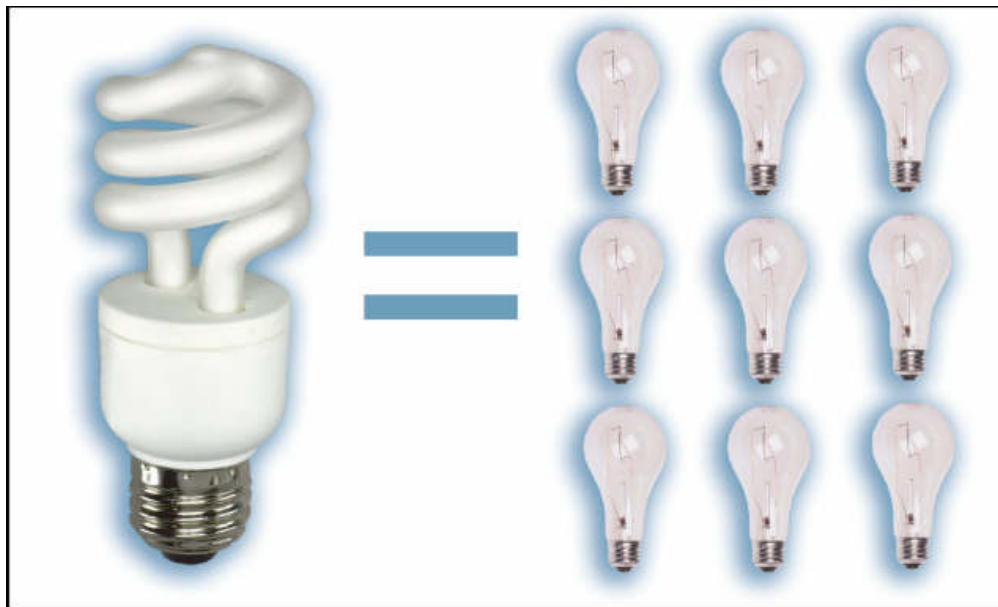
- Using the kits:
 - Students could learn what energy is and why it is important to become more energy efficient. Once they understood why they need to be more efficient, they could make the decision to incorporate it into their lives.
 - “The kids were excited to learn about the world they live in and how they can make changes that make a difference. Getting real-world data is so crucial to their understanding of the concepts.”
 - “Students are generally unaware how much infrastructure is required to create and deliver electricity, and how much some of their favorite devices consume, which helps them determine how and why they can become more efficient.”

Representative Heuristic

- Using the kits:
 - At school, students could perform the behaviors that would make them more energy efficient at home in order to learn the benefits.
 - “The kids used the kits around the school to assess how we use energy. In turn, it helped them see ways to make changes at home.”
 - “I had the kids do a plug-load audit at home, and then they measured similar machines at school in order to compare usage and determine strategies for efficiency.”

Existing Values

In the end, this is probably the most important behavior in relation to kids because they believe that if they embrace energy efficient ideas like this:



Existing Values

They have a better chance of saving these guys, who they equate with all the bad things going on the world in respect to the environment.



Unexpected Feedback

A Director of Maintenance and Operations had a parent call him to complain that his son was following him around and turning his lights off after learning about the benefits of saving energy in class. A few months later he called to apologize because he'd seen a big decrease in his energy bill.

A teacher offered 25 points of extra credit for every CFL a student replaced in their home. One student had his parents buy and replace 43 bulbs. The father called and yelled at the teacher telling him how much he'd spent on bulbs and how angry he was. A few months later he got an apology letter thanking him for having the student replace the bulbs because his energy bill had dropped significantly.

Next steps

Short Term

- Plans are in place to observe students using the kits in classes.
- A pre- and post-test may be administered to assess knowledge gained from the lesson(s).

Long Term

- PNM will work to get the kits into classroom in all of our service territories and expand assessment processes where possible.

Partnering for the future

PNM recently partnered with a local water authority to create a movie and curriculum about the relationship between water and electricity and the need to conserve both resources.

During this portion of the presentation, Melissa showed a video clip, which is available online:

<http://www.youtube.com/watch?v=oGv-wLWZVf0>

Spreading the water and electricity message

The water authority is in classrooms sharing the movie and curriculum.

Program assessment will be done in late spring 2011 to assess message impact.

A reminder for us all

“Be the change that you want to see in the world.”

-Gandhi



Thank you

Melissa would be happy to share her contact info with CEE members. Please email or call Kira Ashby (kashby@cee1.org or 617-337-9281 for her contact info)



Efficiency Vermont



Employee Energy Efficiency (E³) Challenge



Susan Coleman-Smith

CEE Quarterly Program Meeting
Costa Mesa, CA
January 26, 2011

Program Overview

The Employee Energy Efficiency Challenge (E3) was a pilot that was designed to work with Vermont employers to help their employees improve energy efficiency – both thermal and electrical.

- Educate Vermonters on opportunities for saving energy in their home
- Program vs. Event
- Geographically Targeted areas
- Standardized
- Key Account Relationship Building



The Vermont Country Store
Purveyors of the Practical & Hard-To-Find

Step 1: Sign Up!

Turn in Participation Form and you will automatically receive 5 points, good for one ticket in the pool for the prize drawings!

You will also receive a sign-up kit that includes:

- One Free CFL
- Energy Saving Information
- Coupons and Special Promotions
- Reporting Forms (including point system information)

Energy Fact: Many modern products consume energy even after being turned off – and can account for 5-8% of your electric bill. This includes home entertainment systems and computer work stations, as well as products with transformers, such as phone chargers.

Step 2: Take Action to Save Energy and Money

Choose from a variety of recommended energy efficient actions like:

- Participating in an energy-related educational workshop.
- Replacing incandescent light bulbs with energy saving CFLs or LEDs
- Purchasing ENERGY STAR appliances
- Receiving an energy audit

The more points you earn, the more times your name will be entered in the pool for prize drawings.



Step 3: Enter Raffle for Chance to Win Prizes

- The Challenge Coordinator will track points and add one ticket for every 5 points earned into the pool for the prize drawings.
- Employees will be eligible for weekly and grand prize drawings.
- At the conclusion of the challenge, your business will hold a grand prize drawing with 1st, 2nd, and 3rd place prizes.

Behavior Insights & Tools Applied

Framing Efficiency to Promote Behavior Change

Choice Overload

Offered only a select menu of energy savings actions

Feedback

Real time tracking of results

Foot-in-the-Door Technique

Sign up is first simple action

Self Efficacy

Checklist of changes

Behavior Insights & Tools Applied, cont.

Overcoming Natural Decision-Making Preferences

Elimination Heuristic

Checklist narrows choices
from least to most expensive

Emphasizing Person-to-Person Interaction

Competition

Company-wide competition

Interpersonal Communication

Lunch & Learn sessions

Messenger

Trusted on-site coordinator

Social Norm

Recruited a cross-
representative of employees

Behavior Insights & Tools Applied, cont.

Rewarding Behavior Change

Lotteries

Every participant entered into weekly & grand prize drawings

Achieving Follow Through

Goal Setting

Participant goals established pre-challenge

Priming & Prompting

On-site promotional activities

Public Commitment

Participants lists & goals posted company wide

Behavior Insights Applied (cont.)

Rewarding Behavior Change

1. Lotteries: Every participant entered into weekly & grand prize drawing

Achieving Follow-Through

1. Goal Setting: Participant goals established pre-Challenge
2. Priming & Prompting: On-site promotional activities (bill stuffers, posters, etc.)
3. Public Commitment: Participant lists & goals posted company-wide

Results

Employer	Annual kWh savings	Combined Savings
Vermont Country Store	10,000	\$1,400
Ben & Jerry's	70,000	\$10,000
Carris Reels	9210	\$1,627



Evaluation Plan (Post Challenge)

- Participant Exit Survey
- Employer Coordinator Meeting
- February-May 2011: Efficiency Vermont beginning comprehensive evaluation of 8+ pilot programs that utilized community/volunteer efforts that incorporated social marketing techniques

Key Learnings

What worked?

- All three companies achieved employee residential energy savings

What did not work?

- Fairly high level of Efficiency Vermont support needed both before & during the Challenge

Lessons learned?

- Key is to have invested & high energy on-site (Employer) coordinators
- Need employer “skin in the game” (i.e: Matching Efficiency Vermont prizes/rebates)
- Short challenge time frame (otherwise gets stale)

What should be kept in mind

- Fairly high amount of utility coordination/involvement relative to actual energy savings
 - Need high-level of employer involvement (coordination, recruitment, promotion, incentives, etc.)
 - Need staggered promotional activities during the Challenge to reinvigorate/inject momentum



If questions, contact:
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Q&A for presenters



Contact



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