



COMMUNITY
WEATHERIZATION
COALITION

**Saving money and
resources, together.**

Can Education
Change Energy
Savings Behavior?

Paul Monaghan,
Jennison Kipp,
Marianne Schmink
Alane Humrich
Lee Hayes Byron
Emily Ott

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Home Energy and Water Tune-Ups

Trainer recruitment (the CWC "brain trust"): local utility, educators, and/or professional Energy Auditors who create an appealing, engaging, training event taught by multiple individuals

Curriculum and Format: In-person, three-part (12-hour total) event; lecture topics such as *why energy efficiency is important* and *understanding utility bills and usage*. Combine classroom lecture with hands-on demonstrations and off-site learning touring multiple types of residential structures

Volunteer "Energy Coaches" then work in teams to conduct a comprehensive in-home energy/water tune-up (audits) in homes lasting 2-4 hours. Residents are invited to follow along.

Help residents better understand their utility bills, recommend behavioral changes to conserve resources and complete multiple water/ & energy-saving measures during the visit and provide a written report.

Follow-up in some homes for more improvements (insulation, appliances, plumbing repairs).



Focus groups, surveys and utilities research

OBJECTIVES

- Test ways to make CWC's home energy audits more attractive to people;
- Encourage people to change their energy/water use;
- Develop qualitative measures of our people's satisfaction;
- Develop quantitative measures of savings of money and resources.

RESULTS

- CWC services have a significant, quantitatively measurable impact on utility bills as well as reducing use of electricity, natural gas, and water;
- Empowerment of residents through interactive and hands on educational approach leads to greater and more persistent impact;
- Action research supports continual adaptation and monitoring

Focus Group results: Identify barriers to participation

- “Audit” sounds bad, scary: we changed the messaging to “tune-up” and renamed the volunteers as “energy coaches”
- Potential clients have doubts that the tune-up will lead to long-term utility savings: we now have data on economic savings
- Residents are often aware of some of their household problems (aging appliances) but need assistance in making changes: energy coaches listen and dialogue with clients to see how they perceive their issues and solutions
- Believe that renters/apartments will not qualify: outreach targets all residents
- Distrust or embarrassment of having strangers in their home, judging them: clients actually report a positive experience and spread the program through word of mouth

Client Follow-up Survey Results

99-100% of clients:

- Felt comfortable having the volunteers at their home
- Were pleased with the quality of the work and the timeliness of the services
- Had a better understanding of the measures they could take to make their home more energy efficient

Over one-third (41%) had made home improvement changes to the structure of their home since the Home Energy Tune-Up

Over two-thirds (69%) reported that they had followed through with commitments, making 28 different kinds of additional changes

Quantitative results analyzed by the University of Florida Program for Resource Efficient Communities

- Used Gainesville Regional Utility data on monthly household water, natural gas and electricity consumption;
- County property appraiser's data on age, heated sqft, no. of bedrooms and baths to allow comparison of households;
- Analyzed data from homes audited by CWC 2010-2016 compared with similar homes over the same period.

One year after CWC tune-ups.....

Mean household **water savings**:

- 9% reduction
- 6,200 gallons conserved

Mean household **energy savings** (including electricity and gas), in 124 homes:

- 10.6% reduction
- 1,657 ekWh saved

Total utility cost savings = \$255 per home per year on average

3-5 years after CWC tune-ups.....

Even greater savings of 15-20%



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*Our mission is to help our
neighbors save energy
and water and reduce
their utility bills, by
engaging volunteers,
building community, and
learning together.*

communityweatherization.org

352.450.4965

info@communityweatherization.org

