

SECC Peer Connect WEBINAR SERIES

Community-Centered Energy Engagement

February 27, 2020

Today's Presenters





Uzma Noormohamed Program Director Illinois Science & Energy Innovation Foundation (ISEIF)



Yami Newell Outreach Manager Elevate Energy



Teresa Neumann Senior Researcher Center for Urban Research & Learning, Loyola University Chicago



Lindy Carrow Associate Director Social IMPACT Research Center, Heartland Alliance







- ISEIF: Model, outside the utility, third-party funding arm and convener
- Elevate Energy: Delivery of messages and trust-based engagement through grassroots efforts
- Center for Urban Research and Learning at Loyola and Heartland Alliance: Findings on evaluation of grassroots education approach
- Q&A Session

A FUNDING MODEL FOR COMMUNITY-CENTERED ENERGY ENGAGEMENT & LITERACY IN ILLINOIS

UZMA NOORMOHAMED @ISEIFOUNDATION



Illinois Science & Energy Innovation Foundation

⁹ ILLINOIS' SMART GRID LAW INVESTS IN ECONOMIC & EDUCATIONAL INFRASTRUCTURE

- Energy Infrastructure Modernization Act or Smart Grid Law passed in 2011. Authorized \$3.2 billion smart grid investment by state utilities Ameren Illinois and ComEd
 - Digitization of century-old electrical grid
 - Enhancements to delivery of electricity to consumers
 - How consumers can manage and measure their electricity consumption
- The law also established two funds
 - MARKET STIMULATION: A \$22 million venture fund for early-stage, energy and clean tech startups
 - EDUCATION: A \$50 million literacy and education fund for raising awareness of smart grid, smart meter, and AMI enabled technologies, 30% of which must reach low-income, senior, and hard-to-reach populations. A coalition led by consumer advocates negotiated amendments to the proposed legislation that required the utilities to invest in citizen education regarding the smart grid through the establishment of a foundation or trust

ABOUT ISEIF

- Private, nonprofit, grantmaking organization
 - 2 annual grant cycles, \$5 million in funding per year for ten years
 - Funds transferred by ComEd and Ameren Illinois on annual basis
- Management of grantmaking process
 - Invite proposals, make recommendations, cultivate new nonprofit grantees
 - Review process includes a peer committee process and approvals from Board of Directors
- Coordinate grantee cohort "community of practice"
 - 25 to 35 organizations per year
 - Share learnings from engagement activity
 - Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.
- Maintain communications and coordination with select utility departments

O GRANTEES HAVE SHIFTED AWAY FROM SMART METER AWARENESS TO BENEFITS

Ó



FUNDING AREAS: MIX OF HIGH AND LOW TOUCH ENGAGEMENT STRATEGIES

Grassroots Engagement to meet demographic and geographic needs

- Identifying trusted organizations (in and out of energy domain)
- Highly conversational, deep interactions

Research and technology

• Research and pilots that explore engagement and user experiences around home energy management technology, particularly in low-income and senior communities

STEM and youth-serving education

- Support for energy education in a STEM context for K-12 students and educators
- Postsecondary career pathways in trades electrical and construction (to date)

Communications campaigns

- Intended as low-touch interactions
- Includes mass digital and TV campaigns, websites, museum exhibits

Small Grants Program - Inserting Smart Grid Module

- Finding intersecting conversations
- Environmental examples are energy efficiency, renewables, EVs, smart home, climate change
- Non-environmental examples: housing, affordability, health, financial literacy

OVER 60% OF OUR FUNDING SUPPORTS COMMUNITY-BASED OUTREACH EFFORTS

Dedicated funds allow ISEIF to fund the types of public education efforts that have impact in underserved communities

- Outreach must be strongly rooted in the community
 - Strong relationships with community leaders and community partners/institutions are essential to engagement
- Outreach is cost and time intensive
 - Locating social capital in low-density areas takes resources, so does establishing partnerships to gain community trust
- Outreach necessitates trust and prioritizes public benefit
 - People need to be reassured that services/programs/calls to action are in their interest
- Outreach benefits from reinforcement
 - Multiple messengers, multiple mediums

Expectation is that such efforts will change local knowledge, attitudes and ultimately behavior

CHARACTERISTICS OF FUNDED ORGANIZATIONS

- ⁹ Organization should be intimately familiar with the community's cultures, needs, geography, and resources.
 - Hire people who currently live, or have lived, within communities targeted for outreach
 - These staff are able to connect with community members based on shared experiences and mutual understanding, and are well positioned to communicate the benefits of energy management
 - These team members bring an understanding of the community that is critical to successful engagement
- Team members' skill sets more important than credentials
 - Though programs vary, they agree that effective outreach have key personality traits and skills
 - Strong interpersonal skills, excellent listening skills, empathy, and the ability to easily relate and quickly connect with people
 - Effective outreach staff are also creative thinkers who can problem-solve on the fly and adapt engagement strategies to an individual member's needs. It's important to have outreach staff who are multilingual



ISEIF FUNDED ENGAGEMENT PROGRAMS

Community Partners



- Self-defined context
- Self-generated engagement plan
- Messaging customized to context
- Choice of images and language
- No utility branding

Community Members



- Energy literacy modules inserted into existing financial education, social services, homeownership, health, faith-based etc.
- Train the trainer models for groups such as real estate professionals, green builders, community organizers
- Action items include but not limited to utility programs

NON-FINANCIAL VALUE OF THIRD-PARTY FUNDING MODEL

- Outreach is laborious
- Risk avoidance
- Prototype tech
- Extended reach into communities
- Higher enrollment rates and results

- Ownership of program identity
- Autonomy of organization
- Strengthen connection
- Focus on human response
- Candor
- Capacity building

- Trusted messengers
- Accessible
- Translated, contextual
- Someone is listening and empathetic
- More of their needs are met

- Shared information & networks
- Collaborating on education programs
- Coordination of organizations working on the same issues
- High impact due to connected approach and facilitation

To utilities



To community organizations

To people



To the community of practice

6

RESEARCH & EVALUATION UNDERTAKINGS

Validating a public education and bottom-up model – In Progress

- How does a public education campaign impact actions and behavior around energy literacy and consumption?
- Are people likely to share this information in their communities and immediate circles?

Analysis of smart meter data post-outreach event attendance – In Progress

- Residential electricity usage data has never before been available in this manner
- Availability ≠ accessibility
- Launched program to determine if attending an outreach event results in reductions in home energy usage

Opportunity to test mix of methods – Under Consideration

- What mix of technology and information help move people to action?
- How does this differ geographically or demographically? Are there patterns or trends?

CONSUMER ENGAGEMENT SUCCESS

- \$33.4 million in funding to energy literacy programs statewide
- 65% of funds applied to low-income and senior populations
- Nearly 8,000 statewide events
- Reached nearly 475,000 people through outreach events and 38 million through TV/digital/social communications
- Educated over 70,000 schoolchildren and parents through curriculum
- Utility split: 78% ComEd, 22% Ameren



▷ 150+ ENERGY LITERACY / SMART GRID AWARENESS GRANTS IN 6 YEARS



isea

illinois solar

Ο



ELEVATE ENERGY

Smarter energy use for all

Elevate Energy Introduction

Smarter energy use for all



We give people the resources they need to make informed energy choices.



We design and implement efficiency programs that lower costs and protect the environment.



We ensure the benefits of energy efficiency reach those who need them most.



Community Engagement Pyramid





Elevate Energy : Ex. Community Meeting

Day of Your Community Meeting

- Dress like the neighborhood dresses
 - Put together, but no pearls you're one of us, not a marketing person
- Show up 5-10 mins ahead of the scheduled meeting
 - Introduce yourself to the leaders
 - Get setup
 - Mingle and chat with group members as they arrive
- Pass out sign-up sheets for each seat
 - Social pressure is less at a community meeting than other types of events – let people make their own positive decision
 - No sign-in sheet
 - People don't like to give their information twice
 - Ask people for sign-up at the peak of their interest
 - You don't need to waste time on those that don't sign-up
 - ...They will come around later as the community gets excited



Energy Efficiency Programs Overview: Com-Ed

Free Home Energy Assessment

- ENERGY STAR[®] certified LEDs
- Programmable thermostats
- WaterSense[®] certified showerheads
- * Smart Thermostats for sale at discounted prices \$50-\$75

- Hot water pipe insulation
 - Advanced power strips*
 - WaterSense certified faucet aerators for bathrooms and kitchens





hourlypricing.comed.com





Elevate Energy Community Challenge: Pana, IL





©2019 Elevate Energy

ASSESSING THE NETWORK EFFECT OF ISEIF'S PUBLIC EDUCATION EFFORTS

TERESA NEUMANN, OPERATIONS MANAGER AND SENIOR RESEARCHER AT CENTER FOR URBAN RESEARCH AND LEARNING (CURL) LOYOLA UNIVERSITY CHICAGO

LINDY CARROW, ASSOCIATE DIRECTOR OF RESEARCH AT SOCIAL IMPACT RESEARCH CENTER HEARTLAND ALLIANCE FOR HUMAN RIGHTS & HUMAN NEEDS

Overview

Research questions Methods Findings Discussion



Research questions

- What is the impact of the presentations on the participants, in particular information about the smart meter? What did they learn and what subsequent actions did they take?
- 2. What is the network effect of ISEIF-funded educational events, particularly around knowledge about smart meters?

Methods – how did we go about answering the questions?

•Conducted a literature review.

•Collected data from participants at two points in time following the educational event they attended.

Utilizing Networks

 Word-of-mouth, using personal networks to influence personal behavior, and targeted community education are especially effective methods for knowledge dissemination.¹

Studies show that information has a greater weight for mirroring certain behavior when it comes from existing networks including friends, family, and co-workers.

Target Community Education

The spread of knowledge is best accomplished in urban areas and within culturally competent settings where the educator is of a similar racial or ethnic group.

Related findings also highlight the importance of recruiting "opinion leaders".²

Combining Different Information Strategies

Environmental Education and Marketing influences: a social marketing campaign, or directly encouraging students to turn off their personal computers when not in use, was more effective in changing students' electricity use than an education program about greenhouse emission alone.³

3 Marcell, Agyeman and Rappaport 2004

Ongoing Educational Efforts and Follow-Through with a Population.

Consumers learn though social environments and the communicative acts of others. Although consumers are inevitably influenced by the tendency to choose the option that is most accepted by the population, green consumption patterns cannot be "locked in" and are not self-reinforcing.

Ongoing education is preferable over short-term information sharing in order to maintain the flow of information and influence.⁴

4 Marcell, Agyeman and Rappaport 2004

Methods – Focus groups timing overview



Participants



48 participants (34 PiT2)

50% men/50% women

Age range 20-86, median age 64



Eight individuals' (17%) first language was Spanish Recruited from 9 events, which occurred in 5 Chicago neighborhoods and 2 suburbs



Findings: What did they learn?

Knowledge Retention Not Problematic

Participants remembered at least some key points from the presentation at both follow-up data collection times.

Findings: What did they learn?

Topics from presentations that participants reported remembering (n=34)

	Number	Percentages
Saving money	13	38%
Information about smart meter	13	38%
Bill analysis/monitor usage	12	35%
Peak hour pricing	11	32%
About different suppliers	11	32%
Home Assessments	8	27%
Solar Energy	2	6%

Findings: What did they learn?

Money-saving strategies – using new technology

...not so much about Smart Grid Technology itself



Findings: Subsequent Actions and Networking

Actions and Behavior Changes

- Most changes were not directly related to the Smart Meter
 - Using more energy saving devices (56%)
 - Completed a home assessment/in house consultation (29%)
 - Switched energy suppliers (15%), some back to mainstream energy supplier
 - Monitoring usage and changing it with an Hourly Pricing Program (12%)

For a few, making upgrades to be more energy efficient was an investment they were not financially ready to make.

Findings: Subsequent Actions and Networking

Most respondents shared information with others (79%)

- •Most commonly shared info: benefits of using LED lights and dealing with drafts and energy leaks in their home.
- People were less likely to share information about Smart Meters.
- Most interviewees shared information with people in their networks.

Discussion: Possible Further Research

- 1. Wider data collection (e.g., random sample phone survey) to better understand consumers' perspectives
- 2. Assess different models to understand the strength and weakness of different strategies suggested in the literature in increasing the behavioral and network effect.

Questions?





Uzma Noormohamed Program Director Illinois Science & Energy Innovation Foundation (ISEIF) u.noormohamed@iseif.org



Yami Newell Outreach Manager Elevate Energy Yami.Newell@elevateenergy.org



Teresa Neumann Senior Researcher Center for Urban Research & Learning, Loyola University Chicago tneumann1@luc.edu



Lindy Carrow Associate Director Social IMPACT Research Center, Heartland Alliance LCarrow@heartlandalliance.org

