

Greening a Generation; A Look at the Leopold

*A Report of Research and Documentation of Energy Conservation at
the Leopold Retirement Center in Bellingham, Washington.*



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1.0 Introduction

1.1 Project Goals

By increasing energy efficiency, establishments and institutions have the opportunity to conserve not only valuable natural resources but also conserve valuable financial resources. Many places have already taken the first steps towards energy efficiency; installing CFL bulbs, upgrading insulation etc, however without efficient people, even the most efficient buildings will not function at optimal performance. The Leopold Retirement Center, located in downtown Bellingham, Washington has already taken these first measures to ensure their building is performing more efficiently. The administration has taken a legitimate interest in the pursuit of management strategies and technology can help minimize their environmental impacts. The purpose of this project is to examine potential strategies that could be implemented to effectively encourage better energy management practices amongst residents at the Leopold. In order to accomplish this successfully awareness must be raised and residents must be encouraged to adopt new habits and attitudes regarding their personal energy use. We are hopeful that our groundwork will pave the way for both the administration at the Leopold and for further research. This report establishes a baseline of resident's current knowledge, practices and attitudes surrounding energy conservation.

1.2 What is Community-Based Social Marketing?

Through this project our goal is an overall reduction in energy usage amongst the residents through the implementation of community-based social marketing (CBSM) techniques to effectively change behavior through highlighting benefits and developing strategies to remove



identified barriers. CBSM has four steps:

- Identification of barriers and benefits to an activity
- Development of a strategy that uses tools that have been effective in changing behavior
- Pilot the strategy
- Evaluation of strategy once it has been executed

According to Dough McKenzie-Mohr, author of *Quick Reference: Community-Based Social*

Marketing, “Community based social marketing is based upon research in the social sciences that demonstrate that behavior change is most effectively achieved through initiatives delivered at the community level which focus on removing barriers to an activity while simultaneously enhancing the activities benefits.” CBSM is significant to our project because we can use these four steps to create a report outlining energy conservation practices at the Leopold Retirement Center.

1.3 Why Conserve Energy?

Our world has a limited amount of nonrenewable energy so it is important for us to conserve the existing supply or use renewable sources of energy. Not only does conserving energy save money and our current supply, but it also saves our environment. When nonrenewable sources are used, an impact is being made on the environment. For example, air and water become polluted through the use of fossil fuels and 80% of air pollution is a result of energy production. Although the United States holds less than 5% of the world's population, it consumes 25% of the world's energy and the average American will use enough energy to be equivalent to 4,800 barrels of oil throughout his or her lifetime (Puget Sound Energy).

1.4 Significance to WWU

Western Washington University's classrooms are filled with students and faculty who care about the sustainability of our environment. There have been numerous projects that students have worked on over the years to help improve Western's environmental consciousness. Western students have the resources and the ability to make a positive difference in not only the campus, but the Bellingham community as well. We are the current generation building ideas and ways to improve our impacts on the environment.

1.5 Significance to Greater Community

Our campus is a daily reminder that many students at WWU are knowledgeable and passionate about conservation; however the benefits from many of these innovations may not always be shared with the surrounding Bellingham community. The elderly may be especially excluded from sharing ideas with WWU as the generation gap may exclude many from contact with students. This is one reason we felt our concentration on an older demographic may yield a significant outcome. By involving residents and staff at the Leopold Retirement Center in dialogue, our aims were to lay down the initial groundwork for future interested parties to create a full fledged Community Based Social Marketing campaign and use those results to aid in the transformation of retirement homes everywhere.

The Leopold is already a member of Sustainable Connections, a non-profit organization that encompasses over six hundred businesses that build sustainable practices. This is important because energy has an effect on the environment such as creating acid rain, damaging vegetation and wild life, affecting human health, and speeding the process of global warming. By setting our scope beyond the red bricks or WWU's campus, we hope to spread knowledge resources enabling others to creatively conserve resources and fostering a healthier, happier community.

2.0 Methodology

2.1 Internet Research

Our initial internet searches using phrases like “green retirement homes” and “sustainable retirement homes” in online search engines yielded little more than a few LEED certified homes in sprawling resort-style retirement communities and places that happen to have the word Green in their title but advertise no green practices. (i.e. Village Green). Trying to identify sustainably

mindful retirement centers in Washington proved even less fruitful. This ‘drought’ of environmental awareness in the retirement home market may indicate the potential for a specialty or niche market opportunity. In the online article *Looking for Green Communities* written by Carol Gulyas, she outlines the importance of avoiding facilities that promise hollow “green” practices and discusses the potential new demands of the oldest baby boomers now transitioning into retirement. The same baby boomers that created the first Earth Day are now looking for retirement homes for themselves or parents. This demographic, Gulyas suggests, is “old enough to be thinking about retirement communities, many of them have the notion that those should be green, or environmentally sustainable” (2009).

2.2 *Contacts and Meetings*

Whitney Jorgenson, the activities director for the Leopold was our first contact. During our meeting she gave us information on current conservation measures and provided logistics on surveying residents. From our meeting with her, we were able to formulate a plan on how we were going to create a survey and initiate a strategy to help make the residents more aware of the environment around them.

Ron Bailey, Operations Support Manager and Energy Manager for Facilities Management at WWU and Ben Rupert, Program manager for RCM Support Services, also provided us with access to Puget Sound Energy (PSE) tools that included informational materials, templates for conservation stickers, and more.

Gene Myers, a faculty member of Huxley College at WWU with several survey experiences, gave us advice on how to create a good survey. During our meeting, he looked at our potential survey questions and went through them one-by-one and gave us suggestions on how we could make the questions stronger, or if we should simply take out the question. Gene also suggested that we conduct a focus group. This would allow us to first get an idea of the mindset of the residents, and with that information, we can make adjustments to our survey before we distribute it.

2.3 *Current Findings: Leopold as a Case Study*

The Leopold is already taking part of being a sustainable business and has the potential to be one of the foremost green retirement homes in Washington State. The centralized, non-sprawling downtown location of the Leopold implicitly embodies the spirit of smart growth. The convenient locale also provides foot access to much of the city’s services to a demographic that may or may not be able to drive. Trips to buy groceries, visit doctors etc are often done in vanpools which also aids in the reduction of vehicle miles traveled per person, helping to lower carbon emissions from cars than otherwise might occur.

Already the Leopold’s administration is making strides by



taking advantage of local programs such as Sustainable Connections, and the Sanitary Service Company's FoodPlus! which is used to recycle the kitchen's compostable materials, however the potential to increase awareness among residents to these efforts and more still exists. Other efforts such as energy saving tips featured in the monthly newsletter illustrate the continued interest of the administration in educating their residents in energy conservation, however without exposing residents to the actual benefits of saving energy and identifying internal and external barriers to conservation, these efforts may not lead to effective behavioral change.

2.3 Program Development

The Leopold has significant potential for advertising through the promotion of the responsible resource management that already occurs. This information could be added to promotional materials and the Leopold's website. Although they do have a small Sustainable Connections logo displayed it does not link to any further information about the program or the Leopold's commitment. By adding this information, it would allow potential residents to recognize the Leopold's efforts in becoming environmentally conscious. The affiliation with Sustainable Connections can aid the Leopold in creating a green market niche for retirement centers locally and aid in the steps to take advantage of potentially significant regional demand.

To attain a better qualitative understand the residents' views and attitudes of energy conservation, we conducted a focus group and then distributed a survey. Focus groups are useful because the participants are a small group of people from the larger population you are studying, and can provide useful information. We held our focus group on Thursday November 12, 2009. We first went to the Leopold in the afternoon to announce to the residents that they were invited to participate in our focus group concerning resource management. Later that evening, we returned to the Leopold and set up chairs in the second floor library in hopes we would get a few volunteers to join our focus group. The residents came into the library and we found that we had more volunteers than we had anticipated. We had a total of thirteen residents (four men and nine women) answer our questions and engage in a discussion about resource management at the Leopold. Overall, the residents knew of at least a few things the Leopold was doing to be an environmentally conscious facility. For example, many had mentioned that they noticed all the lights and lamps had CFLs (compact fluorescent lights), which is an energy saving light bulb. They also felt that because they had been through the Depression and had no choice but to conserve resources. That training has carried with them though their lives and believe that we all are more concerned about the environment than before. When we asked the residents what motivates them to conserve energy and resources, they responded with:

- Resources cost money, so conserving/reducing resources saves money.
- They were taught at an early age to conserve resources and have maintained conservation habits.
- They worry their monthly rent will increase due to excessive energy use. By conserving energy or other resource, they are insuring their rent stays the same.

At the beginning of this project, we had an idea of creating a competition between WWU students and Leopold residents to see who could conserve the most energy. When we asked the residents what they thought of this idea, many seemed excited and willing to do it. Several residents mentioned that from their rooms, they can see dorm room lights on all though the night

and felt they would be up for the challenge. They also brought up the point of WWU students not wanting to change since they are out on their own, but once they get their own house or apartment and have to pay the bills, they would be more likely to change their behavior. When we asked if the Leopold's environmental awareness influenced their decision to live there, all except one said no. There was one resident who was aware that the Leopold was environmentally conscious, while the other residents had picked the Leopold for other reasons, such as the price to live there, it has a ballroom, their family lives in Bellingham, or their family members picked the Leopold for them. While each resident might have a different story of how they became a Leopold resident, each said they have enjoyed living there.

In some of the restrooms at WWU, there are energy conservation stickers on the faceplates of the light switches to remind us to turn off the light when we leave. We would like to do a similar thing at the Leopold. We contacted Ron Bailey, a member of the facilities management at WWU, and Ben Rupert, the program manager of RCM Support Services, who directed us to the LPB Energy Management website. On that website we found designs for turning off the lights, turning computers off, and turning appliances off. We could use this design to make stickers for the Leopold to help remind the residents to conserve energy.

3.0 Research and Analysis

3.1 Survey Results

To understand the current views of the Leopold residents concerning energy conservation, we created a survey. Because CBSM is relative to our report, we based our survey around its seven steps for conducting a survey:

- Clarifying the objective of the survey
- List the items which are to be measured
- Write the survey
- When the survey is complete, pilot it with ten to fifteen people
- Select the sample
- Conduct the survey
- Analyze the results

We created this survey to identify the attitudes and motivations for energy conservation and to identify possible strategies for future programs. We presented our survey questions to Gene Myers to discuss the quality of our questions. From his suggestions, we updated our survey and made the survey shorter and created questions that would give us a sense of their level of interest in the topic. As it would have been against Leopold policy to do a door-to-door distribution of our survey we instead distributed them after the focus group and asked them to return the surveys to the front desk when completed. This was not our first choice of distribution however, given more time we would have liked to setup a table in the



lobby to distribute and collect surveys, as we had done to invite residents to attend our focus group.

3.2 Analysis of Barriers

By establishing some of the barriers to energy conservation, we can determine what actions can be implemented to overcome these barriers. There are several barriers which contribute to non-conserving practices within the residents at the Leopold. One significant barrier is the participation level. During our meeting with Whitney, she informed us that we might have trouble receiving a high turnout because the participation level can often be low. Because of this, we may not get accurate survey results or get a large turnout if we held an informational talk on energy conservation for the residents to learn about practices they could incorporate into their routine. On the administrative side of the Leopold, there are not many barriers. The staff members are already environmentally conscious and are running the establishment in an environmentally friendly fashion. The Leopold currently has paper recycling on each floor, food recycling in the kitchen, uses energy saving light bulbs, and put energy saving tips into the monthly newsletter. Employees also help conserve energy by turning off lights when the room is not in use. Originally we anticipated to see barriers such as behavior, lack of knowledge, lack of motivation, and non-supportive attitudes; however we were surprised by most of the responses received. From our focus group and survey however, we found that the barriers consisted of forgetfulness, lack of incentives, and lack of knowledge. Most people, for example, thought that most residents at the Leopold worried slightly about their energy use. Most participants thought the Leopold cared about energy conservation but also felt the Leopold could be doing more to save energy. None of the respondents suggested specific actions however.

4.0 Conclusion

The Leopold represents a wonderful opportunity for WWU students looking for a chance to make a difference in our community while learning valuable insight into the challenges that face conservationists. Looking to traditional information-based campaigns to try and alter behavior can be a frustrating exercise, however we are hopeful that with sufficient identification of barriers, both internal and external to conservation and the Leopold will not only allow future students to create meaningful and lasting conservation programs but also shed light on probable barriers at other retirement institutions.

Through this project, we focused on the first two of the four steps outlined by CBSM, leaving only the actual implementation of a pilot program and monitoring and evaluating the strategy for effectiveness. CBSM is an adaptive process that requires significant forethought to execute well. Without the in depth knowledge about a targeted population a true CBSM cannot be established and tools lose their efficacy. Taking the time to create a preliminary assessment using tools such as surveys, as we have done, and focus groups cannot be over emphasized.

5.0 Potential for Future Work

By creating this report we are laying the initial groundwork for future interested parties. Those who take on this project can also work on establishing a resident energy council. This could be a

council run by the residents of the Leopold which would give them a sense of ownership over the subject at hand. The council could monitor the amount of energy the Leopold is saving and could use it as a measuring tool for the impact energy conservation has on an establishment. If a group of individuals were to take on this project, it is suggested that they do an evaluation of the program effectiveness. For example, from the time we leave this project to the time it is picked up again, it would be important for the interest levels of the residents be documented to see any changes that could have occurred. Writing a pledge to be signed by the residents of the Leopold could be an important aspect of this project in the future. The pledge could state that the resident would try to conserve energy whenever possible. This would be an opportunity to get the residents actively involved in energy conservation. By signing a pledge, residents could become more aware of the energy they could save and therefore, have the Leopold as a whole see a reduction in the amount of energy it uses. Evaluating if the Leopold is saving any energy by looking at past and present bill statements might also be a potential project.



6.0 Resources

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