Final Report: Green Living Certification Program, 2018-2019

Eco-Reps: Hope Lu and Catherine Chen

Advisors: Brigitte Baella, Hannah Sanders, Julian Goresko

Partners: Penn Sustainability: Elizabeth Main

Abstract

Over the 2018-2019 calendar year, Eco-Reps Catherine Chen and Hope Lu collaborated with the Penn Sustainability Office on the Green Living Certification Program.

The three main goals of the project were to:

- 1. Increase the number of participants in the program
- 2. Test creative ways to raise awareness about the program
- 3. Obtain feedback on the content of the certification itself

Introduction

The Penn Sustainability Office runs an annual certification program, called the Green Living Certification (GLC), where students living on- or off- campus can assess their personal sustainability habits and environmental impact. The program rewards students who take steps to improve Penn's environmental sustainability. Piloted in 2013, the program is survey-based, and students must complete a set of prerequisites to participate. After these prerequisites are met, students work through several categories that fall under "Optional Actions" and can acquire additional points. Point totals determine whether students are certified as Bronze, Silver, or Gold, and these various levels of certification reward students with different prizes. Students also receive restickable stickers. It displays their level of certification and they're encouraged to put them on their doors to serve as an outward-facing sign of their certification. There is also a raffle for large prizes such as lunch tins, yoga mats and re-usable water bottles. Students can re-enroll in the program every year as well as retake the survey during the course of the same academic year to improve their level of certification. The main goal is to allow students to reflect on their habits that affect the environment and incentivize them to adopt greener practices.

Project Overview

The prerequisites to participate in the GLC program are as follows:

- 1. Practice Good Recycling Habits
- 2. Turn off Unused Lights
- 3. Use CFLs
- 4. Turn off Faucets
- 5. Encourage Others to Become Certified

Optional Actions fall under the categories of:

- 1. Waste Minimization & Recycling
- 2. Transportation
- 3. Purchasing
- 4. Involvement At Penn

An example question included in the survey is:

1. I regularly use reusable shopping bags instead of paper or plastic bags. (1 point)

Plastic bags are non-biodegradable products of the petroleum industry and

contaminate water, land, and air during production and disposal. Paper bags actually
require more energy than plastic bags to produce and recycle, and they contribute to
forest degradation.



At least 55 points need to be earned for Gold Certification status and to achieve the prize of a reusable metal spork for the 2018-2019 academic year.

Project Goals

Our project aims (expanding on those mentioned in abstract) focused on:

- 1. Increase the number of students that take the survey, as well as the number of students who get re-certified
- 2. Increase general awareness of the program
- 3. Try new ways to reach different members of the Penn Community
- 4. Obtain some feedback on the program/survey
- 5. Draw conclusions about incentivization within the program

General Methodology

A. Utilize Social Media

We focused on intermittent posts on the three social media platforms used by Penn Sustainability (Twitter, Facebook, Instagram). Penn Sustainability has found that their posts which contain photos of students receive the highest engagement across social media platforms. We therefore decided to do a series of posts featuring green living certified students in order to reach new members for our certification program. As expected, these posts received higher engagement than other posts (see **Ex.1**). more generic posts with our typical infographic (see 'Physical Advertising' section) (see **Ex 2**).

Another aspect we incorporated into the program was encouraging individuals to share posts related to the GLC. To do so, we allowed for every individual that shared a post from the Penn Sustainability page on their personal page to receive an extra raffle ticket into one of the larger prizes of reusable lunch tins, a yoga mat, or a S'well water bottle.

We also shared posts about GLC prize-winners to help incentivize individuals to take the survey (see **Ex. 3**).

B. Physical Advertising

As part of "physical advertising," the first step we took was to reach out to as many list-servs as possible. We reached out to list-servs for cultural groups, clubs, intramural activities, and more. For a full list and a sample email, see **Ex 4.** We also reached out to green groups on campus like Penn Environmental Group and Penn Vegan Society. We contacted the head of environmental programs at Penn and contacted individuals in charge of displaying physical tents in the dining halls and TV monitors in buildings. We also provided flyers to several residential buildings (Rodin, Harnwell, Mayer, and select buildings in the Quad). The digital and print graphics were designed by Emily Zhao, the Penn Sustainability Office Intern (see **Ex. 2**).

One issue we ran into was not all individuals responsible for the listservs or newsletters would get back to us, despite following up with an additional email.

C. Face-to-face tactics

To encourage individuals to take the survey, we utilized 'Vegan Cookie Handouts' as well as Prize Collection as opportunities to raise awareness about the survey.

We baked a variety of vegan cookies and physically advertised the survey on campus two separate times. The most effective technique was to stand near the entrance of Van Pelt Library and briefly stop individuals and tell them about the survey. The cookies were a good way to catch an individual's attention, and once they grabbed a cookie, we handed them small slips of paper with the *bit.ly* link on it so they could take the survey.



Advertising the survey with vegan cookies in front of Van Pelt Library

The other face-to-face technique was to utilize "prize pickups" as another way to raise awareness. Throughout the semester, we scheduled times when Gold-certified students, as well as raffle prize winners, could come to claim their prizes. We noticed many students who were not certified would look at the table set-up and show interest in learning more about the program. After our first pick-up, we started to include flyers to hand out to individuals who had not been certified yet during these pick-up times and engage with individuals who were curious about the program.



Advertising the Survey during "Spork Pick-Up" at GreenFest 2018

D. Feedback Survey

In order to address the goal of gaining insight into how the program could be modified in the future to better meet the needs of students, we created a feedback survey that was sent out to currently certified students. To incentivize responses, we offered individuals Penn Sustainability notebooks for completing the survey.

The feedback survey asked the following questions:

- How many years have you been certified through the Green Living Certification?
- What kind of prizes/incentives did you like?
- What raffle prizes did you like best?
- What did you like least about the survey?
- Would you be interested in a digital resource guide to reference the initiatives and activities mentioned in the survey?
- What changes would you make to the survey such that you would be willing to take it every year to get recertified?

For results, see "Research Findings"

E. Green Certification Manual

In order to help students have continued access to the information provided on the survey (once the student takes the survey, they cannot go back and access their results), a "Green Living Certification Manual" was created to include the main insights that each question/category targeted.

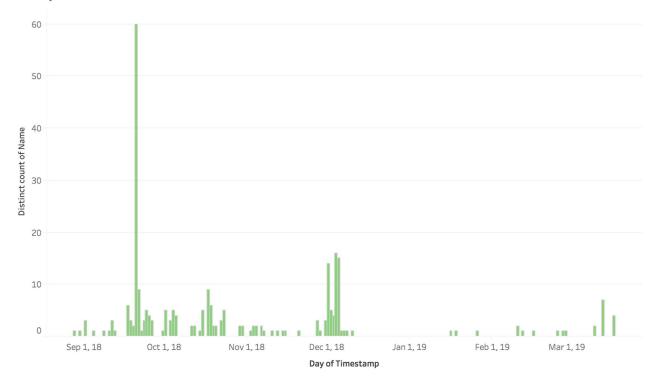
To see the manual:

https://www.sustainability.upenn.edu/sites/default/files/Green%20Living%20Certification%20Manual Updated%202019.pdf

Research Findings

• The # of individuals who have taken the survey over time:

Survey Taker over time



From September 2018 until March 2019, there was a total of 286 Penn students who participated in the Green Living Certification survey. The most popular times for taking the r survey were Mid-September, Early December and Mid-March. We believe that we can attribute the spike in Early December to GreenFest promotion and the timing of the end-of-the-semester, when classes are winding down and people have more time to take the survey. The spike in March may be attributed to the Eco-Rep's efforts to do a Cookie Stand in Van Pelt Library.

Make this a complete sentenceNumber of recertified individuals 17-18 to 18-29: 125

Introduce what this table is? Is it only re-certfied students? If the bullet is meant to introduce, formatting needs to be more obvious

	2017-18	2018-19
% of Gold Certified	100%	80.8%
% of Silver Certified	0%	15.2%
% of Bronze Certified	0%	4.0%

% of On-campus residents	77.6%	66.8%
--------------------------	-------	-------

Out of individuals who are recertified (participated in the survey for 2 years in a row [2017-2018 and 2018-2019 academic years]), the proportion of Gold Certified individuals fell, while the proportion of Silver and Bronze certified individuals increased. This is correlated with the fall in the % of residents living on-campus. We think that perhaps people are less able to keep their sustainable habits when living off-campus.

Number of newly certified individuals 2017-'18 to 2018-'19: 161

	2017-18
% of Gold Certified	57.7%
% of Silver Certified	30.9%
% of Bronze Certified	9.39%
% of Un-certified	2.01%

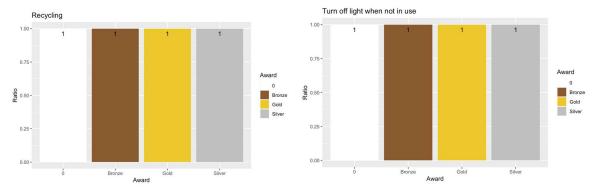
% of On-campus residents	65.78%

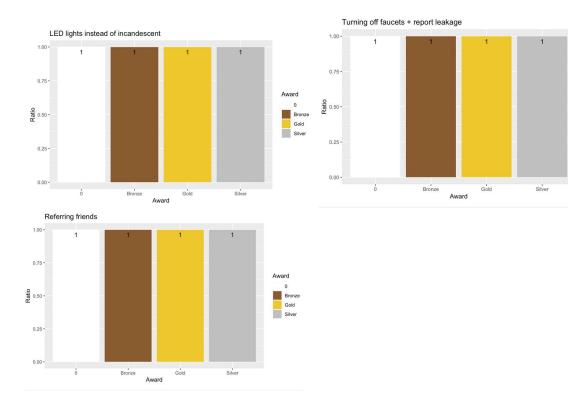
Out of all newly certified survey takers in the 2018-2019 academic year, $\sim 58\%$ became Goldcertified, $\sim 31\%$ became Silver-certified, and $\sim 10\%$ were Bronze-certified. Of all these people, only $\sim 66\%$ live on campus.

• Summary statistics of responses to each question based on the level of certification (Gold, Silver, Bronze)

Results and Evaluation

Part A. Main Results

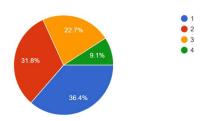




Part B Feedback Survey Results

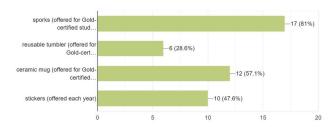
The results we collected from the feedback survey can be summarized in these visuals.

How many years have you been certified through the Green Living Certification?



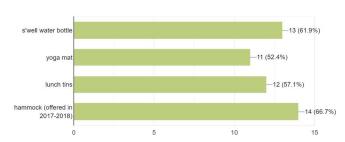
What kind of prizes/incentives did you like? (check all that apply)

21 responses



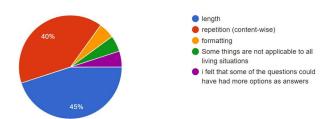
What raffle prizes did you like best? (check all that apply)

21 responses



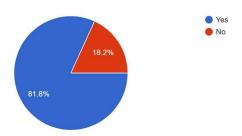
What did you like least about the survey?

20 responses



Would you be interested in a digital resource guide to reference the initiatives and activities mentioned in the survey?

22 responses



Discussion of Feedback Results

From the twenty or so responses to the feedback survey we obtained the following insights;

- 1. Most individuals have only been certified once or twice. While this could be because they are sophomores/freshmen, it could also suggest that individuals may be unaware that they can get recertified every year. Additionally,, it could indicate that there is a low retention rate for the survey. It may be helpful to include a blurb at the very end of the survey (on the thank you page) that includes something along the lines of: "Don't forget to get recertified next year!"
- 2. Sporks are well-liked amongst the prizes available to Gold Certified students. Prizes that "stand out" seem to be popular.
- 3. Raffle prizes offered in the past are equally liked overall.
- 4. Length/Repetition were brought up as the main things people did not like about the survey. While the survey's length is a result of the nature of the information provided, one consideration is to shorten the available information and redirect survey takers to the manual if they are in search of more information, reduce the amount of "clicking" before advancing to each of the survey's categories, and possibly introducing a 'short version' of the survey to get certified, and utilizing a 'long version' for individuals interested in entering the larger prize give-away. In example, allowing individuals to answer a brief set of questions to reach "certified" status and then allowing other individuals to take more time for prize consideration.

Conclusion

This year we were able to get XX individuals to partake in the certification program. We found it challenging to reach individuals outside of the traditionally "environmental" community at Penn and thus implemented unique ways to encourage participation. Beyond usual avenues of reaching out through newsletters/listservs and flyers, we also utilized social media more heavily and ran a Cookie Campaign to raise awareness of the program. While we were able to inform many individuals about the program through the cookie campaign, it was difficult to get them to actually take the survey since it takes at least 5-7 minutes, and we could not guarantee they would actually finish the whole thing, particularly if they were in a rush to get to class or a meeting.

Tapping into social media allowed us to feature individuals who are already certified byf the program and increase participation by people who see their friends/ tagged in the photos. We believe the main success of the project is the feedback survey, where we received some useful insights about what people like about the program, what they would change, and what prizes incentivize them to participate. Based off of those results, we recommend that the Green Living Certification program can be improved for the following year by shortening the length/repetition, creating a short version and a long version of the survey, and having the PDF manual available for additional information.

Appendices

Exhibit 1



Exhibit 2



Exhibit 3



Exhibit 4

We invite you to take the

Green Living Certification Survey 2018

In 5-7 min, you can assess your sustainable habits.

?? Do you know about the cool local environmental initiatives ?

?? How your classmates have applied for green project funding?

Find out by taking the annual Penn Green Living Certification Survey

Take it here!

Click in and these could be yours...

- a Laptop Sticker for recognition of being Green Certified
- Your very own Penn Spork
- to enter a raffle to win S'well bottles, yoga mats, and lunch tins!



Please share with your friends/groups!

Thank you,



Contact			
---------	--	--	--

		Greenfield Intercultural
House Dean Listserv	Fraternity & Sorority Life	Center
Another Push for	Penn Program in the	
House Dean Listserv	Environmental Humanities	Penn Closet
Returning Certified Students	Wharton Sustainability	Table Talk
SSAP Listserv	VIPER	Class Board (2022, 2021, 2020, 2019)
SSAP Listserv + Website	Joseph Wharton Scholars	GAPSA
Send to Stouffer, Viper & JWS Listservs & Dep of Earth & Enviro Sciences	School of Art Sustainability	Undergraduate Assembly
Cultural Centers Listservs	PSR	Student Government
LGBT Center Penn Women's, Civic House	Epsilon Eta	
School Departments	Vegan Society	
UA & Student Govt	Pen Environmental Group	
EcoReps	SSAP	
PennGreen Freshmen	Depart of Earth/ Enviro Sciences	
Stouffer	Cultural Centers x3	
House Coordinators (Google them)	LGBT	
Individal SSAP Members	Penn Women's	
FB Class of 2021, 2020, 2019, 2018	Civic House	

Key Stakeholders Appendix

Elizabeth Main

SUSTAINABILITY COORDINATOR OF PENN SUSTAINABILITY EMAIN@UPENN.EDU