Improving Duke's Green Checklist Certification Programs

Client: Becky Hoeffler, Sustainable Duke

ENVIRON 245 Project Brief Fall 2017

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Background

The Green Certification Program is a program at Duke University that seeks to reduce on-campus emissions through individual action by providing checklists of action items for green-certifying Classrooms, Dorm Rooms, Labs, Workplaces, and Events. Each of the five programs has its own checklist curated by members of Sustainable Duke. By providing benchmarks specific to each type of venue, Sustainable Duke helps identify particular ways in which individuals in certain silos of Duke can promote sustainability on campus.

The Green Certification program is one of many similar university programs aimed at reducing emissions/footprints through changing the actions of individuals and their surroundings. If Duke becomes a leader in the certification program, universities may adopt a similar system, creating a ripple effect that can have a great impact on a global scale. Universities have the responsibility to beneficially impact the environment around us, and Duke has the resources to be a leader in the field.

Finally, the program seeks to encourage student action in sustainability. Empowering students to take action can be one of the most effective strategies in encouraging sustainable living on campus and long term. Participating in campus-wide certification programs and initiatives such as Duke Green Devils or the Duke Campus Farm helps students develop leadership skills and work experience while learning the value of sustainability.

Research Question:

How can we increase awareness of and improve participant experience in Duke's Green Certificates Program?

Project Objectives:

The goals of this project are to discover areas of improvement for awareness of and participation in the Certificates program and provide recommendations based on research. Key questions to answer are:

- What demographics are the program not reaching, and how can they be reached?
- For those who currently participate in the program, what are their sentiments on the program?
- How do Duke students/faculty actually view sustainability and engage in sustainable behavior, and what can the program do to better address these realities?
- What are strengths in other university certification programs doing that Duke's program can learn from?

"If we as individuals are collectively causing global problems, then we as individuals can collectively solve them." - Becky Hoeffler, Program Coordinator

5 Certificates Currently Offered:







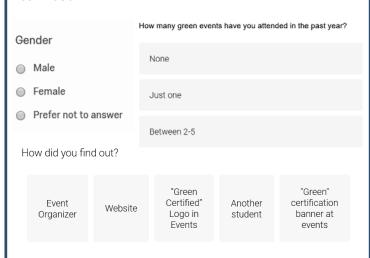


Methods

In approaching the project objectives and key questions, the team sought quantitative data in the form of a survey of Duke students, faculty, and staff as well as qualitative data through student/faculty/staff interviews and research on other university certification programs. Each type of data was coded for common themes with respect to the research question. Additionally, the quantitative data from the survey was used to make charts to get a broad picture of the responses.

1. **Survey**: The team created a survey with questions assessing several aspects of each program, including level of awareness, discovery of program, and participant satisfaction of program. The survey was administered over two weeks in mid-October primarily through sharing the survey link in student GroupMe's and Facebook as well as the Sustainable Duke Listserv. Prizes were given to students who shared the link to encourage more responses.

The survey had 47 questions and begun with information about student demographics. It then went on to ask the assessment questions of the programs, and ended with an option to offer a student, faculty, or staff interview for our video.



2. **Interviews**: To assess deeply the perception of and satisfaction in each program, the team interviewed key individuals involved in each program to understand their thoughts and recommendations of the program. In addition, in order to better understand how the program can engage individuals on campus, the team interviewed students across campus to better understand why students are passionate about sustainability and the actual ways they act sustainably.

Interviewees included: the Coordinator of Sustainable Duke, the Coordinator of Facilities and Reservations, the Manager of Natural Sciences, and a Master of Environmental Management Candidate









3. **Benchmarking**: To see what actions to promote sustainability could be feasible for Duke, the team researched the sustainability programs of Duke's peer schools. The team looked for common actions and innovative ideas that were being implemented in these schools.



Sustainability









Office of Sustainability

Three Components of Sustainability Addressed:

- 1) **Social**: People working collectively towards a more sustainable future through the green checklists will build a stronger community. Moreover, the checklists are tailored to the individual so that everyone can take sustainable actions in the most effective and equitable way possible for them.
- 2) **Environmental**: The checklist items that individuals complete to receive Green Certification are designed to reduce on-campus emissions, thus decreasing Duke's climate footprint and benefitting the environment one individual action at a time.
- 3) **Economic**: Checklist items are designed to reduce energy use on campus and thus will lower costs of energy and associated actions. Moreover, by encouraging a sustainable way of life, the program will encourage people to continue acting in an economically sustainable manner outside of Duke.

"It's a nice idea and I'd like to do it, but the activation energy is high." - Anonymous Survey Respondent

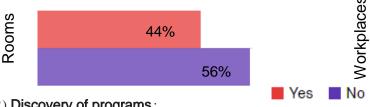
Across all methods of data collection and feedback, a recurring theme was the necessity of making sustainability more convenient and accessible at Duke.

Survey Results on Awareness

223 responses in total (29 employees and 194 students)

1) **Level of awareness**: On average, 60% of respondents were unaware of each program while 40% were aware. Statistical analysis reveals that in the general Duke community, individuals who knew about one program tended to know about all of them. As a result, individuals are not learning about the programs in isolation.

Rooms were the most well known (44%) while workplaces were the least known (22%).



2) Discovery of programs:

For each program, the most common way respondents found about the program was through a "Green-Certification program" sticker.





When a venue is certified, it is branded with a sticker. The survey suggested these stickers have successfully advertised the program.

3) **Demographic analysis**: In general, there does not appear to be any relationship between gender and awareness. Among respondents, Nicholas School and Pratt School students were more likely to know about each program.













Likely to know about program

Unlikely to know about program

Benchmarking Peer Schools

How do other university sustainability programs differ?

- 1) Sustainability Competitions:
- campus-wide competitions among dorms
- nationwide competitions such as re recycle more and use less energy.



2) Internships:

- competitive internships in which students work on a sustainability project throughout the year
- example: full-year project developing ways to promote sustainable behavior in residence halls The following school soffer systainability internships: Dartmouth JOHNS HOPKINS University

Student Views on Sustainability

Responses from Two Duke University Trinity College Students

- 1) **Thoughts on sustainability**: Both students care a lot about sustainability and actually do things in their daily lives to promote sustainability, such as recycling and using less water.
- 2) Need for improving sustainable measures on **campus:** Both students mentioned that Duke should do more to promote sustainability by providing better incentives for people to do so. One student talked about the lack of practical incentives and **conveniences**, while another encouraged people to understand the moral reasons for practicing sustainability.

Conclusions

Key Themes Across Research

- People care about sustainability, but being sustainable is viewed as an inconvenience.
- Moreover, people choose to not act sustainably due to a lack of tangible and immediate benefits to them. Additionally, some do not see any personal benefits of participating in the certification program.
- Although many people have not heard of the Certificates program or only vaguely know about it, many express an interest in the program after hearing about it in detail.

Objective	Recommendations/Tactics
Improve adoption of the program by emphasizing personal incentives the program offers.	 Highlight immediate incentives for being sustainable, e.g. reducing operation costs of departments. Offer prizes for departments with a certain level of classroom or workplace certification. Advertise the resources that the Green Certification Program can offer for being sustainable, such as the Green Grant Fund.
Address the problems people currently have with the green certification programs.	Update the checklist with more effective task items and updated wording.
Make the Green Certification Programs more visible on campus.	 Create sustainability challenges across dorms to promote knowledge and involvement around campus (this may make it more convenient for students to be sustainable as well). Provide incentives for individuals already participating in the program to spread word to others.
Discover strengths in other university certification programs that Duke's program can learn from.	 Implement competitive sustainability internships like other schools have done so that students can take more action (beyond participating in Green Devils). Participate in national sustainability competitions.

How to be a Green Devil

Want to #BleedBlueLiveGreen? Check out tips and resources for students, staff, and faculty to incorporate sustainability into your daily activities at http://sustainability.duke.edu



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