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#### **ABSTRACT**

University communities have always been a principle forum for social change and with the growing global debate over environmental issues and sustainability, this forum must be used to channel education and awareness. One approach to directing these efforts, which our workshop took, is the creation and distribution of a sustainability guide for the University of Virginia student body. Our specific group was tasked with researching the content of the guide, judging topics in terms of greatest importance and relevance to student life. After researching previous efforts made at U.Va. we polled the student body through both an email and tabling survey. With the results, we established five main categories of content: energy, food, natural resources, recycling, and water. The workshop then created specific tips and "How-Tos" within each topic to distribute to the student body through a weekly email newsletter. This project was effective in discerning how a student body is best targeted and how information is best disseminated. In our findings it is clear that short, interactive, relative mediums are the most effective in engaging a student body; however, these conclusions should not be limited to the scope of the University. This issue, the issue of sustainability, is one of an international context, and the principles derived from our research could have implications on the global stage as well.

#### INTRODUCTION

**The Problem:** Design a Sustainability Guide for U.Va. Students

# **Individual Group Purpose:**

- 1. Research and Determine the Content of a Sustainability Guide for U.Va. Students
- 2. Develop Specific Content and "How To"s Related to Recycling and Waste

# **Background Information**

In 2002, the first organized effort to bridge the gap between students and the sustainability goals of the University of Virginia was the creation of Conservation Advocates (now Sustainability Advocates). Since then, sustainability efforts have expanded to include more than 50 organizations and clubs (including Green Dining, the Committee on Sustainability, and Student Alliance for Virginia's Environment) and annual initiatives such as *RecycleMania* competitions, and Earth Week projects. In addition, there has been an academic initiative that has brought about several courses involving sustainability (Global Sustainability and Intro to Environmental Policy) and the creation of a Global Sustainability Minor. In 2010, SustainaUnity was created to compile sustainability information and act as a central base from which to involve and inform students on current efforts. Most recently, in June 2011, the President's Committee on Sustainability as well as the Board of Visitors established and approved a Sustainability Resolution<sup>1</sup> to define the goals and principles of the university.

## **Workshop Project Overview**

Our workshop was charged with developing a sustainability guide for U.Va. students. For the first stage of the project, we broke into five groups to research and develop criteria for the guide. These groups were as follows: researching external guides, researching previous sustainability efforts at U.Va., researching potential format of the guide, marketing, and student interest and potential content for the guide. During the second stage, these groups were reassigned topics within which to develop specific content for the guide.

## **Individual Group Problem Statement**

We will determine what issues within sustainability students are most interested in, allowing that

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<sup>&</sup>lt;sup>1</sup> See Appendix I

information to influence the content that we put in the guide. In order to do this, we must understand what aspects of sustainable living are most pertinent (this can include student preference, relevance to daily student life, etc.) to the student body and in what ways students would be willing to change their habits in order to become more sustainable. In order to gather this data, we will survey the student population in various ways. Finally, in analyzing and implementing our results, we will incorporate U.Va.'s Sustainability Resolution, and, if need be, redefine it in terms relative to student life.

After determining which sustainability issues students are most interested in, we will develop content for one of the categories. These tips will need to be both informative and pertinent to students, giving them information in a way that provides both easy access and easy application. Our workshop's research during the initial phase of the project will be useful and necessary in developing these tips. It will offer a composed report of the information and distribution designs that have been successful both at U.Va. and at other universities.

### **Stakeholders Involved**

Our community partner, contact, and primary stakeholder for this project is U.Va.'s Sustainability Planner Andrew Green. Other stakeholders include the University's faculty and staff that have had previous involvement with sustainability efforts on grounds and who are involved with the University Sustainability Committee. As well, the final product is meant to target a significant portion of the University community, and in that way, all students are stakeholders. In creating this sustainability guide we are hoping to alter the behavior of U.Va. students in order to accomplish the goals set forth by the University, particularly in the Sustainability Resolution.

#### **APPROACH**

In order to gather the data necessary to determine the content, our group generated a variety of ideas; all based on the premise that student interest should drive the focus of the sustainability guide's content. As was evident in our background research, there have been a number of previous attempts to use guides to educate the student population in a greener way of living. Many of these efforts, however, failed to establish a lasting impact because they did not appeal to student interests. By engaging with the student body, our research techniques ensured a degree of pertinence to student life, and also served as an informal marketing opportunity for the guide.

# **Potential Ways to Research**

In order to understand which sustainability issues students are interested in, we needed to communicate with the student body. The following are our options we considered throughout the research process:

Online survey: One idea we had to research content possibilities for the guide was to poll students. Using an online poll would allow us to get direct input from U.Va. students. The poll would be sent out to students through the Connections email listserv and the Sustainability Advocates' weekly emails. In order to make our sample more varied, we planned to send the survey out through other U.Va. listservs including sororities, fraternities, and other organizations on grounds.

In-classroom Surveys: To guarantee responses from the survey, we considered printing out the online survey and bringing it into classrooms to have students fill out in front of us. This would require obtaining teacher permission to use class time. However, hand-selecting classes to poll would ensure a diversity of student input (i.e. poll classes from the Commerce, Architecture, Engineering, and Nursing schools, as well as the College).

Door-to-door interviews: In this scenario, we contemplated personally talking to students to gage

their interest in certain sustainability issues. We would have done this by canvassing—walking through dorms (after getting permission from Senior Resident Advisors) or knocking on doors along Jefferson Park Avenue and in the Corner/Rugby Road area where most upperclassmen live. We would ask students to fill out the same survey as the online and classroom poll. Again, this approach would have ensured a diverse sample population of students of a variety of years and disciplines.

Forum: Another idea was to host an open forum where we would have invited students from across U.Va. to come and talk about their concerns regarding sustainability at U.Va. and what sustainability topics, in their opinion, would be most important to address. We would have moderated the forum and taken notes about which issues were brought up most frequently and discussed with the most fervor.

Tabling: To table, we considered making a more in depth questionnaire that honed in on the specifics of a certain sustainability topic. Ideally, tabling would have been a follow-up to the surveys. After identifying and selecting the most important sustainability issues—as expressed by students in their surveys—we would have created a subset of questions about each of these topics. (For example: What aspects of water are important to you: water usage, clean water, accessibility, etc.?) To encourage people to stop at our table, we contemplated having a raffle. Each topic would have a jar that students could enter their name in after they completed a questionnaire. A name from each jar would be chosen after the tabling and the winners would receive a prize. To have this be as sustainable a process as possible, we would have uploaded the questionnaire online and brought laptops to the tables for students to use.

Gathering information from Sustainability Advocates & SustainaUnity: On October 3, first year dorms began a competition centered on dorm energy use. For the next month, first years received information about how to live sustainably on-grounds. Gathering the research and statistics provided to these students about sustainable living would be incredibly helpful to creating content for our guide. As well, we considered observing which aspects of sustainable living were easiest and most difficult for students to maintain. Sustainability Advocates publicized this information at the end of the month.

#### **Selection Criteria**

With such a large variety of ways to gather data, our group developed a series of seven criteria to judge each option, including: scope of the student population addressed, inclusiveness of topics and issues, depth of information gathered, guarantee of a response, environmentally-friendly format, user-friendly format, and timeliness of receiving results. All of the criteria were determined by the goal of the group: to gather a significant amount of data, in a timely manner, which would give insight into where interest in sustainability lies at U.Va. Using this mission statement we generated the following criteria.

The "scope of the student population addressed" refers to the range and the diversity of students that we targeted using each approach. Maximizing the scope of the surveyed population is important in determining which issues will matter most to the university community as a whole, and indirectly helps determine the population who will be targeted by the guide. If the goal is to target the majority of the school's undergraduate and graduate populations then the methods of data extraction should also target the majority of the school's population.

The "inclusiveness of topics and issues" is a reflection of wanting to incorporate a variety of sustainability-related subjects so that no one interest is overlooked. Oftentimes, discussions about sustainability are limited to just energy use or recycling. Polling on a variety of matters, allows us to be better gauge the subjects students relate to and feel passionate about and also reveals the far-reaching breadth of issues related to sustainability to those students who participate. A concern of previous attempts has been that the issues addressed have been determined by people other than the students themselves and may have, therefore, overlooked key interests or disinterests.

"Depth of information gathered" was key to making our guide substantive. From a technical standpoint, the depth of responses was important in terms of defining what issues within these broad categories people found the most intriguing or inspiring (i.e. specifics about water use rather than just water). That data created the framework for the design and format of our guide.

"Guarantee of a response" is straightforward, however, it was a crucial criteria in judging and executing any of the aforementioned ways to research. Without the guarantee of receiving a response, and therefore data, all of the other criteria were virtually irrelevant. Moreover, the abundance (or lack thereof) of responses in itself proved useful in estimating student interest in sustainability.

Using an "environmentally-friendly format" was necessary in reflecting the goals of our project in the ways we conducted our research. It would be impossible to create an impact on others if our actions conflicted with what we claimed to be working towards.

Along similar lines, a "user-friendly format" often goes hand in hand with eco-friendly format. In this technological age, paperless translates to greater comfort and convenience. However, the term "user-friendly" refers to more than just the materials used to create and disseminate these surveys, it refers to the format of the approach itself. Tabling, for example, would require more time and energy from those who choose to participate, as we would ask students to fill out a greater breadth and depth of information. An online survey, on the other hand, would be fast, easy, and simple to use.

Finally, the "timeliness of results" was most important in meeting deadlines and completing the project. It is this parameter that would drive the success or failure of the guide and make, in its absence, all others obsolete. Having results is always beneficial; however, obtaining results in an untimely manner would serve no purpose in the assigned project.

#### **Research Method Selection Matrix and Decision**

After developing selection criteria, our group generated a matrix to judge the most effective ways to research. We decided to score and rank each possibility according to the selection criteria. Each option was assigned a number (1-5, with 5 being the best). We then totaled the scores to determine the optimal choice for gathering data.

	Scope of Student Population	Inclusiveness of Relevant Issues	Depth of Information Gathered	Guarantee of a Response	Eco- Friendly Formatting	User- Friendly Format	Timeliness of Results	TOTAL
Online School Survey	5	5	2	2	5	5	3	27
Interactive Tabling Stations	3	5	5	5	5	3	5	31
Random Class Polling	3	4	2	5	2	5	5	26
Open School Forum	2	4	5	3	5	3	4	26
Door-to- Door Surveys	3	4	2	4	5	4	4	26

This data gave way to the notion that tabling would be the most effective and efficient manner for gathering our data. We decided that using the best two options—an online survey and tabling—in a multifaceted approach would allow for the most conclusive results. This combination of techniques would allow for improved results in the sense that where tabling may be less effective in "scope" and "format", an online survey could prove generally more effective, creating an, overall, stronger approach.

#### **EXECUTION**

## **Online Survey**

After deciding that we wanted to do an online survey as well as tabling, we created a Survey Monkey poll. The survey asked students to choose and rank which five of 13 sustainability topics are most important to them. For each of the five issues they selected, we then asked students to give a brief explanation of why they chose it. The topics in the survey included the following: alternative energy, community engagement, consumption/consumerism, education awareness, energy use and conservation, exploitation of natural resources, food, plastics and waste, population growth, recycling, sustainable architecture, transportation and emissions, and water. We determined these topics by reviewing the topics discussed in sustainability classes at U.Va. (Particularly Global Sustainability and Intro to Environmental Policy)<sup>2</sup>. We also drew on personal experience with sustainability at U.Va. and considered which issues were most pertinent to student life on grounds and young adult life in general. We also looked at sustainability topics that have been most covered in the media: both in print media and in newscasts. Lastly, we looked at the issues that national and international organizations are targeting, such as the Rocky Mountain Institute. See the survey here: <a href="http://www.surveymonkey.com/s/3RNTFPT3">http://www.surveymonkey.com/s/3RNTFPT3</a>.

# **Tabling**

After receiving 117 results from the online survey (which we considered an insufficient sample size), we decided to table to gather more student input<sup>4</sup>. Originally, we wanted to do a more in-depth survey that asked students about specific aspects of their top sustainability issues. We would have brought our laptops to have students fill them out online to abide by the sustainable ideals of our project. However, when we brought this up in workshop, our TA Carla Jones suggested that this was not the most efficient way to table or survey. Instead, she suggested a more visual approach, using either posters or jars where students could easily mark their preference. However, Carla also suggested that instead of having thirteen criteria, it would be more visually appealing and balanced to have twelve. We then decided to combine alternative energy and energy use and conservation (making it energy [conservation and alternative]), as well as plastics and waste and recycling (which became recycling and waste). This made eleven total categories, so we decided to add another category; government and policy. This decision was based on additional issues addressed in the Intro to Environmental Policy course. Following this advice, we bought poster boards and sticky notes. Then we created two posters where we listed the sustainability criteria. Each poster board said "What Issue Matters Most?" at the top and had six boxes below. Each box was labeled with one sustainability issue. In addition, to offer people incentive to stop and participate in our survey, we baked muffins to offer our participants.

We tabled for two days, Wednesday, October 26, 2011 from 1:00 - 3:00 pm, and Thursday, October 27, 2011 from 1:00 - 2:15 pm. When tabling, we gave people a sticky note and asked them to place it in the box of the issue that mattered most to them. We ended up with a visual representation of the issues that were most important to the students. Carla also suggested that we try to get more specific information

<sup>&</sup>lt;sup>2</sup> See Appendix II

<sup>&</sup>lt;sup>3</sup> See Appendix III

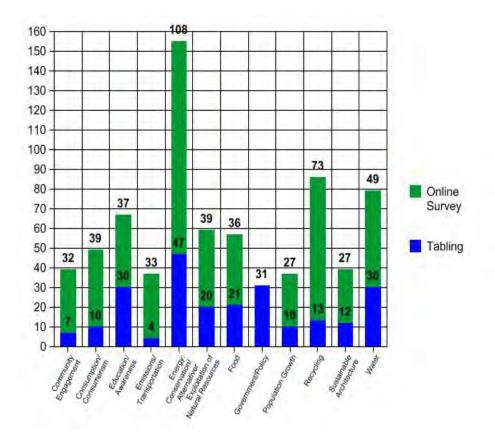
<sup>&</sup>lt;sup>4</sup> See Appendix IV

about what aspects of the larger sustainability issues were important to students. To get this information, we decided to offer students the ability to write on their sticky note if there was a certain aspect of the topic they particularly cared about (i.e. "coal" within "energy [conservation and alternative]"). Few students took the opportunity to do this. At the end up of each day we tallied the sticky notes and wrote down any comments students had made. These comments were the following. Related to energy, one student wrote "coal" as an area they were specifically interested. In the food category, comments included: "local eating," "vegetarianism," "urban gardens," and "donating excess food." Related to sustainable architecture, the two comments were: "passive design" and "materials conservation." The food was less of an incentive than we expected. People responded more to our advertising the survey's brevity. As well, the interactive aspect of the survey (i.e. the visual results and physical act of placing a sticky note on the poster board) was appealing and rewarding to students.

#### **RESULTS**

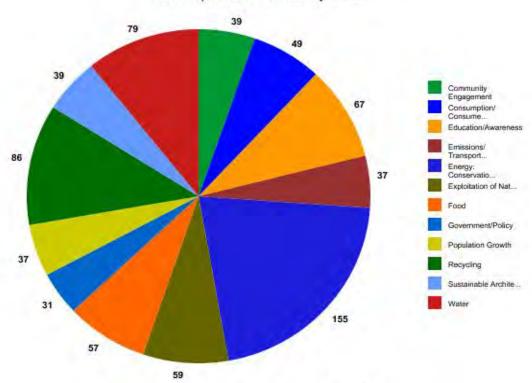
We compiled the responses from both the online survey and the tabling results<sup>5</sup>. The following five categories were the ones with the most votes: energy (conservation and alternative), education and awareness, exploitation of natural resources, recycling and waste, and water. As a workshop, we decided that the project itself was serving as education and awareness, and opted to add the sixth topic instead, which was food.

<sup>&</sup>lt;sup>5</sup> See Appendix V



These charts represent our findings in a graphic form. The bar graph (top) shows the distribution of student votes by issue and by survey medium. The pie chart (bottom) shows the overall segmentation of votes in terms of the issue.





Based on Survey and Tabling Results

#### **Limitations of Results**

The online survey was an individual poll, such that students could not be influenced by others' opinions. In addition, we put the topics in alphabetical order so that our opinions were not represented. However, when tabling, the opinions of others were clearly visible and could have influenced others' decisions. The invisible pressure to agree with the perceived majority opinion and consensus could have skewed results. As well, we only received a total of 745 responses. As we were trying to target the entire student body, this sample size did not statistically reflect the entire population.

# **Choosing Topics for the Guide**

In workshop on October 27, 2011 we presented our findings. The workshop agreed that education and awareness should not be a targeted issue in the guide because the guide itself fulfills this need. The final topics we decided to target for the guide were: energy (conservation and alternative), exploitation of natural resources, food, recycling and waste, and water.

#### **DEVELOPING CONTENT**

The next stage of the project was to develop specific content for the top five sustainability issues that students were interested in. The workshop agreed that the information we created should be presented in a simple, concise, interactive and engaging way. It should also be graphically pleasing, should use positive incentives, and should make the reasons for changing behavior applicable and relative to individuals' lives. Based on these criteria and the research done by other groups in the workshop (namely looking at other colleges' existing sustainability guides), a "How To...", step-by-step, "quick tip" type of format was the primary way we decided to design the content.

Individual groups were then assigned one of the five topics to create content for. Our group was assigned "recycling and waste."

# **Writing Content**

To develop content, our group decided that each person would research and develop three to four of their own tips that we would then all edit together. We began this process by examining what recycling and waste resources and information exist at U.Va. We wanted to include programs like *RecycleMania* and the Rose Program. As well, we found inspiration in a graphic at Greenberry's Coffee that illustrated which parts of a coffee cup were recyclable, by breaking down the cup into its respective parts—i.e. the lid can be recycled in plastics, the sleeve in mixed paper, and the cup can be thrown away. We thought it would be effective to generate a similar step-by-step process with other items, like a grocery bag, plastics and paper, school supplies, light bulbs, and so forth. It also came to our attention during workshop one day that there was a lack of information about how to recycle electronic and office items (e-waste), like batteries, light bulbs, and ink cartridges. As well, during this period we received an email from Sheffield Hale, the president of SustainaUnity, recommending a link with information about recycling, which we used to generate some of our tips (recycle.virginia.edu). In addition, we employed some of the links and resources provided by other members of our workshop. These resources came from their research on previous U.Va. initiatives and other university initiatives across the nation.

## **Format and Distribution**

Collectively our workshop decided that having a database where all of the tips could be stored and made accessible and from which we could send out regular emails would be the most effective way to distribute the sustainability tips to the student body. We were aware that SustainaUnity sends out a weekly newsletter informing the student body about sustainability initiatives and events on grounds. In an effort to

<sup>&</sup>lt;sup>6</sup> See Appendix VI

not repeat, duplicate, or compete with existing efforts on grounds, we asked SustainaUnity to partner with us on our project, and they happily agreed. Our tips will be sent out in their weekly emails.

After each group wrote their content, Carla presented a contest to our workshop where each group had to submit a PDF design for a template to host all of the tips (the database). This PDF will be available for students to access all of the tips at once. We voted on the format, and decided to use a template with five columns each representing one of the issues, accompanied by a picture on the bottom. The top margin has a headline with five graphics for each of the issues and a brief text box explaining why living sustainably is relevant to students' lives.

As a kick-off for publicity, we collectively decided to place all of the tips in the libraries during exam time as a preview of the emails to come. During the last workshop, we printed out multiple copies of all of the tips, cut each one out, and put an assortment of tips into little green bags. The green bags were then given to the front desks at the libraries—including Alderman, Clark, Clemons, and Thorton Hall—and we placed signs advertising the tips on tables throughout each of the libraries.

#### CONCLUSION

Over the course of this semester, we gained a greater understanding of what sustainability means at U.Va. Included in this was a new insight into the issues that matter to the student body, the initiatives that already exist on grounds, the ways in which current initiatives are being organized, and the student and faculty groups that are leading the movement toward sustainability at the University.

## **Documentation**

To document our project, we collected the survey data (both from the online survey and from the tabling) as raw data that we then formulated into tables and graphs. By creating tables and graphs, the information was easy to understand and visually appealing. As well, we took photos while tabling to document how the tabling survey looked<sup>7</sup>.

## **Assessment and Success of the Project**

In polling the student body, we were successful in reaching a diverse sample of the student body (we received responses from first years through graduate students), spurring conversation amongst participants about sustainability, and receiving an adequate number of responses. We were able to deduce which issues are most important to U.Va. students, and did this in user- and environmentally-friendly ways. We accomplished all of this in three weeks. Lastly, we received unintended and helpful feedback from the survey. Students voiced a preference for simple and hands-on information. However, it would have been more statistically significant if a larger portion of students had participated in the survey. This was our major shortcoming.

It seemed to our group that the majority of the semester was spent on the first part of the project—researching and collecting data. The last few weeks when we were developing our tips seemed a bit haphazard and rushed. The process was informal, which made the tips seem to lack a degree of professionalism and credibility. For example, our individual group was unaware of how other groups in our workshop chose and/or researched their tips. With this, the content and depth of the tips varied significantly from issue to issue. Some of the tips were one-sentence facts, while others (including ours) were much longer with both facts and ways for students to apply changes relevant to this fact to their lives. This came about because of a lack of clarity and discussion about how long the tips were supposed to be. Lastly, when instructed to review each others' tips on the collective Google Document with all of the workshop's tips, only a handful of people completed the assignment. More importantly, though, the ratings that were done and the

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<sup>&</sup>lt;sup>7</sup> See Appendix VII

comments that were made could not be addressed because of a lack of time.

Overall, the largest obstacle to the workshop seemed to be a mismanagement of time. It would have been more efficient to utilize first few weeks of workshop to begin the project immediately instead of reviewing class policies and so forth. These weeks would have been nice to have at the end of the semester. With that said, our workshop was able to accomplish the task which we set out to complete. We worked collectively to gather pertinent information regarding sustainability at U.Va. and distributed it in a new and effective way. Under the leadership of our T.A. Carla Jones, we also learned the dynamic of researching in a cohesive manner and navigated the benefits and obstacles of working in a group.

#### **Possible Constraints and Barriers**

As a workshop we decided that the best format for the guide is an email. The polls one of our workshop groups conducted through Student Council came back with decisive results showing that students preferred receiving information through emails. However, email is a risky format to use because it is hard to ensure readership and difficult to measure impact or success.

#### **FUTURE WORK**

Though we were able to accomplish a significant amount of work over the course of the semester, the nature of our project requires a transfer of responsibility; it will be necessary for someone to take over our project. As our workshop chose to distribute the guide by sending out weekly tips, we decided to partner with SustainaUnity, who already sends out a weekly sustainability newsletter. SustainaUnity has already accepted our request for them to adopt the project. Carla gave Ashley Badesch and Haleigh Harper, two representatives from SustainaUnity, a word document with all of our compiled tips to be used in the weekly newsletter and a PDF template to be uploaded to SustainaUnity's website where all of the tips will be available. Ashley and Haleigh have said the newsletter's current "Link of the Week" will be replaced by the "Tip of the Week" beginning in the spring. The PDF file will be placed under the "Live Sustainably" tap on SustainaUnity's website. From this point on, SustainaUnity will be in charge of the project—editing the tips as they see fit, adding more, and distributing them.

#### TIMELINE

Date	Event	Complete? (Y/N)
10/3	Create & upload the survey.	Υ
	Meet to work on the Conceptual Design.	Υ
10/5	Conceptual Design due.	Υ
10/7	Distribute survey. By this date we will have submitted the survey to the	
	Connections listery, Sustainability Advocates email, and other U.Va. organizations' listserys.	Υ
10/20	Analyze data. Connections emails are sent out each Wednesday (which means	
	it will be sent out on October 12). At this point we received 107 results and were	Υ
	able to begin thinking about tabling.	
10/21	Community Partner Meeting. Meet with Andrew Green.	N
10/25	Prepare for tabling. We went to Kroger and bought the supplies for	
	tablingtwo poster boards, markers, and sticky notes. We then made the	Υ
	posters.	
10/26	Table. After we collect the polling data, we will table, to understand which	
	specific elements of the broader topics students find appealing. The in-	Υ
	classroom surveys are only necessary if we do not receive as diverse or as	

	much student input as we are hoping for.	
10/27	See Above	Υ
11/1	Meet to work on Preliminary Report.	Υ
11/3	Preliminary Report due.	Υ
	Develop content for individual group's topic. During workshop on Thursday, each	Υ
	individual group will bring a few ideas about which content to include in their	
	topic (ours being recycling and waste).	
11/17	Content Due	Υ
12/10	Final Report due.	Υ
12/12	Final Presentations.	Υ

# **BUDGET AND FUNDING**

Our workshop had limited funding, but our community partner Andrew Greene did not specify the precise amount past "less than a couple thousand." Thus far, our group has not needed to finance a significant project. We used personal funds to buy the materials for tabling, which totaled \$4.98 + \$6.73 + \$3.26. As well, the muffins cost \$4.25. Our overall total spent on the tabling method of surveying was \$19.22.

# **TASKS AND RESPONSIBILITIES**

Name	Specific to Written Reports	General Team 5 Objectives	Workshop as a whole
Erin Austin	Format	Secretary, Task Manager, Deadlines	
Jessie Greene	Final Proofread	Andrew Greene contact, Tabling Captain, Final proofread of all submissions	
Matt Latimer	Graphs, matrices, survey	Sustainability Advocates contact, Collab Submissions, Data Organizer	
Group	- Meet to discuss and structure the design - Writing content - Meet to finalize and submit - Adding & organizing appendix	Developing surveys, Participating in tabling, Analyzing data	Establish contacts with student body, Connect these interactions with sustainability guide

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# **Appendix**

# I. University of Virginia Sustainability Commitment (June, 2011)

Approved by Board of Visitors on June 10, 2011

WHEREAS the University of Virginia has a long tradition of environmental stewardship guided by values that have come to be recognized as sustainability principles,

WHEREAS the University of Virginia has taken a leadership role to promote sustainability,

#### RESOLVED:

- The University of Virginia will undertake to reduce annual greenhouse gas emissions to 250,000 metric tons or less by 2025, 25 percent below 2009 levels and over a third less than expected 2025 emissions without this commitment.
- The University will utilize the highest standards of environmental stewardship and resource conservation and will address other areas of concern beyond greenhouse gas emissions, such as waste, water, nitrogen, stream and river protection, noise and light pollution, open space protection, and conservation of the historical and cultural legacy of the community.
- The University will educate and engage its students, faculty, staff, and the larger community; contribute to knowledge through research; promote health and well being; and foster public service related to these sustainability principles.
- These initiatives will be supported by comprehensive planning for and communication about sustainability.
- Initiatives will be evaluated on the basis of benefit, cost, and availability of funding.
- A report on sustainability will be prepared annually for the President. Progress on sustainability initiatives will be presented to the Board of Visitors every two years.
- Sustainability efforts are embedded in U.Va.'s governance, culture, and academics, , as well as throughout University operational areas of planning, design, construction, transportation, food service, energy use, water use, waste and recycling.

## II. Global Sustainability Class Syllabus (Abbreviated) & Environmental Policy Class Syllabus

## Class Topics by Date:

What is Sustainability and Why Does it Matter?	8/23
State of the Planet and Humanity	8/25
Systems Thinking and Limits to Growth	8/30
Vision and Community Engagement	9/6
Water	
Human Health	9/20
Food	9/27
Energy	10/4
Culture and Ethics	
Architecture	.10/25
Communities	11/1
Environmental History	11/8
Commerce	11/15
Consumption and Personal Behavior	
Law and Policy	

# II. (Continued) Environmental Policy Class Syllabus

EVSC/PLAP/ETP 2030
POLITICS, SCIENCE, AND VALUES:
AN INTRODUCTION TO ENVIRONMENTAL POLICY—FALL 2011
Professor Vivian Thomson

## August

29 —Introduction; lecture on policy processes, emergence of the environmental movement in the US Walter Rosenbaum, ch. 3 from Environmental Politics and Policy Judith Layzer, Market-based solutions: acid rain and the Clean Air Act Amendments of 1990

# September

- 5 Policy processes; Clean Air Act overview; acid rain
- 12 Markets and environmental policymaking; emissions trading
- 19 -- Policymaking for garbage; class, race, and the environment
- 26 -- Radioactive waste

#### October

- 3 Exam 1 (in lecture) no discussion sections this week
- 10 Fall break— no discussion sections this week
- 17 Dams and water politics
- 24 Energy
- 31 Land use

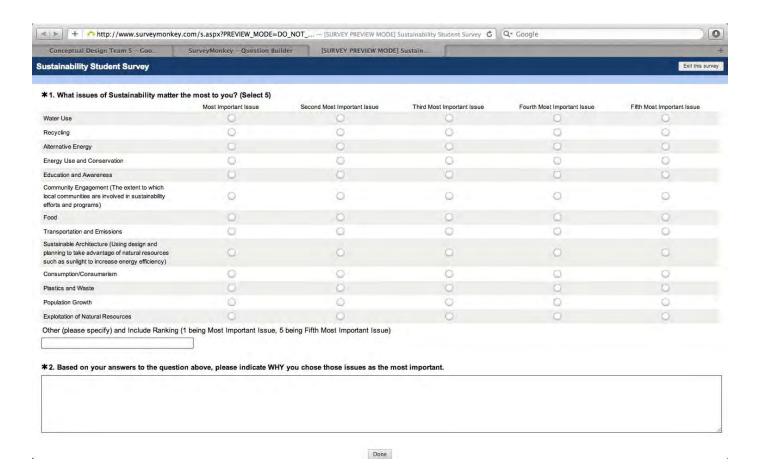
#### November

- 7 Endangered species
- 14 Lawns and agriculture
- 21 Globalization; climate change no discussion sections this week (Thanksgiving)
- 28— Climate change and international fairness; course wrap-up

## December

- 5 Exam 2 (in lecture) no discussion sections this week
- 9 Paper due by 5:00 p.m. in your TA's mailbox. Late papers will be penalized 1/3 grade per day late.

# III. Online Student Survey



# IV. Tabling Reservation and Sustainability Survey Info Table

Reference:	2011-AAXDVC
Event URL:	
Fee Required to Attend/Participate?:	No
Registration Required?:	No
Customer Setup Time Needed (in hours):	n/a
Customer Takedown Time Needed (in hours):	n/a
Rain Date and/or Rain Location:	n/a
Decorations? (footwear, signs, etc.):	n/a
Anything to be sold at site?:	No
Purpose for request?:	n/a
Organization:	STUDENT COUNCIL ENVIRONMENTAL
-	SUSTAINABI
Requestor:	Jessica Greene

# V. Data Table of Survey/Tabling Responses

Issue	Survey Monkey Responses	Tabling Responses (Wednesday)	Tabling Responses (Thursday)	Total
Community Engagement	32	3	4	39
Consumption/Consumerism	39	6	4	49
Education/Awareness	37	16	14	67
Emissions & Transportation	33	1	3	37
Energy: Conservation/Alternative	108	27	20	155
Exploitation of Natural Resources	39	10	10	59
Food	36	8	13	57
Government & Policy	n/a	10	21	41
Population Growth	27	6	4	37
Recycling/Waste	73	2	11	86
Sustainable Architecture	27	4	8	39
Water	49	18	12	79

# VI. Recycling Tips

	How to prepare paper to be recycled:
1	When recycling paper, separate out white paper, mixed paper, and cardboard. Then place the items in their appropriate recycling bins. See below for a list of what falls in which category! (Includes examples for each category)
	How to prepare plastics to be recycled:
2	Did you know? The energy saved from recycling one plastic bottle will power a 60 watt light bulb for 6 hours?
	Plastics include water bottles, many food containers, and even milk cartons. Be sure to check the individual items themselves to make sure they are recyclable. If possible, empty and rinse all containers and bottles before recycling them. Also, remove all caps, which should be thrown away. Then, just add the bottles to the bin!
	How to prepare aluminum to be recycled:
3	Did you know? The aluminum Americans throw away each year is enough to provide the auto industry with all the material it needs to build a year's worth of new cars.
	Aluminum means anything from soda cans to tomato and tuna cans to kitchen foil. No need to remove the labels.  Just rinse the cans and toss them in the recycling bin! Charlottesville recycling centers accept aluminum, but to find out if your hometown recycling center accepts aluminum, check recycle-steel.org.
	To increase sustainable recycling, buy aluminum items instead of plastic when possible!
4	Although both materials can be recycled, the majority of plactic is "downeycled," meaning it is made into a lower
	Although both materials can be recycled, the majority of plastic is "downcycled," meaning it is made into a lower grade material instead of being recycled into its original use (i.e. as a water bottle again). Aluminum, on the other

	hand, is not downcycled and can be recycled into high quality materials indefinitely. In essence, aluminum is more sustainable than plastic!
	Sustainable than plastic:
5	Need new school supplies or getting rid of old ones? Check out the R.O.S.E. program at U.Va. which collects gently or never used office supplies and distributes these materials to anyone who wants them. The R.O.S.E. store is located in the Recycling building at the end of Leake Drive and is open Monday-Friday 8:00-3:00. Contact: UVa Recycling at (434) 982-5050
6	Sustainable Shopper: Buy reusable items. Disposable items are cheaper up front, but the costs add up quickly when item is regularly purchased. A travel-to-go mug saves money and reduces styrofoam use. Look for discounts in coffee shops on grounds for using your own mug!
7	Sustainable Shopper: Buy in bulk. When purchasing items of regular use, reduce the excess packaging of individually wrapped items by finding the product in bulk packaging.
8	"Green Party" Hosting a party? Going to one? Remember that most party supplies can be and should be recycled in the corresponding recycle bins. Here on campus that implies "Mixed Paper" and "Plastics, Metal and Glass."
	Recyclable:
	Aluminum and Glass Beverage Containers
	Cardboard Cases/Packaging Red Solo Cups
	How "To-Go" Green- The to-go containers, available at most dining halls, are compostable but NOT recyclable.
9	Students, however, can go an extra step and borrow re-usable containers, available at your dining hall. For \$5 you
	receive to key tags that are exchangable for to-go containers. When you finish with a container bring it back and get
	either a new one or another tag to be exchanged at a later date. At the end of the year, you'll receive your \$5 deposit as long as you haven't lost/damaged any of the containers.
	Set the Date! Every year 'America Recycles Day' takes place on Nov. 15th. U.Va. sponsors a variety of recycle-
10	themed events including a dumpster dive, display of recycled art, the "CAN You Guess Competition and more. So
	come on out, participate and learn about recycling and its benefits while celebrating the many ways we can all make
	a difference! According to Mother Nature Network, 79 million tons of waste are diverted each year from landfills through recycling and composting! Lets keep that number growing by recycling ourselves and supporting educational
	and interactive events like this one!
	Eco-fashion: According to BBC, each American throws away about 68 lbs of clothing and textiles each year (see
11	http://www.bbc.co.uk/bloom/actions/clothingcare.shtml). Reduce this number by donating your clothes to thrift shops
	and purchasing second hand clothes or clothes that have been made from recycled materials. The U.Va. Bookstore
	offers a variety of accessories made from reused materials and some major outlets, such as American Eagle, sport a seasonal line of eco-friendly clothing.

# VII. Photo Record of the Tabling Process









