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Crafting a Campus Sustainability Action Plan: A Grassroots Approach

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Description

In recent decades, colleges and universities have taken a leadership role in developing institution-based Sustainability Action Plans (SAPs). A SAP includes a summation of past achievements, current initiatives, and the prioritized goals and implementation strategies for future action in terms of promoting environmental sustainability. These plans can also serve as pedagogical devices that teach students, staff and faculty important lessons of intentional living, global citizenship, and environmental responsibility. While many plans are adopted as top-down initiatives, there is great value in finding ways to engage the entire campus community in such endeavors at the grassroots level. This project documents a ground-up approach to developing a SAP at Gettysburg College, a liberal arts institution in Pennsylvania. Consisting of three phases, the project began with an assessment of current sustainability accomplishments as detailed in ASHE's Sustainability Tracking and Rating System (STARS) data base. The second stage included an investigation of recent SAPs adopted by peer institutions and work by the college's Sustainability Advisory Committee, President's Office and student groups to develop and implement a campus survey on potential sustainability priorities. Finally, a series of focus groups consisting of various campus constituencies provided input for crafting a final draft SAP, which was then offered to the campus community for a second round of review. This bottom-up approach helped to cultivate grassroots ownership of the resulting SAP, leading to a greater likelihood of successful implementation. This project may serve as a useful model for other liberal arts institutions.

Location

CUB Ballroom

Disciplines

Environmental Education | Environmental Health and Protection | Environmental Sciences | Environmental Studies | Natural Resources Management and Policy | Sustainability

Comments

Environmental Studies Senior Honors Thesis

This poster was presented at the [2016 American Association of Geographers' Annual Meeting](#) in San Francisco, CA, March 29 - April 2, 2016.

Crafting a Sustainability Action Plan: A Grassroots Approach

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Sustainability
at Gettysburg College



Introduction

In recent decades, colleges and universities have taken a leadership role in developing institution-based Sustainability Action Plans (SAPs). A SAP includes a summation of past achievements, current initiatives, and the prioritized goals and implementation strategies for future action in terms of promoting environmental sustainability. Such plans can serve as essential tools for students, faculty and staff to foster positive behaviors of local and global citizenship through intentional living and environmental stewardship. Additionally, SAPs can serve to better the academic curriculum, support student-faculty research, improve the aesthetic value and ecological health of campus grounds, and contribute to the institutions' prestige and financial standing. While many plans are adopted as top-down initiatives, there is great value in finding ways to engage the entire campus community in such endeavors at the grassroots level. This project documents a ground-up approach to developing a SAP at Gettysburg College, a liberal arts institution in Pennsylvania.

Methods

Phase 1

The process consisted of four phases. In the first phase, we gathered information on the procedures involved in crafting a campus Sustainability Action Plan. A workshop sponsored by the Pennsylvania Environmental Research Consortium (PERC) offered a starting point. This was followed by a comparative assessment of SAPs and Climate Action Plans developed by peer liberal arts institutions and a series of informal interviews conducted with campus sustainability coordinators responsible for supervising the creation or implementing of the plans. The schools examined included Dickinson College, Swarthmore College, Bucknell University, Wilson College, Lehigh University, and Franklin & Marshall College.

Phase 2

In the second phase, we examined the current status of Gettysburg College in terms of sustainable actions and policies in order to identify areas of strength as well as those in need of improvement (Henson 2007). The Gettysburg College Sustainability Tracking Assessment and Rating System (STARS) report provided a comprehensive list of information for this purpose. The data was then summarized and formatted into a reader-friendly brochure and presented to key constituencies of the Gettysburg College community for feedback. These included the Campus Sustainability Advisory Committee, Student Senate, various student clubs, and high-level administrators including the President. The final product was disseminated to the Gettysburg campus community in order to increase awareness and general knowledge about sustainability issues and actions, with the goal of improving the quality of campus input into the process of crafting the SAP.

Phase 3

The third phase consisted of engaging the campus community in constructive discussions of past sustainability achievements, current initiatives, and future goals (El-Mogazi 2005). The key components of this phase included a campus-wide survey and a series of focus-group meetings. Organized according to the ten thematic categories developed in the sustainability brochure, the survey included a series of sustainability policies and goals for each theme and asked campus community members to rank them in terms of prioritization. The survey consisted of 54 topical questions measured using a five-point Likert scale. It also included several demographic questions to discern campus constituency membership (e.g., student, faculty, or administration/staff). It was administered in person in using a representative random sampling method as well as through an online portal. In addition, five focus groups were held, one each for faculty and administration/staff and three for students. Attendance ranged between five and fifteen participants and allowed for in-depth discussion of the goals and proposed policies.

Phase 4

The fourth and final phase entailed synthesizing the survey and focus group results and translating them into a draft SAP document for Gettysburg College. The draft document is composed of an executive summary, a brief account of current achievements, the sustainability planning goals according to the priorities specified by the campus, and a list of sustainable strategies to reach these goals (Sustainability Planning Guiding Team, 2003). The resulting SAP will then be presented back to the campus community and Sustainability Advisory Committee for a second round of feedback and revision. Ultimately, the final document will be presented to the college president, the President's Council and Board of Trustees for formal approval. Given that the SAP is a "live" document, it will continually be revisited and revised over time by the campus community as it serves to direct future sustainability priorities and programs in accordance with the broader educational mission of Gettysburg College.

Results

The survey yielded 672 student responses from a total population of 2632, providing a 3.27% margin of error at the 95% confidence level. A total of 135 responses were collected from faculty, staff and administration (F/S/A) (total pop.=928), providing an 8% margin of error at the 95% confidence level. However, the majority of F/S/A respondents (113 of 135) were faculty.

The results show an overwhelming positive response to most of the sustainability actions and policies measured. To discern a measure of prioritization for each goal, frequency responses were calculated and are presented below. The goals or policies with the highest positive ratings for all groups (receiving "very important" or "somewhat important" scores) are shown in Figs. 1-2. In a similar fashion, goals and policies with the highest percentage of negative responses for all groups (e.g., "very unimportant" or "somewhat unimportant") are shown in Figs. 3-4. When considering the responses from all groups the most positive goal was to "improve awareness of existing sustainability efforts" while the most negative response was to "implement trayless".

Differences in prioritization by different campus constituencies was also measured (Figs. 5-7). The most positive goal for students was to "increase campus composting and its use" while the most negative response was to "implement trayless dining." For Faculty, Staff and Administration the most positive goal was to "improve awareness of existing sustainability efforts" while the most negative response was to "hire a sustainability coordinator."

Table 1. Goals from survey which received the highest and lowest responses within each category

	Positive Responses			Negative Responses		
	Students	F/S/A	Campus	Students	F/S/A	Campus
Academics	Improve Existing Sustainability Awareness	Increase Env. Education opportunities for Faculty and Staff	Improve Existing Sustainability Awareness	Incorporate Sustainability in Greek Life		
Building	'Greening' of living spaces	Create Policy for new construction and upgrades	'Greening' of living spaces	List of preferred products /materials for construction/ maintenance	Create Policy for new construction and upgrades	List of preferred products /materials for construction/ maintenance
Food System	Quantify Food Management			Trayless Dining at SERVO		
Energy	Set goal for % renewable energy on campus	Create Energy Plan		Create Baseline for buildings energy consumption		
Grounds	Reduce Env. impacts of grounds maintenance			Create Landscape Management Plan		
Purchasing	Educate campus on sustainable procurement practices			Educate campus on sustainable procurement practices	Establish % of purchases with sustainable standard	
Transportation	Reduce fossil fuels in campus fleet			Reduce fossil fuels in community travel		
Waste	Increase composting	RRR building materials from construction	Increase composting	Achieve Zero solid waste in dining services		
Water	Reduce water bottles	Create efficient Temperature	Reduce water bottles	Create efficient Temperature	No water-intensive procurements	Create efficient Temperature
Governance	Invest in green, environmentally sound and socially just options			Hire a Sustainability Coordinator		

Table 2. Percentage approval of Goals from survey which received the highest and lowest responses within each category

	Positive Responses (%)			Negative Responses (%)		
	Students	F/S/A	Campus	Students	F/S/A	Campus
Academics	88.1	92.6	88.8	6.8	7.4	7.0
Building	88.3	91.8	88.5	4.0	5.2	4.0
Food System	87.0	87.3	87.0	28.0	11.2	25.4
Energy	88.2	89.6	87.7	3.3	7.5	3.9
Grounds	81.8	80.6	81.7	5.4	5.3	5.5
Purchasing	79.0	82.8	79.7	4.7	8.3	5.0
Transportation	84.5	80.5	84.0	5.3	7.5	5.7
Waste	88.5	88.8	88.6	6.0	7.5	6.3
Water	84.8	87.4	85.0	5.4	6.7	5.3
Governance	80.3	64.7	77.8	13.5	31.3	16.3

Table 3. Calculations on overall percent positive and negative responses per class

	Students	F/S/A	Campus	Students	F/S/A	Campus
Average	80.9	79	80.6	4.7	6	5
Median	82.7	81	82.8	3.4	5.2	3.8

By far the most amount of disagreement between the different groups were expressed within two goals: "Implementing trayless dining" and "Hiring a sustainability coordinator" (Table 2). Overall there was higher average positive responses from the students at 80.9% than the faculty, staff and administration at 79% (Table 2). Yet faculty staff and administration had some of the most positive responses they also had a wider range, from the highest being 92.6% and the lowest at 64.7% (Table 3).

Focus group data largely confirmed the survey findings. The most important priorities noted a need for more education and awareness of the sustainability occurring on campus to increase enthusiasm for more efforts. In every group we discussed the importance of having a sustainability coordinator and made clear how necessary that position would be to achieve much of the SAP. Most suggestions were specific ideas such as adding motion sensor lighting and reduce printing. By combining the survey and focus group data with the Gettysburg College STARS and Sustainability Report, we crafted an initial draft of the Sustainability Action Plan.(Figure 4).

Model Positive Responses

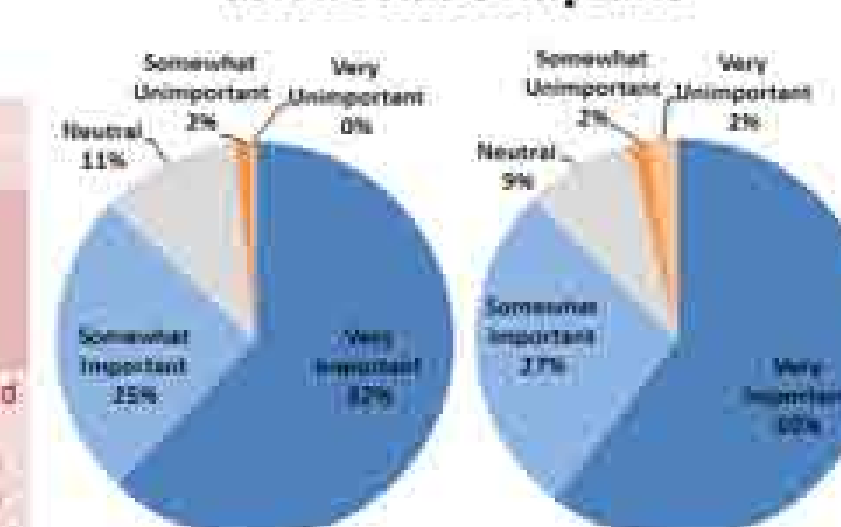


Figure 1. Student Response to Quantify Food Management

Model Negative Responses

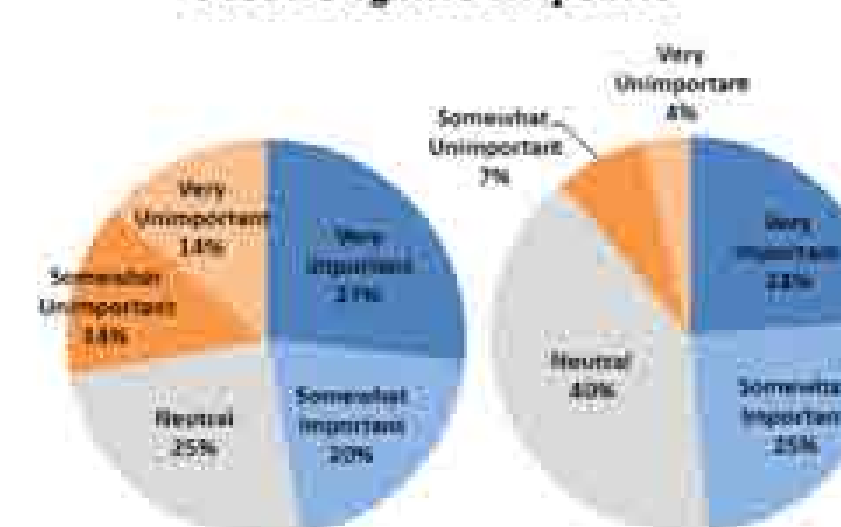


Figure 3. Student Response to Trayless Dining

Model Varied Responses: Hiring a Sustainability Coordinator

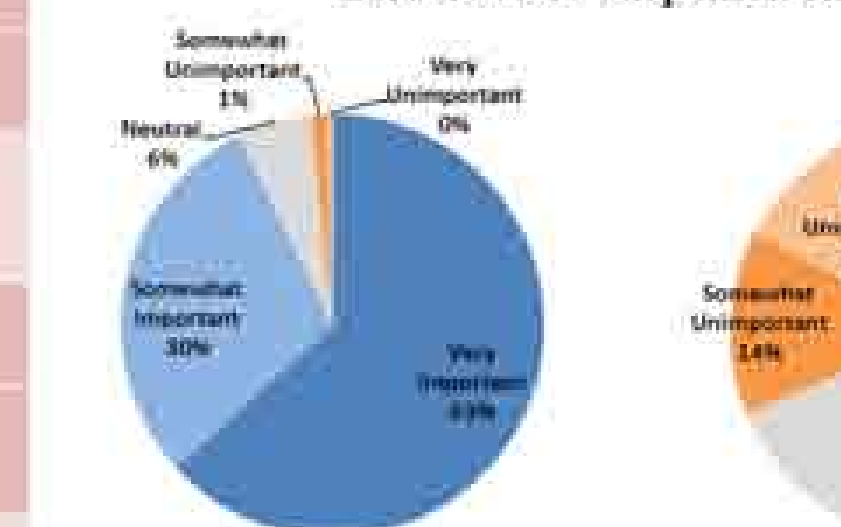


Figure 5. Student Response to Hiring a Sustainability Coordinator

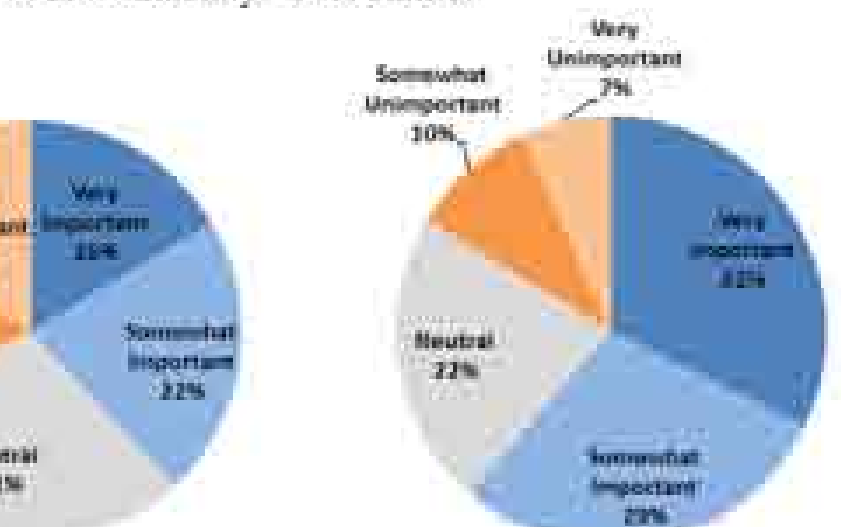
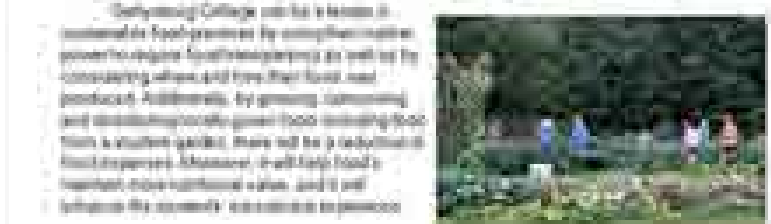


Figure 7. Campus Response to Hiring a Sustainability Coordinator

FOOD SYSTEMS

Introduction

Gettysburg College has already made some progress in creating a sustainable food system. Currently, about 80% of food and beverage purchases are local and compostable and only 10% of animal products are sustainably produced. Some of the food system goals include: create a food system that is sustainable, healthy, and affordable; create a food system that is sustainable, healthy, and affordable; create a food system that is sustainable, healthy, and affordable.



Sample Pages from Sustainability Action Plan

Current and Proposed Efforts

Gettysburg College has already made some progress in creating a sustainable food system. Currently, about 80% of food and beverage purchases are local and compostable and only 10% of animal products are sustainably produced. Some of the food system goals include: create a food system that is sustainable, healthy, and affordable; create a food system that is sustainable, healthy, and affordable; create a food system that is sustainable, healthy, and affordable.

Goals	Objectives
Quantify Food Management	Develop a comprehensive and detailed food system plan that includes a baseline assessment of current food system practices and identifies opportunities for improvement.
Improve Sustainability of Food System	Develop a food system plan that includes a baseline assessment of current food system practices and identifies opportunities for improvement.
Increase Awareness of Sustainability Efforts	Develop a food system plan that includes a baseline assessment of current food system practices and identifies opportunities for improvement.

Conclusions

The grass-roots approach to developing a campus Sustainability Action Plan documented here, at Gettysburg College has provided critical information pertinent to developing and implementing a successful SAP for Gettysburg College. While feedback was overwhelmingly positive for most of the goals and policies presented, the process provided clear guidance in terms of which goals are highly prioritized and which goals require additional education and community discussion. Perhaps most importantly, it identifies topical areas in which there is a difference of perspective between different campus constituencies (e.g., students versus faculty, administration or staff). This provides valuable guidance for next steps. The grass-roots approach also provided a valuable learning opportunity for community members about past and current initiatives. Many were simply not aware of what the college has done so far in terms of achieving sustainability goals and learned about them for the first time through this process. Going forward, the process of engaging with the campus community will also yield a sense of ownership in the SAP which will translate into greater legitimacy and support for plan implementation (Simpson, 2009).

The results also suggest there is more work to be done in terms of providing a deeper level of understanding with regards to the costs and benefits of various initiatives. For example, it is possible that the resounding positive feedback for many sustainability goals from students reflect a lack of knowledge on costs and benefits. Most mixed responses from students occurred over questions where they identified a potentially negative impact (e.g., smaller meals if a trayless dining option were to be implemented, impacts to Greek life or higher fees, see Alher et. al. 2016). While this impact may be much less pronounced that perceived, or even non-existent, the survey responses suggest more education is needed to clarify the pros and cons of particular goals and policies. A similar observation may be made for the lack of administrative support for hiring a sustainability coordinator. While this position will require an initial financial cost, there is strong agreement among most institutions of higher learning that the benefits of this position over time more than cover the costs. Moreover, not all benefits are easily quantified in financial terms, but render positive returns in the form of education, aesthetics and environmental health. Nonetheless, findings suggest that clear evidence still needs to be presented to the campus community to make this case for several topics. This will help in the delineation of more precise short-term, intermediate and long-term goals, as well in cultivation of support for implementation.

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