

Establishing an SU Office of Sustainability

Contributors

Environmental Studies Capstone Class of 2015

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Executive Summary

Institutions of Higher Education (IHEs), along with many other aspects of society are becoming increasingly aware of the importance of sustainability. Southwestern has faced barriers to institutionalizing sustainability on a campus-wide scale and has addressed this issue through a number of administrative and student-led initiatives. This proposal addresses both the *why* and the *how* of creating and implementing an Office of Sustainability on campus.

The research revealed an important pattern among IHEs. Colleges and Universities all over North America and abroad are prioritizing sustainability. IHEs frequently have significant carbon footprints, and universities should be responsible for reducing that footprint however possible. The primary institutional benefits include: reducing environmental impact, enhancing a reputation of high ethical standards, improving community relations, and attracting donors. There are obstacles in implementing projects, namely institutional divisions and fiscal challenges (Merkel & Litten, 2007). However, Southwestern's interdisciplinary focus can help to address institutional division, while a successful Office of Sustainability will more than alleviate financial concerns.

Undertaking this project gives Southwestern an opportunity to become a leader among its peers. The university's core values and mission statement both strongly align with the goals of this proposal, as it will empower students by cultivating their personal and professional skills as well as promote sustainability initiatives and activism in pursuit of justice and the common good. While Southwestern has enjoyed a great deal of momentum from students, staff, and faculty, the lack of centralized administrative support has lead to projects that are often limited and disjointed. Creating an Office of Sustainability would address this and other challenges to reaching our potential.

The implementation of this position into the school's organizational structure will follow a five-year plan that starts with an academic internship and finishes with a final proposal petitioning the university for an official sustainability position. Each step in the implementation process is contingent on the success of the previous step and the appropriation of adequate funding. This proposal outlines the necessary steps leading to the establishment of an Office of Sustainability either housed in the Office of Civic Engagement or the Environmental Studies Program. Funding for this program could be drawn from multiple sources, and is expected to be comprised of a combination of external grants, donations, the Green Fund, cost savings from energy/water efficiency renovations, and university contributions.



Introduction

Sustainability has become critical to multiple facets of society, including government, business, and education. In response, Institutions of Higher Education (IHEs) are promoting environmental awareness in order to demonstrate and strengthen existing values, and also to remain competitive among peer institutions (Merkel & Litten, 2007; McNamara, 2008). Southwestern is no exception. Led by an active and engaged student body. Southwestern has implemented dozens of sustainability initiatives across campus intended to reduce our ecological footprint and promote the health and well being of our campus community. On an institutional level, Southwestern is a signatory on the ACU President's Climate Commitment, the Talloires Declaration, and has committed to powering the campus with 100% renewable energy. Most recently Southwestern has joined the Association for the Advancement of Sustainability in Higher Education (AASHE), and has begun AASHE's Sustainability Tracking, Assessment and Rating SystemTM (STARS). In recent years, Southwestern has received national recognition for its commitment to sustainability. However, these efforts are largely maintained by a handful of students, faculty, and staff, and those individuals are struggling to maintain this momentum without the help of personnel specifically devoted to the support and furthering of sustainability initiatives. Across North America, IHEs have maintained their sustainability initiatives through the establishment of an Office of Sustainability, and this proposal supports the creation of such a position here at Southwestern.

The establishment of an Office of Sustainability has the potential to benefit Southwestern University on multiple levels, and is adaptable to the institution's current mission and core values. The office would promote campus-wide initiatives to reduce our carbon footprint, create a greater awareness of the environmental issues, and promote synergy between social justice issues, environmental issues, and sustainable financial planning. Financial sustainability, in itself, is incentive enough for many institutions. In 2010, there were over 29 energy overhauls at U.S. universities that will potentially create up to \$50 million in savings over the next 10 years (Bridgestock, 2012). Middlebury College alone "has completed 62 efficiency projects costing \$1.7 million, saving nearly \$500,000 per year and reducing demand by 3.4 million kilowatt hours per year" (Princeton Review, 2015, p. 7). Issues of sustainability introduce a broad mandate, however. In addition to financial benefits, an Office of Sustainability will have the ability to coordinate efforts throughout campus that would promote diversity, inclusion, environmental awareness, social justice, and community engagement.

This proposal outlines the background, benefits, and logistical details for creating an Office of Sustainability at Southwestern University. Drawing from primary and secondary research conducted over the course of the semester, we have developed two possible models for such an office. The first model creates a Sustainability Coordinator in the Office of Civic Engagement, and the second model places this position in the Environmental Studies Program. Both suggest a five year implementation plan that evolves based upon the continued success and financial support generated by each stage in the process.



Sustainability at Southwestern

The push for sustainability is a relatively recent development at Southwestern University, having emerged largely from engaged members of the Environmental Studies Program, Students for Activism and Environmental Knowledge (SEAK), and the Talloires Sustainability Committee. Together, students, faculty, and staff from these groups have launched numerous campus-wide initiatives. The majority of these projects originated with an inspired student or group of students who turned to faculty or staff for advice and supervision. Some of these projects include:

1. Garden Improvements

- Operating an on-campus greenhouse
- Aquaponics growing system in the greenhouse
- A community garden that supplies food to community organizations
- Rainwater collection for watering the garden
- Maintaining a Chimney Swift tower habitat

2. Infrastructure

- Electric car charging station
- Single stream recycling
- Dyson Airblades in the McCombs Campus Center bathroom
- LEEDs certified buildings
- LED lights in outdoor lamp posts and the black box theater
- Low-flush toilets and urinals in several buildings
- Low flow showerheads in residence halls
- Solar panels for Heather Hall
- Solar recreational chairs around campus
- Solar water heater at the Phi Delta Theta fraternity house
- Water bottle refill stations to reduce plastic water bottle consumption









- AASHE membership for access to metrics systems
- Meatless Monday policy in the Commons
- Attaining 100% wind power
- 6% of academic courses integrated sustainability themes
- Green fund to offer financial support to projects
- Trayless dining services

4. Practices

- All printer paper is 100% post consumer
- Collecting plastic bags for responsible disposal
- Composting 100% of food waste industrially or on site
- Green cleaning supplies are used by maintenance
- Native plant species and xeriscaping
- Reuse, trade and recycle theater costumes
- The SU shuttle provides a free carpooling opportunity
- The use of electric golf carts and two electric car charging stations

5. Ongoing Projects

- Construction of the GeoDome in the SU Garden
- Filling out the STARS application to receive recognition
- Increasing the amount of sustainable food in the cafeteria
- Installing solar panels on the top of the Greenhouse
- Retrofitting the Robertson Center lighting to consume less energy
- Stopping all university purchasing of plastic non reusable water bottles
- Analysis of the environmental impacts of SU study abroad.



Literature Review

Sustainability can be broken down into three main pillars: environmental, economic, and social. Environmental consciousness strives to regulate the amount of resources consumed. Economic feasibility aims to optimize resource use. Social equity intends to create equality (Merkel & Litten, 2007). Sustainability in higher education works to inform current environmental issues, develop sustainable facilities, and encourage research and policy development (Aber, Kelly, & Mallory, 2009; Merkel & Litten, 2007; McNamara, 2008).

Environmental sustainability has recently become a central focus for most colleges and universities (McNamara, 2008; Merkel & Litten, 2007). AASHE as well as other entities call on academic institutions to strive towards, "sustainable physical operations, sustainable academic research, environmental literacy, ethical and moral responsibility, cooperation amongst universities and countries, the development of interdisciplinary curriculum, partnerships with government, non-governmental organizations and industry, and public outreach" (Wright, 2002, p. 11). As a result, IHEs have become crucial to developing 'living laboratories' and leading sustainability initiatives (Env. Studies Capstone, 2014). The National Council for Science and the Environment released the Recommendations for Education for a Sustainable and Secure Future in 2003, encouraging IHEs to become more sustainable because institutions are "uniquely positioned to help solve the challenges of environmental, social, and economic sustainability through innovations in teaching" (p. 5).

Benefits of Implementing an Office of Sustainability

Over 275 Offices of Sustainability have been established in North America (Kerr & Hart-Steffes, 2012). Either creating an Office of Sustainability or hiring a Director of Sustainability has been credited with legitimizing the advocacy and implementation of successful initiatives on campuses nationwide, with Sustainability Directors being called the "keystone of any campus sustainability program" (Bartlett & Chase, 2004; Carlson, 2009; McNamara, 2008).

Institutional benefits of sustainability initiatives include establishing a reputation of high ethical standards, ensuring regulatory compliance, enhancing community relations, increasing possible student and government funds, and attracting private donors that are focused on sustainability (Merkel & Litten, 2007). Colleges and universities that have established successful sustainability plans have incorporated all three pillars of sustainability into their strategic vision (White, 2014). Brown and Hamburger (2012) argue that sustainability needs to be a widespread and deeply ingrained aspect of the university's operations and inner workings, including "mission statements, campus master plans, annual planning documents, dining, and curriculum" to facilitate a culture of sustainability (p. 95). Additionally, students, faculty, and staff must engage with "sustainability principles" (Brown and Hamburger, 2012, p. 95). Yale's former Director of Sustainability states that a shift towards a more integrated sustainability program "will only be as successful as the commitment is to being an ongoing process of continuous improvement, learning and systemic reform" (2007, p.75). Consequently, a



successful shift in thinking and management will prepare institutions "for the change in culture driven by sustainability principles while ensuring organizational stability" (2007, p.75).

Challenges of Implementation

The efforts of other IHEs have revealed many obstacles when attempting to institutionalize sustainability. Southwestern University will face two main challenges: institutional division and fiscal challenges (Brown & Hamburger, 2012). IHEs must confront division within their organizational structure. The university should strive to collaborate and compartmentalize between divisions to maintain an "interdisciplinary exchange," which is essential to create a single coherent campus vision (Brown & Hamburger, 2012, p. 85). Sustainability at Southwestern University needs both top-down and bottom-up support to ensure that dissimilar groups can interact without friction or stagnation (Beringer, 2007; White, 2014).

Financial difficulty is another barrier for many small schools. IHEs are significantly cutting back on administrative positions and special programs, while increasing tuition. However, IHEs have continued with sustainability goals even during hiring freezes and cutbacks (Carlson, 2009). The cost of creating an administrative position can be offset by the ability of a university to utilize grants, budgets, and special funds (Bartlett & Chase, 2004).



Establishing an Office of Sustainability

Justification

Institutionalizing sustainability at Southwestern University will allow the institution to adapt to the current societal focus on sustainability and remain competitive with peer institutions. There are several ACS peer institutions that are making strides towards sustainability. For example, five of these universities (Centre College, Trinity University, Sewanee University of the South, Davidson College, and Richmond University) are members of AASHE. Several of these universities have established an Office of Sustainability, including Davidson, Furman, Morehouse, Sewanee, and Richmond. Furthermore, Sewanee and Richmond have a Silver STARS rating, and Furman has a Gold STARS rating.

Southwestern University has the opportunity to become a leader among peer IHEs (McNamara, 2008; Merkel & Litten, 2007). Sustainability initiatives will allow Southwestern to remain a competitor in higher education, as demonstrated by Princeton Review's 2014 Survey of "College Hopes and Worries", which states that 61% of students and 60% of parents were "strongly, very much, or somewhat" influenced by a college's commitment to environmental issues when making their decision to apply to or attend a university (Princeton Review, 2014).

Southwestern University's core purpose is to "foster a liberal arts community whose values and actions encourage contributions toward the well-being of humanity" (2015). In the mission statement, the university states that it is "committed to an undergraduate liberal arts education that [is involved] in both the study of and participation in significant aspects of our cultural heritage" (2015). The mission statement calls for students to take responsibility for the welfare of society, and sustainability is an essential part of social consciousness. Southwestern University has the opportunity to create a culture of sustainability on campus. Consequently, initiatives promoting sustainability will align actions with ethics and values. Our institutional history is shaped by the changes that we make today. The creation of an Office of Sustainability will further promote and maintain sustainability initiatives on campus while strengthening Southwestern University's core values and mission statement.

Additionally, Southwestern University's mission statement is dedicated to "cultivating the qualities and skills which make for personal and professional effectiveness" (2015). As sustainability is incorporated into the core values of both public and privately run organizations, students who have experience with the office will be increasingly more desirable to employers. The Office of Sustainability will be uniquely positioned to increase student opportunities with research, policy development, and application while simultaneously upholding and strengthening Southwestern University's mission (Merkel & Litten, 2007). An Office of Sustainability will also allow Southwestern University to provide emerging leaders with the skills and experience needed to critically evaluate societal and environmental issues. Although students learn about theory in class, they are not always given the chance to apply this knowledge. An Office



of Sustainability that includes internship positions would give students the opportunity to practically apply the skills and knowledge in the field of sustainability (Merkel & Litten, 2007).

Without institutional support, especially at an administrative level, sustainable initiatives at universities are severely limited (Brown & Hamburger, 2012; McNamara, 2008; Moore et al., 2005). Currently, students and student organizations are the primary drivers for sustainable initiatives on campus, while faculty and staff participate outside of their usual duties. Although students have implemented incredible sustainability initiatives over the years, Southwestern would significantly benefit from the oversight of an Office of Sustainability. The establishment of an Office of Sustainability would centralize all sustainability efforts, internalize our institutional memory, maintain student projects after their graduation, and facilitate communication between students, faculty, and staff who are interested in sustainability.

Finance

Although there is a steep initial cost to institutionalizing sustainability, the long-term financial benefits of creating an Office are undeniable. There are many costs associated with maintaining a functioning campus which include inefficient landscaping, energy usage, facilities, recycling, dining practices, housekeeping, and other campus systems. If the university adopts sustainable practices these hidden costs can be mitigated. It is imperative to quantify these hidden costs, because it allows IHEs to make informed financial decisions about what systems, programs, and initiatives are viable. An Office of Sustainability would give the university the necessary resources to make its facilities and practices transparent, ultimately making invisible costs visible (Carlson, 2006).

Ongoing financial stability is integral to the fiscal health of an IHE. A major responsibility of the Office of Sustainability is evaluating campus operations and restructuring inefficient systems to be more sustainable. The lack of an administrative leader creates inefficiency in the development and execution of projects. Ultimately, a centralized approach under a single office will increase the number of projects undertaken, the efficiency of those projects, and the success rates of those projects. For example, Macalester College implemented an Office of Sustainability in 2008, and by 2011 the institution had saved \$1.4 million through initiatives such as updating the HV/AC in one building, using energy efficiently, and recycling rebates (Macalester College, 2011). Overall, an Office of Sustainability would strive to quantify and reduce hidden costs, acquire funding from external sources, and support and implement projects that provide positive returns on the school's investment.



Implementing an Office of Sustainability

Model #1 Office of Civic Engagement and Sustainability

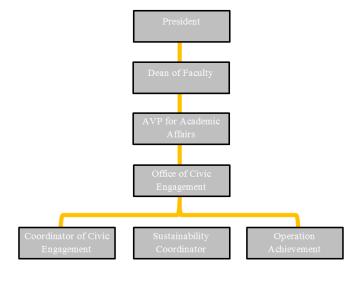
Summary

In this model, the Sustainability Coordinator would be housed in the Office of Civic Engagement to facilitate collaboration between them and the Director of Civic Engagement. The Office of Civic Engagement is currently coordinating and overseeing the campus garden's interns and is also working with volunteer organizations outside of Southwestern University. The Coordinator would need to be familiar with these activities and positions, and would work closely with Physical Plant, Dining Services, Bookstore, Risk Management & Safety, Human Resources, and Facilities/Campus Services.

Benefits and Drawbacks

- This position works directly with the Director of the Office of Civic Engagement and ensures that the two positions can separate responsibilities while still able to collaborate on issues such as events that require community outreach
- Allows for a close relationship with the SU community and organizations
- The ability to be able to communicate environmental, social, and civic ideas in an effective manner
- Requires a lower salary than Model #2
- This location would allow the Coordinator to have more of a connection with students, especially because the Office of Civic Engagement already has student workers and focuses on engagement of students.
- However, this would segregate the coordinator from the physical plant and facilities management team
- The person may lack the skills and experience to handle issues with facilities' problems
- Until the Sustainability Coordinator becomes a full-time staff position, the internship and post-grad positions would need a supervisor, which would place more responsibility on the individual

Organizational Placement





Model #2 Environmental Studies Department

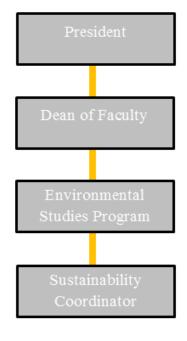
Summary

In this model, the Sustainability Coordinator would be a staff with faculty rank position in the Environmental Studies Program. Although this is a different placement they would have the same responsibilities of the previous model with the addition of being a chair of the Sustainability Committee.

Benefits and Drawbacks

- Work closely with faculty department and the Sustainability Committee
- Position would have educational experience with Environmental Studies issues
- Likely to have more interactions with students
- Position will lack interaction with physical plant
- No current existing office for the position to be absorbed into
- Until the Sustainability Coordinator becomes a full-time staff position, the internship and post-grad positions would need a supervisor, which would place more responsibility on the individual
- More expensive option because staff with faculty rank position requires a higher salary

Organizational Placement:





Implementation Plan over Five Years

Model 1

Step One: Academic internship with

Office of Civic Engagement
Step Two: Post-graduate position
Step Three: Post-doctoral position
Step Four: Sustainability Coordinator
Step Five: Staff with faculty rank

Model 2

Step One: Academic internship with Environmental Studies Program
Step Two: Post-graduate position
Step Three: Post-doctoral position
Step Four: Sustainability Coordinator
Step Five: Staff with faculty rank

AY 2016-2017: Sustainability Coordinator Internship

This position is available to Southwestern University students that have a passion for achieving campus sustainability. Applicants for this position must be well organized, self-motivated, and able to effectively communicate results and questions. Previous research and data analysis experience is preferred. Effective communication skills and the ability to write in a professional and academic manner are necessary to complete daily tasks. One of the primary roles of this position is to collect data on the sustainability of Southwestern. After collection, data must be assessed and a recommendation about potential improvements should be made. The ability to facilitate cooperation between various offices and departments on campus is essential. The intern will function as a liaison between administration, faculty, and students for all matters of sustainability. This will include the development of professional relationships with many factions on campus. Additionally, skills pertaining to the maintenance and improvement of the Southwestern Sustainability website are preferred.



Advisor(s): Model 1: Dr. Sarah Brackmann

- Responsibilities
 - Data Collection
 - Report information
 - o Act as liaison
 - Grant writing
 - Attend conferences
 - Maintain website
- Position maintained through stipend, academic credit, or both

Advisor(s): Model 2: Joshua Long and Anwar Sounny-Siltine, professors of Environmental Studies

- Responsibilities
 - o Data Collection
 - Report information
 - Act as liaison
 - Grant writing
 - Attend conferences
 - Maintain website
- Position maintained through stipend, academic credit, or both

AY 2017-2019: Graduate Position

Applicants for this position should be recent graduates with a desire to work in the rapidly expanding field of sustainability. In addition to the responsibilities of the internship, this position would include roles beyond what is expected of an undergraduate student. Maintaining AASHE membership and finding ways to improve our STARS rating is an essential responsibility. Monitoring the health of the campus garden and coordinating garden-related activities is expected. Supervising new interns and assigning tasks will also fall under the purview of this position.

Applicants for this position should be recent graduates with a desire to work in the rapidly expanding field of sustainability. In addition to the responsibilities of the internship, this position would include roles beyond what is expected of an undergraduate student. Maintaining AASHE membership and finding ways to improve our STARS rating is an essential responsibility. Monitoring the health of the campus garden and coordinating garden-related activities is expected. Supervising new interns and assigning tasks will also fall under the purview of this position.

Important Tasks

- STARS
- Data Collection
- Report information
- Grant writing
- Act as liaison Sustainability Committee, Student Activities, Admissions, Garden, CDSJ, Paideia, Athletics,
- Coordinate Interns

AY 2019-2020: Full-time Staff Position

In addition to the responsibilities listed above for the internship and graduate position, a full-time staff position would have duties that are associated with the office or department in which it is eventually housed. The candidate for this position could be hired either internally or externally, but must have previous experience in sustainability work. Grant writing experience is also preferred.



Glossary

Associated Colleges of the South (ACS)

A consortium of sixteen liberal arts universities in the southern United States devoted to fostering collaboration in the liberal arts community.

Association for the Advancement of Sustainability in Higher Education (AASHE)

An organization of colleges and universities that are working to advance sustainability in higher education.

Cultural heritage

The legacy of physical artifacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations.

Energy efficiency

Providing the same level of service (e.g., lighting, indoor temperature) while using less energy.

Environmental literacy

To have a basic comprehension of environmental sustainability, natural capital, exponential growth, carrying capacity, environmental history, ecology, biodiversity, energy, resources, pollution prevention, waste reduction, ethics, economic and political systems.

Environmental stewardship

Having an ethical responsibility toward nature. Encouraging environmentally beneficial forms of economic growth in part by using energy and resources wisely.

HV/AC

Heating, ventilation, and air conditioning.

Institutional memory

A collective set of facts, concepts, experiences and know-how held by a group of people. Maintaining institutional memory requires the ongoing retention and transmission of this knowledge among current members of the group as well as an organized means of passing it on to future members.



Institution of Higher Education (IHE)

According to the 1998 Amendment to the Higher Education Act of 1965 an institution of higher education is any institution that:

- "(1) admits as regular students only persons having a certificate of graduation from a school providing secondary education, or the recognized equivalent of such a certificate:
- `(2) is legally authorized within such State to provide a program of education beyond secondary education;
- `(3) provides an educational program for which the institution awards a bachelor's degree or provides not less than a 2-year program that is acceptable for full credit toward such a degree;
- `(4) is a public or other nonprofit institution; and
- `(5) is accredited by a nationally recognized accrediting agency or association, or if not so accredited, is an institution that has been granted preaccreditation status by such an agency or association that has been recognized by the Secretary for the granting of preaccreditation status, and the Secretary has determined that there is satisfactory assurance that the institution will meet the accreditation standards of such an agency or association within a reasonable time" (Department of Higher Education)

Living laboratory

AASHE defines a living laboratory as a given place where problem-based teaching, research and applied work combine to develop actionable solutions that make that place more sustainable. These living labs accelerate transitions to a more sustainable place through joint commitments from students, faculty, staff and local residents to design, implement, adapt and teach new approaches that address issues of equity, economy and ecology.

Alternate description offered by STARS technical manual AC-8:

This credit recognizes institutions that utilize their infrastructure and operations as living environments for multidisciplinary learning, applied research and practical work that advances sustainability on campus. Students that actively participate in making their campuses more sustainable are well prepared to continue that work in their careers and communities after graduation.



Southwestern University Mission Statement

Southwestern University, under the auspices of the United Methodist Church, is committed to undergraduate liberal education involving both the study of and participation in significant aspects of our cultural heritage, expressed primarily through the arts, the sciences, the Institutions and the professions of society. As a teaching -learning community, Southwestern encourages rigorous inquiry and scholarship, creative teaching and the expression of free human life. The University seeks to involve the student in finding a personal and social direction for life, developing more sensitive methods of communication, cultivating those qualities

and skills which make for personal and professional effectiveness, and learning to think clearly and make relevant judgments and discriminations. (Officially adopted by the faculty and the Board of Trustees in 1972, amended in 2001, 2008 and 2011)

Sustainability Tracking, Assessment, and Rating System (STARS)

A transparent, self-supporting framework for created by AASHE for colleges and universities to measure their sustainability performance. Arguably the most comprehensive and widely respected university sustainability ranking system in the world.

Sustainability

To utilize components of social, cultural and biological diversity in a way and at a rate that does not lead to long-term decline, thereby maintaining the potential to meet the needs and aspirations of present and future generations.

University Sustainability Program (USP)

The USP is a grant program enacted as a part of the Higher Education Opportunity Act of 2008. Endorsed by over 240 colleges and universities, higher education associations, NGOs and corporations, this grant program will provide the catalyst for colleges and universities to develop and implement more programs and practices around the principles of sustainability. The bill also directs the Department of Education to convene a national summit of higher education sustainability experts, federal agency staff, and business leaders to identify best practices and opportunities for collaboration in sustainability. At the original intended authorization level of \$50 million, USP will annually support between 25 and 200 sustainability projects education institutions individual higher and higher education consortia/associations. (Adapted from the Campaign for Environmental Literacy website)



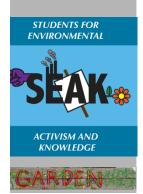
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Southwestern University



Environmental Studies Program

