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College and University Indicators

Abstract

Universities are different from other organizations given their power structure and educational mission. The attention to environmental sustainability is relatively new to these organizations and until recently, has resided in the operations of facilities. Several organizations are developing quality assessments with wider acceptance and new pressures to act environmentally responsible among colleges and universities. If the assessments adhere to certain principles and tie to the campus' strategy, they will influence campus stakeholders to create a more environmental sustainable organization.

Introduction

Universities are unique environments with a dual power structure between faculty and administration, students involved in parts of the functioning of a university's operations, a diversified curriculum and decentralized decision making. This uniqueness calls for assessments different from other types of organizations. Environmental sustainability is no exception.

Sustainability as a concern on campuses is relatively new. Some attention has been paid to the overall measurement of environmental activities on campus, especially as related to campus operations. Yet, much of the focus is has been for cost cutting on energy bills or for comparison

purposes trying to determine which university is the "greenest" or most environmentally responsible.

Important Agreements and Organizations Related to Universities and Their Commitment to a Sustainable Future

Universities have tried to organize uniform agreements around commitments to sustainability. For example, The Talloires Declaration (TD) was the first such attempt. It is a ten-point action plan for incorporating sustainability and environmental literacy in teaching, research, operations and outreach at colleges and universities. It was initiated in 1990 at an international conference in Talloires, France and has been signed by over 350 university presidents and chancellors in over 40 countries.

Second Nature, a nonprofit organization, works with higher education leaders to incorporate sustainability in the curriculum and student and faculty practices within colleges and universities. Second Nature was established in 1993 in Boston, MA. It is the primary supporter for the **American College and University Presidents' Climate Commitment (ACUPCC)**. The ACUPCC provides a framework and support for America's colleges and universities to implement comprehensive plans in pursuit of climate neutrality. The organization was officially unveiled in June 2007, and currently numbers 683 signatories to its commitment statement.

A partner with Second Nature, the **Association for the Advancement of Sustainability in Higher Education (AASHE)** was established in 2006 as the first professional higher education association for the campus sustainability community. AASHE works with all sectors of a campus integrating sustainability in campus governance, education, and research.

Other attempts to aid universities in their mission to become environmentally sustainable are The World Resources Institute: Greening business colleges, referred to as the BELL project, The Consortium for Environmental Education in Medicine, and the Association for University Leaders for a Sustainable Future.

Sustainability Measurement Systems Currently in Use

Despite these attempts, sustainability programs are still in their infancy at most universities. For example, many of the important university commitments are less than 10 years old as are the organizations listed in the previous section. Therefore, methodologies that measure sustainability have not been fully developed, as well.

The following shows several methodologies that illustrate the variety of approaches to measuring sustainability on college and university campuses.

Sustainability Tracking, Assessment & Rating System (STARS)

STARS is a new, relatively pervasive approach used in the United States. It is supported by the Association for the Advancement of Sustainability in Higher Education (ASSHE). STARS is a self-reporting tool that requires a university to collect information on a standard form that is submitted to AASHE who then assigns the university a quality rating. STARS is currently is use by over 250 colleges and universities (STARS Dashboard, 2011).

STARS has four analysis categories: education and research; operations; planning, administration, and engagement, and innovation. The ratings result in a designation of highest to lowest (Platinum, Gold, Silver and Bronze with one category entitled "STARS reporter" for those who

want to disclose information by not pursue a rating). These ratings are modeled after the LEED categories for buildings.

One of the benefits of STARS is that it allows universities to compare themselves to other universities and colleges and by the nature of this comparison, to discover best practices among all of the STARS members. However, one of the drawbacks is its self-report format and lack of significant adaptation to a particular organizational mission.

National Wildlife Federation's (NWF) State of the Campus Environment

The NWF issued reports based on the results of surveys sent to every university in the United States. The stated goal of the report was to "track trends and advance knowledge about environmental stewardship, sustainability activities and related curricular offerings in higher education" (NWF 2008, 1).

The survey contained assessments in three broad, overarching categories: management, academics, and operations which were then subdivided into sub-categories. The report provided enough information so that universities could compare their responses to other institutions and to determine best practices for becoming sustainable. Therefore, while this report was not individualized, it did provide some suggestions for how schools might improve.

The College Sustainability Report Card claims to be the only independent evaluation of campus and endowment sustainability activities at colleges and universities in the United States and Canada. In contrast to the academic focus on sustainability in research and teaching, the Report Card claims it examines colleges and universities, as institutions, through the lens of sustainability. The GreenReportCard.org website and the College Sustainability Report Card are both initiatives of the

Sustainable Endowments Institute. The Institute is a nonprofit organization engaged in research and education to advance sustainability in campus operations and endowment practices.

Sustainability Assessment Questionnaire (SAQ)

SAQ is a questionnaire supported by the University Leaders for a Sustainable Future (ULSF). Much like STARS, SAQ is a self-assessment process that allows universities to evaluate themselves. The goal of SAQ is two fold. First, it assesses a university's sustainability at a given point in time. Second, SAQ seeks to encourage discussion at the university about sustainability and further steps that may be taken to improve the overall university's sustainability.

Unlike some of the other assessment tools, SAQ divides its questionnaire into seven categories: curriculum; research and scholarship; operations; faculty and staff development and rewards; outreach and service; student opportunities; and institutional mission, structure, and planning. SAQ is not a quantitative approach to sustainability assessment, and it seems focused on fostering discussion in the university community. SAQ does not allow universities to compare themselves, and it offers little guidance on what next improvements universities can make.

Higher Education Funding Council for England's (HEFCE) Environmental Report and Workbook

In 1998, HEFCE surveyed six universities in England. The report was particularly good at providing benchmarking for universities against existing best practices, and the report was also careful to lay out the benefits that universities will receive should they choose to implement certain sustainability actions. This approach was particularly beneficial for guiding decision making for the individual universities.

On the other hand, there were some important issues that the assessment tool does not address. While several universities were discussed, there was no obvious method for other universities to assess themselves. Additionally, the process provided little guidance on future steps that should be taken by universities.

Environmental Management System Self- Assessment

This assessment tool was developed by the Global Environmental Management Initiative (GEMI) to cover a wide variety of organizations. The assessment tool was intended to meet draft international standards for environmental management systems put out by the International Organization for Standardization (ISO).

This assessment requires that the organizations score themselves on a scale from 0 to 2 in each subcategory, and the tool clearly lays out how points are awarded. It is broken into five categories, corresponding to parts of the ISO: commitment and policy, planning, implementation and operation, checking and corrective action, and management review. The tool also provides some suggestions for meeting certain criteria that are helpful but quite general. While this assessment tool is worthwhile and takes a global viewpoint, it does not look specifically at universities, so it fails to take into account important ideas such as coursework focused on sustainability.

Campus Sustainability Selected Indicators Snapshot and Guide

The Campus Sustainability Selected Indicators Snapshot and Guide is supported by the New Jersey Higher Education Partnership for Sustainability (NJHEPS), and it serves as another self-assessment tool. First, an organization answers a series of questions in several categories. Then the

organization rates itself on a scale from 1 to 7 in each of the categories and several subcategories. Further, the organization ranks the categories to indicate their importance to that particular university. Then the university provides further information on their most important category, and NJHEPS will work with the university to provide suggestions on that particular category.

The assessment tool covers solid waste, energy, water/sewage, transportation, indoor air quality, landscape, food service, new structures/renovations, procurement, and curriculum. This is a significantly different approach from many of the other assessment tools because it subdivides issues such as administration that are normally just given one larger heading. While there is some individualization and methods to compare, this is still largely a self-assessment, and its effectiveness depends on the honesty of the university with itself. Further, while there is follow-up and suggestions given, it is likely to focus on the universities top priority, not necessarily what would make the biggest difference to sustainability, and there is little information provided for the other categories.

What Makes for Effective Assessments

All of these methodologies have attempted to an elevate the conversation about sustainability and to provide some insights into campuses and their environmental sustainability. Yet, these measurements have lots of needed research before they are valid and reliable. Certain characteristics of an effective measurement system would be important to increase the usefulness of the methodologies and their levels of sophistication.

The information should cover topics and indicators that reflect the organization's significant economic, social and environmental outcomes and that substantively assess organizational practices from various perspectives. Thus, a quality assessment identifies its stakeholders and explains in the

report how it has responded to their reasonable expectations and interests. These assessments need to be complete enough so that they create a valid representation of the organization's state of sustainability.

Quality reports happen in a context and thus, are not divorced from the overall organization's strategy and its boundaries of operation. This component, of relating to the organization's strategy, is where most current assessment tools fail. Clarity, timeliness, balance (positive and negative commentary), and reliability are other important factors in quality assessments (Shriberg 2002:256–257; GRI, 2011).

In sum, each of these methodologies need much more rigorous analysis to accurately measure a campus's environmental sustainability. Also, most of the current assessment tools are insensitive to a college or university strategic direction.

The Baseline Assessment of Sustainable Environments (BASE™)System

The BASE™ is one tool that attempts to meet the criteria for effective assessments and is sensitive to an educational organization's strategy. In brief, BASE™ provides tools for assessing seven major areas within a university: strategy, environmental sustainability plans, education, research, operations, administration and finance, and social outcomes (Fogel, 2011). This new assessment tool is not for comparison among organizations – it is designed as a strategic tool to increase the competitiveness of the educational organization using environmental sustainability as the primary analytical lens. It attempts to build on previous tools, is organizationally adaptable and represents the latest sustainability research.

Conclusion

Universities are unique contexts yet powerful places for influencing the sustainability of our world. They can influence the future workforce, generate new knowledge and be models and facilitators for the communities in which they reside. They have the potential to act responsibly and to influence the behavior of other organizations. As sustainability assessments improve universities will have the potential to be models for other types of organizations and to increase their sophistication in become more sustainable.

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References and Further Reading

Devuyst, D. (2001). Introduction to sustainability assessment at the local level. In D. Devuyst (Ed.), *How green is the city? Sustainability assessment and the management of urban environments*. New York: Columbia University Press.

Everard, Mark, Johnston, Robèrt, Karl-Henrik, & Santillo, David. (2007). Reclaiming the definition of sustainability. *Environmental Science Pollution Resources International*, 14(1), 60–66.

Global Environmental Management Initiative. Environmental Management System Self-Assessment Checklist. (2000). Retrieved March 21, 2011, from http://www.gemi.org/resources/ISO_111.pdf.

Higher Education Funding Council for England. Environmental Report. (1998). Retrieved March 21, 2011, from http://www.hefce.ac.uk/pubs/hefce/1998/98_61.htm.

National Wildlife Federation. Campus Environment 2008: A National Report Card on Sustainability in Higher Education. (2008). Retrieved March 20, 2011, from http://www.aashe.org/files/documents/STARS/stars_1.1_technical_manual_final.pdf.

NJHEPS. Campus Sustainability Snapshot. Retrieved March 21, 2011, from http://www.njheps.org/assessment.htm.

Shriberg, Michael. (2002). Institutional assessment tools for sustainability in higher education: Strengths, weakness, and implications for practice and theory. *International Journal of Sustainability in Higher Education*, 3(3), 254–270.

STARS Sustainability Tracking & Rating System. Retrieved March 20, 2011, from https://stars.aashe.org/.

STARS Sustainability Tracking Assessment & Rating System Version 1.1 Technical Manual. (2011). Retrieved March 20, 2011, from http://www.aashe.org/files/documents/STARS/stars_1.1_technical_manual_final.pdf.

Sustainability Assessment Questionnaire. (2008). Retrieved March 20, 2011, from http://www.ulsf.org/programs_saq.html.