Walking the Eco-Talk Movement: Higher Education Institutions as Sustainability Incubators
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Abstract
Management scholars can have a major impact on advancing environmental sustainability by focusing on their own home institutions. A “four-type” sustainability action model is presented to foster thinking about how instructors can engage and empower students, faculty, and staff to be active environmental change agents on their own campuses and local community. Faculty can assign sustainability class projects, integrate sustainability throughout the Business School’s core curriculum, participate on a campus sustainability committee, and conduct research on sustainability in higher education that flows out of these activities. Some examples of these different types of efforts are offered based on experiences at Edgewood College, a small U.S. Midwestern college. A coordinated effort among faculty engaged in similar activities on other campuses would dramatically advance environmental sustainability.

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Introduction

What can management scholars do to help advance environmental sustainability? “Be the change you wish to see in the world,” inspirational words attributed to Mohandas Gandhi, are a good starting point for reflection.\(^1\) The “you” includes yourself, your students, your campus, and organizations in your community.

Higher education courses and campus operations can be sustainability incubators. Figure 1 provides a “four-type” sustainability action model to guide management instructors for engaging and empowering students, faculty, and staff to be sustainability change agents. The model categorizes sustainability change opportunities based on breadth of impacts (e.g., your own course to other business courses), and depth of impacts (e.g., sustainability in curriculum to campus sustainability).

The sustainability action model is intended to spur creative thinking. The cells are meant to be fluid, not static. An array of activities can be captured within each cell, and among the cells. Examples of the four types of sustainability actions contained in the model, and described in the following sections, are based on the authors’ experiences at Edgewood College, a small Midwestern liberal arts institution located in Madison, Wisconsin. Similar efforts are occurring on some other campuses, though much more needs to be done soon given global warming issues.

It is our hope that management faculty reading this essay can find their place within the model, and then expand the breadth and depth of their efforts. To paraphrase Arlo Guthrie’s “Alice’s Restaurant,” if management instructors at five higher education institutions perform these activities, others may think there’s an organization behind this, and if fifty, yes fifty,
instructors join in, people may think it’s a movement. A coordinated effort among faculty engaged in similar activities nationwide would dramatically advance environmental sustainability.

Type 1 – Assigning Sustainability Class Projects

Management scholars exert their most direct impact on the students they teach. Our Edgewood College courses have a service-learning component (Collins, 1996, 2006). Students learn by reflecting on their social conditions (Freire, 1970), and apply, analyze, synthesize, and evaluate the content being learned (Anderson & Krathwohl, 2001). Below are brief descriptions of sustainability class projects employed in five different undergraduate and graduate courses that can be adapted by other faculty for classroom use (Collins, 2008). The campus environmental performance and Eco-Olympics projects directly target campus sustainability, the environmental management change and best practices assessment projects target student employers, and the local environmental exemplars project targets the broader community.

**Campus Environmental Performance:** Students can make a positive environmental impact on campus through class projects that are aimed at performance improvements. Sophomore and juniors in an introductory “Management of Human Performance” class individually walk around the campus and develop a list of observed or experienced “good” and “bad” environmental practices. They then meet in teams, where they share their observations and assessments, commend best practices, critique weaknesses, choose one item the team (with administrative approval) can positively impact during the semester, and develop, implement, and assess the results of their action plan. Accomplishments include reducing the amount of printing
in student computer labs, marketing the cafeteria’s reusable mug discount policy, and enhancing the college’s recycling program.

_Eco-Olympics:_ Undergraduate students in a “Social Responsibility in Business” class learn environmental leadership skills by managing an Eco-Olympics where residence halls compete to reduce energy consumption. Heating and electricity consumption data is obtained for each of the six college residence halls for the three month period from mid-January through mid-April; the previous year’s three month performance serves as a benchmark. A student team assigned to each residence hall develops and implements multiple strategies for educating and inspiring occupants to reduce their heat and electricity consumption. Strategies include advertising how to be eco-friendly and creating a competition within the residence hall that rewards environmentally-friendly behavior. Each team also conducts a “Green Room Audit” to determine who has the most eco-friendly room. Awards are given to the residence hall with the greatest percentage decrease in heat and electricity consumption as compared to the benchmark.

_Environmental Management Change:_ Students in an MBA “Organization Behavior and Development” course enhance their employer’s environmental performance. Early in the semester, students assess their employers using “The Natural Step (TNS),” a four step analytical framework for conceptualizing an organization’s environmental impacts that focuses on reducing ecologically unsustainable practices (Nattrass & Altomare, 1999). Students highlight organizational strengths and weaknesses and develop strategies to address a “low hanging fruit,” a change that has low costs, high effectiveness, and high likelihood of being accomplished during the semester. Students develop and present an implementation action plan to the organization’s change agent for approval, modification, or rejection. Environmental changes that
MBA students have implemented include recycling, reduced paper consumption, installing energy efficient lighting, and developing a ride share program.

**Best Practices Assessment:** In an MBA “Business Ethics” course, students assess their employers based on an “Optimal Ethics System Model” that highlights 90 best practices in ten operational areas, one of which is environmental management (Collins, 2012). Environmental best practices include risk assessment, goals, green packaging, and an Environmental Management System plan. As with the TNS project, each student identifies one “low-hanging fruit” strategy, and develops and presents an action plan to the organization change agent responsible for that operational area.

**Local Environmental Exemplars:** Student awareness of environmental best practices among local companies can help establish high expectations and provide models they can emulate with future employers. For an elective “human issues” course, undergraduate students choose one company from a list of local environmental exemplars, gather information through research and interviews, and write and present a case study documenting the company’s environmentally-friendly practices. The entire class chooses the top five exemplars, which are then presented with an award. Three of these case studies were included in an article published by an influential monthly city magazine (Collins & Eannelli, 2006).

**Type 2 – Integrating Sustainability throughout the Business School’s Core Curriculum**

Another key role for management scholars is to ensure that environmental sustainability is integrated throughout the Business School’s core curriculum, rather than taught only in a separate course. Beginning with the 2012-2013 academic year, Edgewood’s Business School underwent an extensive core curriculum revision process. Faculty addressed fundamental design
problems with what was perceived to be an “assembly line” educational model, in which students excel in a discipline-based core curriculum course but knowledge transfer faltered because it wasn’t addressed again until a capstone course their senior year.

To address this educational design problem, the Business School recently adopted an approach that develops and reinforces complex business understanding. The business core curriculum, which included 10 discrete discipline-based courses, has been transformed into three integrated learning circles composed of 31 credits earned over five semesters. The new core business curriculum is designed around specific content area topics that are analyzed by each discipline in an integrated manner. This process is then repeated at least three times at deeper levels of understanding.

Sustainability, which is still offered as a separate required course for Management majors, has been woven throughout the new core curriculum. During the second semester, for instance, students focus on solving a local social issue, such as the racial achievement gap in the area’s elementary schools. They examine how nonprofit and for-profit organizations address the achievement gap issue from finance, accounting, management, marketing, legal, and sustainability perspectives, shifting and integrating perspectives as the semester progresses. The same multidisciplinary approach is employed in succeeding semesters as students develop a product for a local business, a global import-export business, and an entrepreneurial business. In each of the three learning circles, students have multiple opportunities to consider how sustainability interacts with issues, organizations, and each business discipline.

We anticipate that the end result of this radical curriculum change will be students who consider sustainability as a natural part of their business analyses and decision making processes, rather than as a separate consideration or additional layer added on to "normal" business
approaches. As students build their business intuition, their thought processes will automatically include sustainability in its many forms – economic, social, and environmental.

**Type 3 – Participating on a Campus Sustainability Committee**

Campus Sustainability Committees provide a unique leadership opportunity for management instructors concerned about sustainability. Edgewood College’s vision is to model campus sustainability for its students, local businesses, and other Wisconsin higher education institutions. In 2005, Collins co-chaired a “Green Campus Task Force” whose purpose was to engage students, faculty and staff in developing an environmentally sustainable living and learning community on campus. The task force evolved into a Campus Sustainability Coordinating Team, co-chaired by a faculty and staff member, which reports directly to the Chief Financial Officer. Monthly meetings are usually attended by six to ten faculty, staff, and students.

As events unfolded, differentiating ourselves as a regional environmental leader has taken on greater strategic importance for the college’s identity. Our accomplishments include an Environmental Management System (EMS) plan in accordance with ISO 14001, a Campus Sustainability Plan based on the Association for the Advancement of Sustainability in Higher Education Sustainability Tracking, Assessment and Rating System (AASHE STARS) framework, becoming the first Wisconsin higher education institution to receive Green Tier certification from the state’s Department of Natural Resources, two LEED certified new buildings (including the first LEED certified student residence hall in Wisconsin), green restaurant certification for our cafeteria, a sustainability tour for visitors, and constructing a
boardwalk on the campus’ lakefront wetlands property that enables college, community groups, neighbors, and prospective students to appreciate and manage the wetlands.

The college administration’s environmental performance commitment has been further institutionalized by becoming a Founding Circle Member of the national Billion Dollar Green Challenge. Participation entails establishing a green revolving loan fund equal to one percent (1%) of the College’s endowment that provides upfront financing for specific energy reduction projects. Financial savings generated from each project are used to repay the revolving loan, which in turn funds new projects.

**Type 4 – Conducting Research on Sustainability in Higher Education**

Management researchers seeking to understand environmental issues should examine the ecosystem in which they are embedded – their own higher education institution. In the academic literature, we are just beginning to understand the complexity behind why and how sustainability practices are implemented and work within and between higher education institutions. This dialogue is reflected in the recent outpouring of edited books (Barlett & Chase, 2013; Leal Filho, 2102; Johnston, 2013; Martin & Samels, 2012) and articles in the *International Journal of Sustainability in Higher Education*.

Among the many excellent scholarly articles about environmental issues published in *Organization & Environment (O&E)*, few have addressed sustainability in higher education institutions. Of the nearly six hundred articles published in *O&E* between 1987 and September 2013, only four are related to higher education institutions (Benn, Edwards, & Angus-Leppan, 2013; Fox, 1997; Mathisen, 2006; Sharma, 2013).
AASHE STARS offers a large untapped quantitative and qualitative database within which scholars can research correlations among, and the evolution of, factors likely to contribute to success or failure of specific institutional environmental initiatives, such as renewable energy, waste, recycling, landscaping, and green buildings. In a cursory analysis of EBSCO and ERIC databases, we found only one article that used the AASHE STARS database (Beringer, 2007).

AASHE, a nonprofit organization founded in 2005 with more than 800 members, seeks to make sustainability practices the norm within higher education. The 2012 Version 1.2 AASHE STARS is an information-gathering assessment framework for measuring a college’s sustainability performance, using a point system in three general categories (with multiple subcategories): (1) Education and Research, (2) Operations, and (3) Planning, Administration and Engagement. Table 1 illustrates the richness of the database, listing the subcategory factors for which information is gathered and quantified. The recently-issued Version 2.0 of AASHE STARS further segments “Engagement” into a separate category and modifies the credit scoring methodology. The AASHE STARS data can be correlated or triangulated with green campus rankings performed by independent parties.

The American College & University President’s Climate Committee (ACUPCC), a network of 678 higher education institutions committed to eliminating net greenhouse gas emissions, maintains another database which researchers can explore. The signatories have submitted 1,996 Greenhouse Gas inventories, 523 climate action plans, and 337 progress reports.

Two important research areas are best practices and inter-institutional comparisons. Potential research questions include:
1) What demographic factors differentiate high and low environmental ranking institutions? – Type of institution (public, private, land grant); endowment size; location (city, rural); academic programs (sustainability program); other?

2) What are the best and most cost effective ecological practices for: green building; lighting; rainwater harvesting; air quality; landscaping; invasive species control; other?

3) What, if any, personnel/personal factors correlate with higher performance scores? – Role (administrators/staff, faculty, students); motive (environmentalist, cost savings); other?

4) What factors affect faculty involvement in environmental performance activities? – Environmental concern; student influence; colleague influence; institutional goals; incentives; other?

5) What AASHE subcategories receive the highest or lowest scores? Why?

**Challenges and Lessons**

Each of the four types of sustainability actions that management scholars can pursue has unique challenges. The campus environmental performance and Eco-Olympics class projects require buy-in from key campus administrators who may be sensitive to their work being evaluated, particularly when operational inefficiencies are exposed. The MBA projects require buy-in from an employer change agent. Project scope, as well as student and instructor expectations, must be carefully managed. Undergraduate students, in particular, tend to be naïve about what they can accomplish during a semester.
Three major challenges for integrating sustainability throughout the business school’s core curriculum, besides resistance to change, are course design, administration, and faculty skill set. First, dissecting 10 core classes into their many discrete content areas, and then remixing the content in an iterative integrative manner is a huge creative undertaking. Second, faculty must shift their conception of teaching from a semester-long course based solely on one discipline, to three simultaneous semester-long learning circles that they enter and exit multiple times. Third, faculty must shift from having narrow discipline-based expertise to broad integrative cross-disciplinary expertise.

A key challenge for campus sustainability committees is coordinating activities among constituencies – faculty and facilities staff – who previously have not engaged each other in joint decision making. Committee meetings need to focus on constructive engagement between faculty and facilities staff for the common good, rather than on complaints about past mistakes or perpetuating unhealthy faculty/staff stereotypes.

Concluding Movement Comments

One of the most meaningful ways that management scholars can advance environmental sustainability is to model the change we want to see in other people and organizations by focusing on our own courses, institutions, and industry. Sustainability class projects and weaving sustainability throughout the core business curriculum provide opportunities to educate and change our students, campuses, and local companies. Participation on campus sustainability committees can not only reduce our institution’s environmental footprint, but also provide experiential stories and data that can fuel our teaching and research. Lastly, the AASHE database can provide researchers with insights and recommendations for putting our own houses in order.
Can faculty create a national movement where higher education institutions act as sustainability incubators that transform students into sustainability change agents, and our own campuses and local companies into sustainability exemplars? The idea of a national movement within higher education gets us back to “Alice’s Restaurant.” If you want to end environmental injustices and participate in a movement that changes the destiny of higher education institutions and nations, then create sustainability class projects, integrate sustainability throughout the Business School core curriculum, volunteer for sustainability committees, and design research on sustainability in higher education … and with feeling!

References


Figure 1: Sustainability Action Model

<table>
<thead>
<tr>
<th>Breadth of Impact</th>
<th>Your Own</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Type 1: Class Projects</td>
<td>Type 2: Core Business Curriculum Integration</td>
<td></td>
</tr>
<tr>
<td>Building &amp; Grounds Type 3: Campus Sustainability Committees</td>
<td>Type 4: Comparative Higher Education Research</td>
<td></td>
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</tbody>
</table>
Table 1: AASHE Sustainability Categories and Items

<table>
<thead>
<tr>
<th><strong>Sustainability Education and Research</strong></th>
<th><strong>Subcategory</strong></th>
<th><strong>Specific Information Factors</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Student engagement in co-curricular education</td>
<td>Student outreach and mentoring; outreach materials and publications; student groups; student organic garden; model room in Residence Hall; themed housing; events; themed semester</td>
<td></td>
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<tr>
<td>Curriculum</td>
<td>Courses; learning outcomes; undergraduate and graduate program; immersion experience; literacy assessment</td>
<td></td>
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<tr>
<td>Research</td>
<td>Faculty scholarship; scholarship incentives; promotion and tenure variable</td>
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</tbody>
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<tr>
<th><strong>Sustainability Operations</strong></th>
<th><strong>Subcategory</strong></th>
<th><strong>Specific Information Factors</strong></th>
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</thead>
<tbody>
<tr>
<td>Buildings</td>
<td>LEED (or “green”) building construction and renovations; indoor air quality</td>
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<tr>
<td>Climate</td>
<td>Greenhouse gas emissions inventory and reduction; air travel emissions; local offsets program</td>
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<tr>
<td>Dining Services</td>
<td>Food and beverage purchasing; trayless dining; vegan dining; trans-fats avoidance; pre- and post-consumer composting; food donations; recycled napkins; renewable mug discounts; reusable to-go containers</td>
<td></td>
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<tr>
<td>Energy</td>
<td>Building energy consumption; clean and renewable energy; temperature control timers; lighting sensors; LED lighting; Energy Management System; energy metering</td>
<td></td>
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<tr>
<td>Grounds</td>
<td>Integrated pest management; native plants; wildlife habitat, snow and ice removal strategies; grounds and grass composting</td>
<td></td>
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<tr>
<td>Purchasing</td>
<td>Environmentally preferable computers; green cleaning products; recycled paper purchasing; vendor environmental screen; preference for local products and businesses</td>
<td></td>
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<tr>
<td>Transportation</td>
<td>Fuel efficient vehicles; alternative transportation options; bicycle plan; mass transit discounts; condensed work week; telecommuting</td>
<td></td>
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<tr>
<td>Waste</td>
<td>Waste reduction and diversion strategies; hazardous waste management; materials exchange; limiting printing; chemical reuse inventory</td>
<td></td>
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<tr>
<td>Water</td>
<td>Water consumption; storm water management; waterless urinals; water metering, non-potable water usage; xeriscaping</td>
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<tr>
<th><strong>Sustainability Planning, Administration &amp; Engagement</strong></th>
<th><strong>Subcategory</strong></th>
<th><strong>Specific Information Factors</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination and Planning</td>
<td>Sustainability committee; sustainability plan; component in strategic plan and master campus plan</td>
<td></td>
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<tr>
<td>Diversity and Affordability</td>
<td>Diversity and equity coordinator; diversity assessment; support programs for diverse students and faculty; affordability and access programs; employee and student training</td>
<td></td>
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<tr>
<td>Human Resources</td>
<td>Sustainable compensation; employee satisfaction assessment</td>
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<tr>
<td>Subcategory</td>
<td>Specific Information Factors</td>
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<tr>
<td>Sustainability</td>
<td>sustainability in new employee orientation; staff development in sustainability; childcare; employee wellness; socially responsible retirement plan</td>
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<tr>
<td>Investment</td>
<td>Committee on Socially Responsible Investment (SRI); shareholder advocacy; SRI policy; SRI funds; SRI disclosure</td>
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<tr>
<td>Public Engagement</td>
<td>Community sustainability partnerships; collaboration with other higher education institutions; community service; graduation pledge; farmers’ market</td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td>Other creative policies, implementations, and outcomes</td>
<td></td>
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Author Biography

Denis Collins, PhD from University of Pittsburgh, is a Professor of Management, Business School, Edgewood College, Madison, WI. His latest books – *Business Ethics: How to Design and Manage Ethical Organizations* (2012: John Wiley & Sons), and *Essentials in Business Ethics: Creating an Organization of High Integrity and Superior Performance* (2009: John Wiley & Sons) – provide practical “how-to” examples and best practices for improving an organization’s ethical performance. He has conducted hundreds of business ethics workshops, talks, and consulting projects, has won several teaching and service awards, and serves on Edgewood College’s Board of Trustees.

Amy Gannon, PhD from Boston University, is an Associate Dean and an Assistant Professor of Management in the School of Business at Edgewood College. She teaches courses on entrepreneurship and organizational behavior, and directs a practicum program in which student teams do semester-long projects with local non-profit organizations. She is also co-founder of the Doyenne Group, a Madison-based organization dedicated to expanding women’s entrepreneurship in the region.

1 See “Mahatma Gandhi Quotes” at [http://www.brainyquote.com/quotes/authors/m/mahatma_gandhi.html](http://www.brainyquote.com/quotes/authors/m/mahatma_gandhi.html), retrieved on November 18, 2013. There is no reliable evidence that Gandhi actually spoke this well-known quote.


3 See “Eco Olympics” on Duke University’s website for further explanation at [http://sites.duke.edu/dukeea/eco-olympics](http://sites.duke.edu/dukeea/eco-olympics), retrieved on November 18, 2013.

See Wisconsin Department of Natural Resources, Green Tier, website at http://dnr.wi.gov/topic/GreenTier, retrieved on November 18, 2013.

See Association for the Advancement of Sustainability in Higher Education (AASHE) homepage at http://www.aashe.org, retrieved on November 18, 2013.


The searches described here were conducted on November 18, 2013. We apologize to any authors whose articles have been overlooked in the cursory exploration results described here.


See American College & University Presidents’ Climate Committee homepage at http://www.presidentsclimatecommitment.org, retrieved on November 18, 2013.

See ACUPCC signatory list of institutions at http://www.presidentsclimatecommitment.org/signatories/list, retrieved on November 18, 2013.