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## Advancing Business Ethics Education

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Edited by

**Diane L. Swanson**  
*Kansas State University*

and

**Dann G. Fisher**  
*Kansas State University*

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## CHAPTER 12

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# CREATING ENVIRONMENTAL CHANGE THROUGH BUSINESS ETHICS AND SOCIETY COURSES

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**Denis Collins**  
*Edgewood College*

### ABSTRACT

This chapter explores how to improve the environmental performance of local organizations through MBA and undergraduate Management and Business & Society course assignments. Edgewood College MBA students apply "The Natural Step" framework to their organizations' operations and initiate changes that improve their environmental performance. Undergraduate Business & Society students research and implement campus energy efficiency techniques, manage a campus-wide Eco-Olympics, and publish case studies that showcase local environmentally friendly business practices. These environmental service-learning activities have contributed to fostering a Business School and college culture that embraces environmental innovations. Students want to make a difference and these projects enable them to do so. Materials are provided to assist professors in implementing these class projects.

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### REQUIRING ENVIRONMENTAL MANAGEMENT CHANGES

Professors have an obligation to not only convey information to students, but also empower students to apply the knowledge being learned in a meaningful manner and examine the impact of the applied knowledge on relevant stakeholders, including present and future employers. Organizations are dynamic, not static; they are clay to be shaped, not concrete. Our students typically earn, or already have, positions of authority and influence their organization's evolutionary progress. Students can more intentionally experience their ability to influence organizational events and relationships while studying at higher education institutions, in partnership with professors who guide them to sources of knowledge and serve as coaches for hands-on change experiences.

The recently revised version of Bloom's learning taxonomy begins with students remembering information as the most basic form of education and then progressing through understanding, applying, analyzing, evaluating and creating new ideas (Anderson & Krathwohl, 2001). The higher stages of learning are often the basis of education within professional programs, including Business, Accounting, Finance, and Marketing professors convey state-of-the-art knowledge and expect students to either implement the knowledge or encourage others in their organization to do so. Applying what they learn, and analyzing and evaluating the results, deepen a student's understanding of the concepts being taught. If students do a good job, they not only receive a good grade in class, but they might also receive a highly desired job offer or promotion.

Similarly, I organize my Management and Business & Society courses around Bloom's learning taxonomy by designing MBA and undergraduate class projects aimed at improving the environmental performance of a student's employer or the college. I choose "environmental" change, rather than some other change topic, because of the serious threat of global warming (Gore, 2006) and the increasing managerial receptivity to improving environmental practices (Hawken, Lovins & Lovins, 2000; McDonough & Braungart, 2002). The project offers students an opportunity to provide immediate "value added" and "make a difference" in their organizations as a result of enrolling in the class. Students study project management and organizational change, apply these concepts in the spirit of continuous improvement to generate new knowledge, and then critique what they experience. From this perspective, a class of twenty students can provide business professors an opportunity to improve the management of twenty organizations. This is particularly the case if the student is in a part-time MBA program, an adult taking evening undergraduate courses to move up the corporate ladder, or a traditional undergraduate working part-time evenings or weekends.

My concern about "imposing" environmental change on organizations, a potential misuse of professorial authority, has evolved over time. My Management and Business & Society courses have always had a significant amount of service-learning and experiential activities (Collins, 1996, 2006). I want my students to be more socially aware by the end of the semester. We study, debate, and experience enough controversy so that students who lean left politically have a better understanding of those who lean right politically, and vice versa. My students serve food at a soup kitchen, visit a religious organization unlike their own, share their beliefs about the purpose of life, work on consulting projects for nonprofit organizations and small businesses, and compare the ethics and business practices of their own organizations to "best practices." Refusing to participate in any of these activities, including serving food at a soup kitchen, negatively impacts their grade.

Requiring new experiences, such as taking a field trip, is a long-accepted pedagogical tool. Requiring that students make their organizations more ethical, however, is very contentious. My students assess their organization's ethical integrity, brainstorm how their organizations can expand their social responsibilities, and develop action plans for improving their organization's ethics training, but I do not require that they implement any of their suggestions. Organizations are complex institutions on their unique evolutionary paths. The terms "ethics" and "social responsibility" are accompanied by a lot of moral baggage that can alienate managers. Managers do not want to be accused of being unethical or socially irresponsible. Ethics is at the heart of organizational operations, a well-fortified area that is defensively protected by upper-level managers. Instead, I am content with planting seeds in the minds of students that I hope yield fruit.

However, I have found managers to be much more receptive to improving environmental performance. Unlike ethics, environmental management practices are usually treated on par with concepts such as GAAP practices, investment strategies, or marketing analysis. Environmental management is considered a tool or technique, rather than the heart of the matter. In addition, I do not require that a specific practice be implemented. Instead, each student determines the next appropriate step in his or her organization's continuous improvement path and then initiates the change.

Whereas asking managers to improve their organization's ethics training is likely to result in an "Are you saying that we're unethical?" response, asking managers to improve their organization's environmental performance is equivalent to asking managers to improve their organization's investment strategy—something worthy of further discussion. Importantly, environmental management discussions can open the door to ethics discussions. But this highly desired outcome is not a required outcome.

The remainder of this chapter describes four environmental change projects. The first is an MBA project where students apply an environmental framework to assess their organizational operations and initiate change. The second project is the same assignment applied to the college by undergraduate students. The third project is a residence hall "Eco Olympics" managed by undergraduate students. The fourth project requires students to research local environmentally friendly business practices, write the results up as case studies, and publish the results in the local media. I also provide suggestions on how to manage the class and student teams, and discuss how these environmental change class projects have influenced other campus activities.

### THE MBA ENVIRONMENTAL CHANGE PROJECT

Edgewood College is a small, liberal arts college in Madison, Wisconsin, with approximately 1,500 undergraduate students and 1,000 graduate students. Edgewood College has a core group of faculty members committed to greening the campus, the curriculum, the local community, and the organizations our graduates will help manage in the future. Many of these activities have stemmed from individual efforts by professors associated with our Environmental Studies Department.

Shortly after my arrival at Edgewood, I was invited to join the Environmental Studies Department, a group of interdisciplinary scholars and teachers whose cross-listed courses serve as the foundation for the Environmental Studies minor. The more I interacted with this unique group of faculty, the more I integrated environmental issues into my business courses.

The "Organizational Behavior and Development" MBA course meets for nine class sessions, one night a week, for three hours, and is offered every semester. For the Spring 2005 semester, I introduced a lecture on "The Natural Step" (TNS), a framework for conceptualizing an organization's environmental impacts. The students, who tend to be middle-level managers at local companies, calculate their own ecological footprint (see Table 12.1) and then conduct an environmental analysis of their company's operations. TNS, developed by Swedish scientists during the 1980s and 1990s, is a four-step analytical process that provides a common philosophy, language and approach for improving an organization's relationship with the natural environment (Naturass & Altomare, 1999). In January 2006, the city of Madison adopted TNS as an analytical framework for city decision-makers, creating a conceptual bridge between the college, city government, and the organizations employing my students.

The students focus on the first three of the four-step TNS analysis:

- Step 1: *Reduce wasteful dependence on fossil fuels, underground metals, and minerals.* We are removing too many substances from the Earth's

**TABLE 12.1**  
**Calculating Your Ecological Footprint**

How many people are in your household? \_\_\_\_\_

*Car energy use:*

Vehicle 1: \_\_\_\_\_

\_\_\_\_\_ Miles driven per month/year (circle one)

\_\_\_\_\_ Miles per gallon for vehicle *or* is it: small/medium/large-truck (circle one)

Vehicle 2: \_\_\_\_\_

\_\_\_\_\_ Miles driven per month/year (circle one)

\_\_\_\_\_ Miles per gallon for vehicle *or* is it: small/medium/large-truck (circle one)

*Air travel:*

\_\_\_\_\_ Miles traveled by airplane per month/year (circle one)

*Electricity use:*

\_\_\_\_\_ Kwh per month/year (circle one)

*Home heating:*

Natural gas: \_\_\_\_\_ Therms per year

Or oil: \_\_\_\_\_ Gallons per year

Or propane: \_\_\_\_\_ Gallons per Year

Submit information into ecofootprint calculator at: [www.nativeenergy.com/safecimate\\_calculator.htm](http://www.nativeenergy.com/safecimate_calculator.htm).

crust. Substitute minerals that are abundant in nature for scarce minerals, and use all mined materials efficiently.

- Step 2: *Reduce wasteful dependence on chemicals and unnatural substances.*

We are producing too many synthetic compounds that are difficult for nature to breakdown. Substitute natural substances that are abundant, or chemical compounds that breakdown easily in nature, for synthetic compounds, and use all compounds produced by society efficiently.

- Step 3: *Reduce encroachment on nature (land, water and wildlife).* We are increasingly interrupting the natural flow of ecosystems. Draw on resources from only well managed eco-systems, use them efficiently and minimize the manipulation of nature.

- Step 4: *Meet human needs fairly and efficiently.* Human needs are not being met on a worldwide basis. Use all our resources efficiently, fairly and responsibly so that the needs of all stakeholders—customers, staff, neighbors, people in other parts of the world, and people who are not yet born—stand the best chance of being met.

The first three TNS steps provides the basis for their environmental change project and accompanying paper submitted at the end of the semester (see Table 12.2). The fourth step does not lend itself well for student analysis because it is more of a socio-political statement than an environmental management practice. Based on their TNS analysis, students

### TABLE 12.2 Making a Difference Environmental Change Report

1. *Cover page:* Creative title, name of organization, authors, date, class name, professor's name.
2. *Table of contents:* List major subheadings and page numbers in report
3. *Executive summary:* Summarize all the key information contained in this report that your boss (or senior manager) should know all on one page; be clear and inclusive, and don't be preachy. This is *not* an introduction to the paper. It may be the only page a busy executive reads so it must contain all the relevant findings regarding the environmental audit, your change recommendation, obstacles to implementation, and the outcome of your efforts. [1 page—and do not exceed 1 page]
4. *The Natural Step Environmental Audit:* Evaluate your organization's environmental performance using the first three Natural Step objectives: a) reduce wasteful dependence on fossil fuels, underground metals, and minerals, b) reduce wasteful dependence on chemicals and unnatural substances, and c) reduce encroachment on nature, particularly regarding energy use, water use, air, material resources, food, land, transportation, and building dynamics. Complete the chart below and then, in paragraph form, discuss your satisfaction or dissatisfaction with each step. If possible, collect relevant data. [2 pages]

#### Environmental strengths improvement areas

Fossil fuel and mineral use analysis  
Chemical and unnatural substance analysis  
Encroachment on nature analysis (land, water, wildlife)

5. *Screening table:* Develop a screening table for three strategies that address an important potential environmental improvement area. Evaluate the strategies using the following three categories: cost, effectiveness, can accomplish this semester. Use a 1–5 scale with "5" representing the best value in each category: low cost, high effectiveness, high likelihood of accomplishing this semester.

Use the screening table analysis to pick a "low-hanging fruit" solution (something relatively easy to change), and explain your choice in paragraph format.

To increase likelihood of success, you should be able to empirically demonstrate that your strategic solution will either reduce costs (i.e., decrease amount of payments for landfill disposal), increase revenue (i.e., attract new business), or increase employee productivity (i.e., improve morale).

6. *Levin Force-Field Analysis:* Develop a force-field organizational change chart for your change recommendation, similar to the example below. List the forces against change first, and then explain how to overcome that particular change obstacle, including data if needed. Discuss the prioritization of the obstacles; which obstacle is the most problematic and why? [1–2 pages]

Current state (environmental problem): \_\_\_\_\_ Future state (environmental goal): \_\_\_\_\_

- (2) force to overcome the change obstacle → (1) Forces against change

7. *Action plan:* Given your recommended solution and anticipated obstacles, develop an "action plan" for accomplishing the solution and overcoming the obstacles. More succinctly clarify: a) The *problems* you are correcting, b) the *goal*, c) the *strategy* you will pursue, and d) how you will *measure* success. Refer to your strategic solution as a "pilot project" and keep the parameters reasonable.

To increase likelihood of success, you should be able to empirically demonstrate that your solution will either reduce costs (i.e., decrease amount of payments for landfill disposal), increase revenue (i.e., attract new business), or increase employee productivity (i.e., improve morale).

8. *Meeting with change agent:* Prior to change agent meeting, obtain relevant cost or survey data that supports the change you will be recommending. Assume that the change agent is interested in the change (particularly its cost savings or revenue generation). Begin the meeting by praising the change agent and/or organization's environmental accomplishments and educate the change agent about the cost savings, revenue generation, or employee morale impacts. The change agent should become your ally, and vice-versa. Exhibit the attitude that you want to make the change agent look good by implementing your recommended change. This is not about you, it is about the change agent and your company.

Discuss the dynamics of your meeting with the organizational change agent responsible for the area involving your change recommendation. Explain [1–2 pages]:

- (a) What is the change agent's power base?
  - (b) Is change agent a blue, green, brown or red personality and how did this impact the communication style you used?
  - (c) What social tactics did you use to influence the change agent?
  - (d) How did you try to motivate the change agent—apply MBO, equity theory, etc.?
  - (e) How did you communicate with the change agent—how did you encode and transmit the message?
  - (f) The context of your meeting with the change agent—where did you meet, what was on the agenda, how did the meeting go?
  - (g) What was the change agent's response to the data you provided?
9. *Outcome:* What was the result of the meeting? Did the change take place? How much success did you have? What would you do differently to achieve greater success? [1–2 pages]
10. *Change experience reflection:* Summary of primary lessons learned as a result of doing this project, including lessons learned about yourself. [1 page]

conduct an environmental audit that highlights organizational strengths and weaknesses. They then provide three strategies for addressing a particular environmental improvement area and evaluate each of the recommended strategies in terms of cost, effectiveness, and length of time it

would take to implement the change. The ideal choice, referred to as a "low-hanging fruit," is one that has low costs, high effectiveness, and high likelihood of being accomplished during the semester.

After the change recommendation is selected, students must gather empirical evidence demonstrating how the strategic solution will either reduce costs, increase revenue, or increase productivity, arguments managers typically find more persuasive than "do the right thing." Next, students conduct a Lewin force-field analysis that lists all the probable obstacles and strategies for overcoming each obstacle (Brager & Holloway, 1992). All this information serves as the basis for an action plan, which is presented to the organization's change agent for approval, modification, or rejection.

If the change agent rejects the student's recommendation, the student must negotiate alternative strategic recommendations for improving the organization's environmental performance. The change agent may have some other environmental change item on his/her "to do" list that the student can champion. After initiating the environmental change process and, hopefully, implementing the change, students analyze their environmental change experience in terms of key concepts discussed in class, such as power bases, communication styles, social tactics, motivation techniques, and meeting context.

Below is a list of some of the environmental changes MBA students implemented in their organizations:

- Recycling and reducing the use of computer paper
- Providing healthier vending machine food options
- Installing energy efficient lighting and motion sensors
- Eliminating hazardous chemical use in a research lab
- Conserving energy by turning off computers at the end of the day
- Donating excess hospital supplies to developing nations
- Developing a ride share program

#### **UNDERGRADUATES APPLYING "TNS" TO EDGEWOOD COLLEGE**

I began teaching at Edgewood College during the Fall of 2002, after having taught at two other universities the previous twelve years. Service learning, where students apply textbook knowledge in the local community and then reflect on their experience, has always played an important role in my courses (Collins, 1996, 2006). For my Edgewood College undergraduate "Social Responsibility in Business" class, offered every semester, I formed a partnership with the Boys & Girls Club of Dane County. Student teams have created a program guide for potential members, a hiring manual for

administrators, a training manual for new employees, a recycling curriculum for members, and catalogued donated books for their library, among other accomplishments.

I was very pleased with the service-learning projects, yet wanted to take advantage of a unique opportunity to integrate business student learning with their peers in the natural sciences. I shifted our project focus inward during the Spring 2005 semester and designed several campus-based environmental projects. My business students read campus ecological research reports written by natural science students, studied the results, considered the management implications, and then implemented, in partnership with college administrators, some of the organizational changes suggested by the natural science majors.

Their accomplishments that semester included:

- Implementing a recycling program for a residence hall
- Decreasing electricity use in a residence hall
- Reducing the amount of paper printed by students in the computer labs
- Selling reusable mugs in the cafeteria and advertising discounts available for using mugs instead of Styrofoam coffee cups
- Relocating smoking receptacles further from the entrance of buildings

The following semester, Fall 2005, the business students directly applied TNS analysis to college operations. Each student chose a low-hanging fruit and they formed teams based on common concerns. Their final projects included:

- Implementing a more efficient classroom wastebasket recycling program
- Developing a database of local food sources for the cafeteria
- Marketing the cafeteria's reusable mug policy
- Creating a website for the Environmental Studies program
- Reducing electricity use in a residence hall
- Reduced heat use in a classroom building

#### **ECO-OLYMPICS**

In November 2005, I represented Edgewood College at a sustainable campuses conference sponsored by the Environmental Protection Agency. One of the sessions included a presentation about Duke University's Eco-Olympics, where campus residence halls compete against each other to reduce energy, waste, and water consumption ([www.duke.edu/web/ESC/2005-10-31Eco-olympics.html](http://www.duke.edu/web/ESC/2005-10-31Eco-olympics.html)). Students earn points for conservation and by attend-

ing events pertaining to environmental education and impact reduction. The residence hall with the highest score at the end of the Eco-Olympics earns a prize, such as a Ben & Jerry's ice cream party. This seemed a logical next step in the evolution of my environmental service-learning project.

During the Spring 2006 semester, the 24 students enrolled in the undergraduate "Social Responsibility in Business" course managed an Eco-Olympics among the five residence halls on the Edgewood College campus. I integrated the project goals into the course learning objectives by establishing direct links with knowledge content and skill development. By managing the Eco-Olympics students would:

1. Learn how to reduce the amount of heat, water and electricity consumed within a building.
2. Learn how to increase awareness of environmental impacts among members of an organization.
3. Learn how to motivate others to change their behaviors.
4. Develop project management skills.
5. Develop team management skills.

We formed seven teams in class, each with three or four students. Five of the teams were assigned to our five residence halls, one team per building. These teams met with residence hall directors and assistants to develop a plan that would generate the highest level of student resident participation. The teams performed an environmental audit of the residence hall, developed suggestions for changing resident energy consumption behaviors, and encouraged resident hall students to participate in other environmental activities associated with the Eco-Olympics.

The remaining two teams performed support activities. One team was responsible for organizing a campus talk given by the CEO of an environmentally friendly business, sponsoring an environmental movie shown in the student center, and conducting a fair trade coffee taste test. The student cafeteria sold regular coffee but not fair trade coffee, which provides higher income to the coffee bean growers (Talbot, 2004), because the cafeteria manager believed that fair trade coffee did not taste as well as regular coffee. Most of the taste test participants preferred the unmarked fair trade coffee. Fair trade coffee became available in the cafeteria during the Fall 2006 semester and a student team advertised its virtues over regular coffee.

The seventh team was responsible for obtaining donations from local businesses for prizes, publicizing the Eco-Olympics on campus, and managing an Environmental Ethics Bowl where residence hall teams compete against each other in analyzing environmental case studies.

The Environmental Ethics Bowl is a derivation of the national Ethics Bowl, initiated by Professor Robert Ladenson of the Illinois Institute of Technology in 1993, and held in conjunction with the Association for Practical and Professional Ethics' annual February meeting (Borrego, 2004; Ladenson, 2001). Student teams analyze and debate an ethical issue and are then evaluated by a panel of judges based on their intelligibility, depth, focus, and judgment. We obtained six one-page environmental cases used in previous Ethics Bowls and distributed them to teams representing each residence hall. The largest residence hall sponsored two teams so that there would be an even number of teams pairing off against each other. Each team was given two cases, one to present and one to rebut. The format for the Environmental Ethics Bowl, a two-hour event for six residence hall teams, appears in Table 12.3.

The movie, talk, fair trade coffee taste test and Environmental Ethics Bowl raised environmental awareness on campus. But the primary purpose of the Eco-Olympics was to change the energy consumption behaviors of students living in the college's five residence halls.

**TABLE 12.3**  
**Environmental Ethics Bowl Contest Format**

1. The Environmental Ethics Bowl facilitator introduces the two teams and the judges, reads the case to the audience, and then poses a question about the key ethical issue in the case to Team A—3 minutes
2. Team A answers the case question—4 minutes
3. Team B meets to develop a rebuttal to Team A's arguments—1 minute
4. Team B provides a rebuttal—2 minutes
5. Team A meets to develop a response to Team B's rebuttal—1 minute
6. Team A responds to the rebuttal—3 minutes
7. The judges each ask Team A questions about what's already been stated or other ethical issues associated with the case—3 minutes
8. Judges evaluate the performance of Team A and Team B using the scorecard criteria—3 minutes
9. The Environmental Ethics Bowl facilitator reads the second case to the audience, and then poses a question about the key ethical issue in the case to Team B—3 minutes
10. Team B answers the case question—4 minutes
11. Team A meets to develop a rebuttal to Team B's arguments—1 minute
12. Team A provides a rebuttal—2 minutes
13. Team B meets to develop a response to Team A's rebuttal—1 minute
14. Team B responds to the rebuttal—3 minutes
15. The judges each ask Team B questions about what's already been stated or other ethical issues associated with the case—3 minutes
16. Judges evaluate the performance of Team B and Team A using the scorecard criteria, the team with the most points is announced the winner—3 minutes

For each residence hall, I obtained baseline calculations for heat, water, and electricity consumption for the month prior to the Eco-Olympics. I calculated a baseline water measure by reading the water meter in each residence hall on January 15 and February 15. I calculated heat and electricity consumption based on local utility bills for the same 30-day time period.

On February 23, resident hall students were formally challenged to reduce these monthly baseline calculations prior to April 20, Earth Day. Each of the five Eco-Olympics teams organized a campaign to educate students in their assigned residence hall about energy consumption and conservation recommendations. They posted flyers, held informational meetings in the resident hall, and motivated residents to participate in the environmental activities.

On April 20, I read the water meters to determine how much water was consumed during the two month Eco-Olympics and obtained the utility bills for each residence hall to determine electricity and heat consumption. The residence hall that achieved the greatest percentage decrease in each category won a prize and was awarded a plaque. Residence halls also won prizes and plaques for having the greatest percentage of residents participating in the other Eco-Olympic events (attending the environmental movie, attending the environmental talk, and participating in the fair trade coffee taste test) and for winning the Environmental Ethics Bowl. The residence hall that won the most Eco-Olympic events was crowned the grand prize champion and awarded a Ben & Jerry's ice cream social.

During the two-month Eco-Olympics, the resident halls, on average, reduced:

- Water consumption by 54%, with the winning residence hall reducing water consumption by 57% (280 gallons per resident)
- Electricity consumption by 4.2%, with the winning residence hall reducing electricity consumption by 10.4% (40 kwh per resident)
- Heat consumption by 17.0%, with the winning residence hall reducing heat consumption by 22.4% (6 therms per resident)

How do these impressive energy consumption reductions compare to the same three-month period the year prior to the Eco-Olympics? I compared the 2006 contest energy calculations with the same four month time period in 2005, to create a control group comparison. For the parallel time period in 2005, electricity consumption declined on average by 5.5% (compared to 4.2% for 2006) and heat consumption declined on average by 19.1% (compared to 17.0% for 2006). Water consumption for the parallel 2005 time period cannot be determined because water meters are not read on a monthly basis. Energy reductions were less, not greater, during the Eco-Olympics year. This disappointing finding requires additional research. Energy consumption reductions in 2005 could have been greater than the

2006 Eco-Olympics year because of weather patterns, the length of winter break, when Spring break occurs, or a host of other factors.

There were several other complications related to obtaining reliable comparative measures for the contest—two residence halls shared the same water meter, one residence hall's heat consumption was unavailable, one residence hall has classrooms, and one residence hall has a cafeteria.

One thing is very clear. Residence hall students were educated by their peers about environmental issues and energy conservation techniques, an essential learning objective. The greatest increased awareness about environmental issues, however, occurred among the students enrolled in the class who taught resident hall students about environmental issues and energy conservation techniques and motivated them to change behaviors.

At the end of the Eco-Olympics, each student team submitted a "Making a Difference" project paper (Table 12.4) that included the team's original

**TABLE 12.4**  
**Making a Difference Eco-Olympics Project Report**

<i>Cover page:</i> Creative title, authors, date, class name, professor's name	<i>Table of contents:</i> List major subheadings and page numbers in report	<i>Executive summary:</i> Summarize the information contained in this report. This is <i>not</i> an introduction to the paper. Instead, it should clearly and concisely summarize the details regarding who, what, when, where, and why, along with what was accomplished, and information demonstrating that the goal was achieved (or not achieved). This may be the only page an executive might read, so if key information is omitted then the executive will not know what you did or accomplished. Avoid jargon and vague generalities. [Never more than 1 page]	<i>Environmental issue:</i> What issue did the team address? Why? [1 paragraph]	<i>Action plan:</i> Describe your initial plan to accomplish your goals. Who was going to do what, when, where, and why? Then create a Lewin Force-Field Analysis organizational change chart as shown below. First, list the forces against change (given your initial plan, these are your obstacles you expected to have to deal with, the things you thought might go wrong). Then for each obstacle, describe how your group thought it might overcome the obstacle. [1–2 pages]	Future state (environmental goal): students become good environmental agents
		Current state (environmental problem): students insensitive to environmental issues			
		(2) Force to overcome change obstacle	(1) Forces against change		
		How will you overcome student apathy?	Students are apathetic		
		How will you overcome obstacle #2? (etc.)	Anticipated obstacle #2 (etc.)		

**TABLE 12.4**  
**Making a Difference Eco-Olympics Project Report (continued)**

6. *Implementation experience and results:* What was your experience implementing your plan. Who did what, when, where, and why? What unanticipated obstacles happened and what did you do about them? Tell stories about what actually happened, including items in your Task Activity Time Log (Appendix A). What results did you accomplish? Provide actual data when appropriate. [1–2 pages]
7. *Team performance reflections:* Taking a step back, what did the team do right and wrong? What would you do differently if you were to start this project all over again? [1 page]
8. *Organization and course concept reflections:* Taking a step back, what are the team's thoughts about current environmental management practices at Edgewood College? Comment on insights from your course readings on ethics and the Hawken, Lovins & Lovins book that might be relevant to your experience. What dilemmas did you encounter in trying to change institutional and human behavior? Why does it take so long for institutions and people to adopt environmentally friendly ways of being? [1–2 pages]
9. *Appendix A: Task Activity Time Log—*Dated diary documenting what each team member did on each work day using the table below. End with summary of how much time each team member put into the project.

Date	Task activity (short one sentence description stating who did what on which date; longer detailed activity explanations should appear in text under action plan or implementation experience)	Person (people) doing task	Amount of time to do task
		Student #1:	Total amount of time
		Student #2:	Total amount of time

**Summary of amount of time per student:**

10. *Appendix B:* Summary of each person's primary lessons learned as a result of doing this team project, including lessons learned about yourself. [1 page per team member]
11. *Appendix C:* Any other relevant information associated with the project, such as a copy of survey or flyer. Explain why the information is relevant.

action plan for obtaining their unique goal, a Lewin force-field analysis stating initial obstacles (such as student apathy), strategies for overcoming those obstacles, implementation details, actual results, and lessons learned from the experience.

### CASE STUDIES ON LOCAL ENVIRONMENTALLY FRIENDLY BUSINESSES

Madison, Wisconsin is home to many progressive businesses engaged in socially responsible activities, including environmental management. In the Spring of 2004, I offered an elective course titled "Ethical Business Practices in Madison" with the purpose of creating a database of local socially responsible business practices. For two consecutive semesters students researched socially responsible business practices, interviewed company managers, and wrote case studies about the companies they researched. Students also researched companies that went beyond the call of duty in serving at-risk kids, and, in partnership with the Samaritan Counseling Center, we chose winners for a newly created Good Samaritan award.

For the Fall 2005 semester, I more narrowly defined social responsibility in terms of environmentally friendly business practices. Whereas I team taught the first three class renditions with the former mayor of Madison, I now elicit assistance from the Executive Director of Sustain Dane, a nonprofit organization that networks with business leaders and environmental activists who seek to transform Dane County into an environmentally sustainable community.

Sustain Dane's Executive Director was interested in showcasing several environmentally friendly businesses on his organization's website ([www.sustaindane.org](http://www.sustaindane.org)). We developed a list of eight companies in different industries known for being environmentally friendly. The students researched the companies, interviewed their managers and environmental activists, and composed case studies documenting each company's environmentally friendly practices.

We intended to initiate a dialogue in class where management representatives from each of the participating companies could share their "best practice." Unfortunately, only one company representative was able to attend due to a snowstorm that particular day.

As an alternative, we decided to initiate a dialogue by publicizing their ecological activities in the local media. *Madison Magazine*, an influential local monthly magazine, agreed to publish an article describing the environmentally friendly practices at three companies the students researched (Collins & Eannelli, 2006). We chose companies that addressed different aspects of environmental management—training, processes, and mission. Madison Cutting Die (MCD) trains its managers in The Natural Step framework, which is then applied to company operations. Best Cleaners is the first drycleaner in Wisconsin to exclusively use a technology that results in zero hazardous waste. Cascade Asset Management collects and resells computer and electronics parts rather than dumping them in landfills. We plan on inviting these environmental business leaders to campus for further dialogue and networking.



## MANAGING THE CLASS AND STUDENT TEAMS

It is essential that the class projects be tightly linked to the curriculum. The key to service learning is the linkage between the "service" and the "learning." The "Social Responsibility in Business" class meets for 75 minutes, twice a week, for 15 weeks, a total of 30 class sessions. Approximately 40 percent of the semester is related to the service-learning project. In preparation for the project, I teach four class sessions on environmental problems and public policy solutions, innovative environmental management techniques, TNS analysis, and project management.

Prior to the project management class session, I distribute a list of service-learning project options and each student ranks order his or her top three choices. I create the 3 or 4 member teams informed by student preferences—maximizing the number the students who get to work on their highest preference—and diversity factors (gender, race, major, clique).

During the project management class session, in addition to creating a time-management plan for completing the project assignment, student teams discuss their responses to a "Team Role Survey" (see Table 12.5), which clarifies the skills and duties needed for different roles a student can fulfill on a team, and review a "Peer Evaluation Form" (see Table 12.6) that they have to submit at the completion of the project to inform my grading process (Marcic, Seltzer & Vaill, 2001). I assign the project paper a grade and all team members receive that grade unless the peer evaluation forms suggest that one member should earn a higher grade for exemplary performance, or a lower grade for inadequate performance.

Students also earn project points based on their performance during team meetings (see Table 12.7). They earn points for being prepared for the meeting, attending the meeting, and being a constructive participant during the meeting. At the end of each team meeting, those in attendance summarize what the team accomplished during the meeting, describe what each member must do in preparation for the next team meeting, and provide an agenda for the next team meeting. Students complete the team meeting form as a group, sign it, and submit it to me at the conclusion of the meeting.

The teams typically meet once a week during a regularly scheduled class session for seven or eight consecutive weeks. Many Edgewood College undergraduate students take 18 credits a semester and work 30 hours a week at a part-time job. It is nearly impossible for them to meet outside the regularly scheduled class time. We do not meet as a class during these working sessions, although I am always available in my office for consultation. The teams can meet anywhere they want to make progress on their projects—in the classroom, computer lab, library, an administrator's office,

**TABLE 12.5**  
**Team Role Survey**

Your name: \_\_\_\_\_

Circle the answer that most closely resembles your attitude for each of the following 5 statements using the following 1–5 Scale. The more honest you are the more helpful the information you will receive.

1 = Very low; 2 = Somewhat low; 3 = Neutral; 4 = Somewhat high; 5 = Very High

How interested are you in . . .

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. being a team leader (whose role is to get team members involved in activities and keep the team on track)? | 1 | 2 | 3 | 4 | 5 |
| 2. completing forms and other records for the team?   | 1 | 2 | 3 | 4 | 5 |
| 3. taking the role of encouraging others in your team to participate?   | 1 | 2 | 3 | 4 | 5 |
| 4. taking the role of checking other members' understanding of the problem the team is solving?               | 1 | 2 | 3 | 4 | 5 |

Role	Skills/duties	Examples of comments
1. Leader	<ul style="list-style-type: none"> <li>Direct team's activities to ensure all parts of assignment are completed on time</li> <li>Direct team members to stay on task and fulfill roles</li> <li>Encourage team dialogue about its process</li> <li>Complete all team materials</li> <li>Provide copies of information for absent team member</li> </ul>	<ul style="list-style-type: none"> <li>"We're getting off topic and we only have 10 minutes left!"</li> <li>"We still need to come up with a plan."</li> <li>"Team member B, are you happy with the way we are all participating?"</li> <li>"Our performance to date is as follows . . ."</li> <li>"Does everyone agree with what I wrote down?"</li> <li>"Team member C, what is your opinion on this?"</li> <li>"Everyone tell me your opinion and I'll write it on the board for us to discuss."</li> <li>"Team member A, please repeat what our solution is."</li> <li>"Team member C, please summarize why we decided to pursue the first option."</li> </ul>
2. Recorder	<ul style="list-style-type: none"> <li>Encourage all team members to participate in discussions</li> <li>Make sure no team member dominates discussions</li> <li>Ask for team opinions</li> <li>Develop method to check everyone's understanding before team meeting ends</li> <li>Make sure each member can verbalize the reasoning behind the team's decisions</li> </ul>	<ul style="list-style-type: none"> <li>"Team member C, what is your opinion on this?"</li> <li>"Everyone tell me your opinion and I'll write it on the board for us to discuss."</li> <li>"Team member A, please repeat what our solution is."</li> <li>"Team member C, please summarize why we decided to pursue the first option."</li> </ul>
3. Encourager of participation	<ul style="list-style-type: none"> <li>Encourage all team members to participate in discussions</li> <li>Make sure no team member dominates discussions</li> <li>Ask for team opinions</li> <li>Develop method to check everyone's understanding before team meeting ends</li> <li>Make sure each member can verbalize the reasoning behind the team's decisions</li> </ul>	<ul style="list-style-type: none"> <li>"Team member C, what is your opinion on this?"</li> <li>"Everyone tell me your opinion and I'll write it on the board for us to discuss."</li> <li>"Team member A, please repeat what our solution is."</li> <li>"Team member C, please summarize why we decided to pursue the first option."</li> </ul>
4. Checker of understanding	<ul style="list-style-type: none"> <li>Encourage all team members to participate in discussions</li> <li>Make sure no team member dominates discussions</li> <li>Ask for team opinions</li> <li>Develop method to check everyone's understanding before team meeting ends</li> <li>Make sure each member can verbalize the reasoning behind the team's decisions</li> </ul>	<ul style="list-style-type: none"> <li>"Team member C, what is your opinion on this?"</li> <li>"Everyone tell me your opinion and I'll write it on the board for us to discuss."</li> <li>"Team member A, please repeat what our solution is."</li> <li>"Team member C, please summarize why we decided to pursue the first option."</li> </ul>

etc. The teams can also meet at a time other than the scheduled class session time, if that is what is needed to accomplish their goal.

The "Team Meeting Assessment" form provides essential feedback about the team's project management progress. I intervene when the submitted

form suggests that a particular team member is performing inadequately, the reported work accomplished or work to be accomplished appears misdirected or inadequate, or the team requests my intervention. I meet with each team for 10 minutes during their fourth group meeting to review their progress and future plans.

**TABLE 12.6**  
**Peer Evaluation Form**

Your name: \_\_\_\_\_

Please evaluate yourself and each group member in a fair and accurate manner. Your ratings will be kept *anonymous*. Take your time and provide a useful and complete evaluation.

1. *Point allocation*—below, rate yourself and your team members using a zero to four point scale (4 = superior, 3 = adequate, 2 = average, 1 = poor, and 0 = no contribution).

Team member names:	You	Person #1	Person #2	Person #3
Organizational ability				
Cooperativeness				
Originality or creativity of ideas contributed				
Functional contribution—analysis and recommendations				
Dependability				
Quantity of work contributed				
Quality of work contributed				
Total points				

2. *Percent allocation*—below, rate yourself and your team members using the following 80% to 120% scale:

120%: This team member performed a lot more than everyone else  
 100%: This team member performed the same as everyone else  
 80% (or less): This team member performed a lot less than everyone else

Team member names (including yourself) 120%, 100% or 80% using scale above

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Please provide comments on back explaining your evaluation

**TABLE 12.7**  
**Team Meeting Assessment**

The team project is worth 200 points—80 points for your performance during team meetings and 120 points for the quality of the final product.

You must meet as a team an equivalent of 8 class sessions to work on your team project. Each working session is worth 10 points. After each team meeting please Xerox this page, insert the points representing each team member's effort for the work session, have each person in attendance sign the sheet, and then give it to me at my office or slide it under my door. Please be honest in your assessments.

Date: \_\_\_\_\_

Team members	Name	Name	Name	Name
1. Work session preparation: Fulfilled expected work tasks due—Point scale: 0 (none), 1 (little), 2 (half), 3 (a lot), or 4 (all)				
2. Work session attendance—Point scale: 0 (missed it), 1 (some); 2 (most), 3 (attended all of it)				
3. Was a constructive participant during work session—Point scale: 0 (no), 1 (a little), 2 (most of the time), 3 (all the time)				
Total points earned by each team member				

What did team members do during the 75 minutes set aside to work on the project?

What will team members do before the next team meeting?

What will team members do during the next 75 minutes set aside to work on the project?

**OTHER CAMPUS INITIATIVES**

The class projects described in this chapter have contributed to fostering a culture in the Business School and campus-wide that embraces environmental innovations. We have received recognition both on campus and in the local community for these efforts. During the Summer of 2005, I became chairperson of a "Green Campus Task Force" whose purpose is to more directly engage students, faculty and staff in developing an environ-

mentally sustainable living and learning community on campus. First year accomplishments include the creation of an Environmental Indicator Report that will serve as an annual benchmark. The criteria—hazardous waste and waste minimization, solid waste materials and recycling, energy use, and water use—are those recommended by the Campus Consortium for Environmental Excellence ([www.c2e2.org](http://www.c2e2.org)), which is developing a national database.

In 2006, Edgewood College received Green Tier certification from Wisconsin's Department of Natural Resources (DNR). Green Tier is a new state-wide innovative environmental initiative that recognizes and rewards superior environmental performance ([www.dnr.state.wi.us/org/caer/cea/environmental](http://www.dnr.state.wi.us/org/caer/cea/environmental)). Green Tier companies must develop a functionally equivalent Environmental Management System (EMS) in accordance to ISO 14001 that includes an environmental policy, environmental planning, environmental implementation and operations, environmental measurement and corrective action, and management review for continuous improvement. Edgewood College is the first college or university in Wisconsin to obtain Green Tier status.

As these events unfold, differentiating ourselves as an environmental leader in Madison and southern Wisconsin took on greater strategic importance in the college's identity. Administrators became even more committed to LEED (Leadership in Energy and Environmental Design) certification for a new residence hall under construction ([www.usgbc.org](http://www.usgbc.org)). We obtained Kresge Foundation and Focus on Energy grants to offset some of the planning and documentation costs associated with the LEED certification process. The building will have solar panels to heat water and rain gardens for irrigation, and all construction resources will come from within a 500 mile radius to benefit local businesses. High-level administrative discussions about LEED certification inspired a meeting with executives of the local energy utility, Madison Gas & Electric, to explore win-win partnership opportunities between the two organizations.

Mohandas Gandhi eloquently noted that "You should be the change you want to see in the world." Only then does the messenger gain legitimacy. By establishing ourselves as an environmental leader, Edgewood College has greater legitimacy in helping local businesses adopt more sustainable environmental practices.

Rather than just telling our students how businesses have to become more environmentally friendly, Business Ethics & Society professors are in a unique position to implement environmental change within local businesses through our courses. The TNS environmental change audits, Eco-Olympics, and case studies on environmentally friendly business practices are just a few of many possibilities in this evolving process.

## REFERENCES

- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Longman.
- Borrego, A. M. (2004, March 5). Ethics bowls exercise students' moral muscles. *Chronicle of Higher Education*, 50, A31.
- Brager, C., & Holloway, S. (1992). Assessing prospects for organizational change: The uses of force field analysis. *Administration in Social Work*, 16, 15–28.
- Collins, D. (1996). Serving the homeless and low-income communities through business & society/business ethics class projects: The University of Wisconsin-Madison plan. *Journal of Business Ethics*, 15, 67–85.
- Collins, D. (2006). Taking business ethics seriously: Best practices in teaching and integrating business ethics within a business program. In R. DeFillippi & C. Wankel (Eds.), *New visions of graduate management education*. (pp. 319–349). Greenwich, CT: Information Age Publishing.
- Collins, D., & Eannelli, K. (2006, July). Get more green by going green. *Madison Magazine*, 89–96.
- Gore, A. (2006). *An inconvenient truth*. New York: Rodale Books.
- Hawken, P., Lovins, A., & Lovins, L.H. (2000). *Natural capitalism: Creating the next industrial revolution*. New York: Back Bay Books.
- Ladenson, R. F. (2001). The educational significance of the ethics bowl. *Teaching Ethics*, 1, 63–78.
- Marcic, D., Seltzer, J., & Vaill, P. (2001). *Organizational behavior: Experiences and cases, Sixth Edition*. Cincinnati, Ohio: South-Western College Publishing.
- McDonough, W., & Braungart, M. (2002). *Cradle to cradle: Remaking the way we make things*. New York: North Point Press.
- Nattrass, B., & Altomare, M. (1999). *The natural step for business: Wealth, ecology and the evolutionary corporation*. British Columbia, Canada: New Society Publishers.
- Talbot, J. M. (2004). *Grounds for agreement: The political economy of the coffee commodity chain*. Lanham, Maryland: Rowman and Littlefield.