A service-learning consulting project for undergraduate business sustainability education

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ABSTRACT

There is growing interest among business school faculty, administrators and students in incorporating sustainability topics into undergraduate and MBA programs. The challenge is not only to deliver knowledge and content but also to train students in the practices of sustainability management which they will need for future careers in the field. This article describes the experience of launching an undergraduate elective at an AACSB accredited business school of a state university in the Florida system. Here the authors explain how a problem-based learning approach and cooperation with a university-based Small Business Development Center have added value to the course delivery and outcomes. Students develop competencies not only in green business practice but in consulting project management. This article provides a benchmark and guidelines for readers interested in implementing similar programs in their own institutions.

Keywords: consulting project, service-learning, sustainable business
INTRODUCTION

“A vital need exists to reach the point where attention to sustainability in business schools has become as widespread and as integrated as other concerns, such as profit, quality, globalization and technology.” (Starik et al., 2010, p. 381)

Surveys by NetImpact, the Aspen Institute and others, show increasing student interest in environmental and sustainable business practice (Docksai, 2010). Recent investigation by Slater and Dixon Fowler (2010) shows the importance of a business school education for sustainability. They discovered significant positive associations between the incidence of CEOs with MBAs and corporate environmental performance. However there are many suggestions that existing MBA and other business degree models need reform. Datar, Garvin and Cullen (2010) advocate the need for more MBA courses in integrative and boundary spanning topics such as sustainability.

Green MBAs, undergraduate business programs and certificate courses in sustainable business are now increasingly available from leading business schools including Babson College, Bentley University, Columbia, Duke, McGill, and Stanford, as well as lesser known institutions (www.entrepreneur.com/greenbizdegrees). However, U.S. business schools lag their European and other international counterparts in their offerings of sustainability courses (Wu et al. 2010).

While sceptical business practitioners and financial analysts have denounced sustainability as a fad, there is nevertheless evidence of real benefits and that stock price is correlated with sustainable business practices (Peloza and Yachnin, 2008). According to a 2011 survey by the GreenBiz group, more executives than ever have a job dedicated to sustainability. Eighty-six percent of large companies now have at least one full-time person spending all of their time on sustainability, compared to 81 percent last year. (www.greenbiz.com). Employers at both Fortune 500 companies and smaller enterprises are increasingly providing a market for business students with knowledge of sustainability and relevant skills.

In light of these trends and developments in business education, it is clearly both important and timely to address how needs for curricular reform and incorporation of sustainability topics can be implemented in practice. In this spirit the present article describes the design, delivery and outcomes of an undergraduate elective on sustainable business launched in 2010 by the management department of the Lutgert College of Business at Florida Gulf Coast University (FGCU). It provides a benchmark and an early assessment of success so far, and a lesson for others interested in launching similar courses.

REVIEW: TEACHING FOR SUSTAINABILITY

“Integrative coursework and beyond-classroom projects that produce real and beneficial results in all these fields (of management and business) need to be developed to empower students to “take over” the instruments of societal power and influence to transformatively advance sustainability in their lifetimes.” (Starik et al., 2010, p. 381)

Business schools have a central role in raising awareness of sustainable business issues in higher education. Interest in weaving sustainability into business curricula has grown in parallel with closer attention to related topics of corporate social responsibility (CSR) and ethics.
For example, AACSB International held the first of a series of annual sustainability conferences in 2008 at Salt Lake City, reflecting growing interest by business school administrators and faculty at leading business schools worldwide. The Academy of Management (AOM) 2009 annual meeting had as its main theme “Green Management Matters” and the AOM often addresses sustainability issues in publications and conferences. The Association for Advancement of Sustainability in Higher Education (AASHE) was established in 2006 with a mission “to empower higher education to lead the sustainability transformation” (www.aashe.org).

In recent decades over 200 academic centers of sustainability have been established in universities (Starik et al, 2010). Indeed centers for sustainable business and the environment now comprise the fifth largest category of centers in AACSB business schools, after centers for entrepreneurship, economic studies, small business and leadership development (Drew, 2011). Centers for sustainability and small business can provide especially important opportunities for student and faculty outreach, service, and problem-based learning projects.

It is clearly a challenge to address all three dimensions of sustainability (the “Triple Bottom Line”) in terms of environmental, social, and economic factors, in a single business school course. There is a wide variety of sustainability-related topics that can be covered in any business school curriculum, including sustainable investing, green marketing, sustainable business strategies and green supply chain management.

Typically sustainability is taught through a mixture of lectures, case studies, videos, guest speakers and field trips. Rusinko (2010) describes a matrix of options for integrating sustainability into the management curriculum. Erskine and Johnson (2011) report finding little prior empirical evidence as to the perceived effectiveness of different teaching strategies. Their research discovered that students perceive active learning and practical hands-on approaches to be the most effective. According to Moffatt (1988) activities outside the classroom form the most significant part of the learning experience for some 40 percent of college students. Shrivastava (2010) argues for a more passionate and holistic approach to engaging students in sustainability with projects and personal development exercises. There seems to be significant value in field work and action-learning approaches for a sustainability course.

Texts on environmental business and sustainability related topics now are offered by mainstream and specialist publishing houses such as Sage, Doubleday, Greenleaf, Worldwatch Institute and Earthscan. Rusinko (2010, p. 513) lists useful recent books and other resources. The number of case studies available for teaching sustainability from Harvard Business School Press, the European Case Clearing House, Caseplace.org and other publishing houses has increased significantly since the 1990s. However the coverage of management fields and topics in such case studies is uneven. Starik et al. (2010) identify need for more case studies in sustainability practices, and career-oriented skills such as project management, supply chain management, accounting, and human resources management.

It is clear that the state of business education for sustainability is rapidly evolving. However relatively few case studies of creative and integrative course designs have been presented in the literature. Rudell (2011) describes development of a green marketing course and Persons (2012) discusses how corporate social responsibility (CSR) and sustainability were incorporated into a business course to help students understand the strategic, global and economic significance of these topics. There remains much opportunity to explore alternative approaches to course delivery involving a variety of strategies and stakeholders.
INSTITUTIONAL BACKGROUND

The mission of Florida Gulf Coast University (FGCU) aims to promote environmental sustainability and to nurture community partnerships. The guiding principles of the Lutgert College of Business (LCOB) include commitment to developing future business professionals who recognize the need for environmental sustainability in business practice and decision-making.

Since opening in 1997, FGCU has paid attention to teaching sustainability to all undergraduate students, notably by means of a colloquium. This is an interdisciplinary environmental education course designed to explore the concept of sustainability as relating to conditions and developments in Southwest Florida. A very active university Center for Environmental and Sustainability Education has hosted a number of high profile conferences and engaged in significant community outreach activities. The LCOB has aimed to wrap sustainability as a theme into undergraduate and graduate programs for a number of years. In 2011 an MBA module on sustainability and corporate governance was launched by one of the authors of this article as a summer program for visiting students from the University of Wuerzburg in Germany.

The LCOB incorporates a Small Business Development Center (SBDC). This is a dynamic community-based resource to help small business owners take advantage of new opportunities to grow their business through a variety of programs and services. It is a unique collaboration between faculty, students and small business owners. The SBDC has approximately 8,000 contacts in its database. In recent years the SBDC has offered services and programs on green business, including an invitation to firms to apply to receive a free sustainability report. This report is prepared by student teams under supervision of a faculty member and SBDC manager.

The course design described in this article involved the SBDC in constructing and organizing a consulting project based on student teams developing sustainability audits and reports. This resulted in meaningful recommendations for the client organization, as well a high quality learning experience for students. The creation of the new sustainability elective was very well supported by the missions, commitment, culture and activities of the university and college of business.

MOTIVATIONS FOR LAUNCHING A NEW ELECTIVE

Several factors influenced the motivation to launch a new undergraduate elective in sustainable business management. The professor’s goal was primarily to incorporate real world research on sustainability into the classroom, and to help students develop skills in business consulting and sustainable business management practice. There was also an interest in exploring how such practice-oriented courses could best involve stakeholders from the outside community and elsewhere in the university or business school such as the SBDC.

There were a number of related research issues. Wu et al., (2011) describes how U.S. business schools tend to lag their European and other international counterparts in their offerings of sustainability courses. There is a need to explore how this situation could be remedied through testing new course approaches, design and content. It is also helpful to identify useful directions for further course innovation and research.

COURSE DESCRIPTION AND OBJECTIVES

The course entitled “Sustainable Business Management” was launched in the Fall of 2010 with the description offered to the students on the syllabus as follows:
“This course focuses on the management of sustainability in enterprises using a problem-based learning approach. A foundation of knowledge in green business practices in a variety of industry settings is developed.”

Students were further informed that this was a “learning by doing” course, and as such very different to most of their other courses. The course experience was deliberately designed to resemble what they might be doing after graduation working for a real business. The challenge was to solve real business and environmental problems using their initiative, knowledge and team-working.

The course objectives included development of business consulting and communication skills as well as knowledge and application of sustainability management concepts as shown in Exhibit 1.

Exhibit 1

| 1. Working effectively with others in a diverse team. |
| 3. Understanding principles of change management and developing the ability to audit and make well-documented, actionable recommendations. |
| 4. Producing professional quality oral and written consulting reports. |
| 5. Understanding principles of energy and water use and developing the ability to audit and make well-documented, actionable recommendations for improvement. |
| 6. Understanding principles of waste and pollution and developing the ability to audit and make well-documented, actionable recommendations for improvement. |
| 7. Understanding principles of green purchasing and marketing and developing the ability to audit and make well-documented, actionable recommendations. |

Students were assessed by means of a combination of traditional examinations and quizzes, oral presentations, written project reports, consulting client, instructor and SBDC evaluations. A copy of the syllabus is available from the authors on request.

COURSE DELIVERY

The course was designed to emphasize the quality of student experience and acquisition of practical knowledge as important objectives. Key features of the course design included careful attention to the preparation students received in class, the consulting project process design, involvement of the SBDC from an early stage, links to expertise in other schools in the university, technological support and field trips.

Class preparation

This junior-level (3rd year) service-learning course was taught over a traditional semester of 15 weeks meeting twice weekly, and for three undergraduate credits. The early part of the course was devoted to lectures and discussions on various topics related to sustainability and consulting in practice. The text most recently used was by Esty and Simmons, (2011) which has chapters dealing with all the areas important for a sustainability audit: energy, waste, water, supply chain, products and services. The hands-on and applied emphasis of this text was found to be very useful. Starting with the premise that sustainability is a strategy to enhance organizational performance and profitability, the text focuses on practical recommendations and implementation.
Students were also directed to the many general and industry-specific audit checklists that are available online. For example, restaurant standards have been developed by the Green Restaurant Association, Green Seal, State of Maine, and City of San Francisco. These checklists and standards inform students as to what they should look for during the audit inspection of a client’s premises.

Use of technology

This course was well supported by the Learning Management System “Angel” available at FGCU. This provided a convenient set of online resources, supported the material in the text, and conveniently allowed for postings of PowerPoints and work-in-progress. It also provided for discussion rooms and enriched communication outside the classroom.

Team selection and formation

A core component of the course was a consulting project for an external client arranged in liaison with the SBDC. Teams of typically four students were formed taking into account the background mix of each individual. Since students produced reports for external clients, it was important that the teams were able to write well, and so far as possible, at a professional level. To facilitate this, each team was required to have one person with excellent written communication and managerial skills as leader. A job description for the team leaders was provided on the syllabus. The team leadership pool was generated by asking students to volunteer or nominate others to be team leaders. Typically, there were more nominations than possible teams, so prospective leaders were asked to give a short pitch summarizing their accomplishments and explaining why they should be chosen. After that, an election was held and team leaders chosen.

There was then a class discussion about the six functional areas for which each team member could assume responsibility: (1) energy management, (2) water management, (3) waste/pollution management, (4) purchasing/product management, (5) marketing management and (6) organizational change management. Energy management and, to a lesser extent, water management are more technical areas. Technology-oriented students who were comfortable discussing “kilowatt-hours” and “gallons per hour” were asked to identify themselves so that team leaders could choose the right team members for these functional areas. There was no problem finding mechanically-inclined students adequately familiar with these topics. After the discussion, team leaders took turns choosing members for their teams, until all class members were chosen. As teams usually had four members, one member typically was responsible for functions 2 and 3 and another member took responsibility for functions 5 and 6. While the total workload was high, this division of effort resulted in roughly equal contributions required from each team member.

Every team had to submit a Team Charter to reduce the possibility of dysfunctional group functioning and to encourage a high quality of process and outcomes. To accomplish this, teams met to agree goals, core values, responsibilities and specifics regarding how they would address poor performance of a team member. To avoid or penalize social loafing, all team members were required to submit a peer review at the end of the semester. Project grades were multiplied by the ratio of individual’s average peer review score divided by the team average peer review score to calculate individual grades.
Consulting project management

An important experience for students of this course was the opportunity to manage and participate in a small consulting project from initiation to client reporting. This helped them develop skills not only in sustainability management but also project planning and leadership. The aim of the project was to conduct a holistic sustainability “Eco-audit” of a local small business, report on the opportunities identified for improvement, and make specific recommendations.

In the earlier part of the course students were briefed in project process management and planning. The audit itself and field trips took a large proportion of the course hours beginning some three weeks into course. The SBDC was most helpful in providing a manager to act as focal point for student-client liaison and to identify and select potential clients. Since many of these clients are from the local tourism, restaurant, and hospitality industry it was a natural choice to look for a client firm from this sector.

The syllabus informed students that:

“There is a moral imperative involved when attempting to intervene and assist a business in addressing its problems, needs and opportunities. This is especially the case when dealing with businesses that face severe constraints in terms of time, money, and other resources. It is imperative that student consulting teams:

1. Create meaningful value for the firm by focusing on deliverables
2. Not waste the time or resources of the entrepreneur
3. Not create unrealistic expectations or other misunderstandings.”

Students were furthermore briefed by the SBDC manager and informed of their responsibility to comply with SBDC guidelines in communicating and dealing with clients.

Selecting client sites

The SBDC was instrumental in identifying appropriate client sites. Potential benefits of a sustainability audit and report were described to candidate small businesses as: (1) reaching new customers and increasing sales, (2) reducing costs and waste, (3) attracting better employees, (4) avoiding future regulations, (5) enhancing their brand, and (6) enhancing creativity and innovation. Firms that responded to an SBDC invitation were sent an application form to complete which asked the questions shown in Exhibit 2.

Exhibit 2

1. Why would you like to have a student team develop a sustainability plan for your firm?
2. Will you be reasonably available (e-mail, phone, and occasional site visits) for the team during the semester?
3. Do you agree to give student teams reasonable access to your utility bills, premises, and manufacturing processes?
4. Are you willing to attend a class at the end of the semester for the final sustainability report presentation?

From the viewpoint of the professor the most important selection criterion was that the business would be willing to spend the time to work with the students. If they were not, nothing else mattered. Another crucial criterion was that the business had a desire to become more “green.” All businesses have some environmental impact, but firms were sought where the project could add the most value. This meant firms that used significant resources, such as...
energy, water, or raw materials, or firms that generated substantial waste or pollution. The business could not be so huge or complex that students would have difficulty understanding the processes taking place within the operations. Examples of ideal firms included restaurants, hotels, country clubs, golf courses, farms, grocery stores, small-scale food processing or light manufacturing. For the class of the Fall of 2011 a well-known and high-quality French restaurant in the City of Naples (Florida) agreed to serve as the sole site for the student consulting project.

**Use of student consortia**

While student teams to significant degree were operating in competition with one another to achieve their grades, there was also a strong element of inter-team cooperation through consortia. Consortia were formed for each of the functional areas of the audit. For example, the energy consortium was composed of the person in each team responsible for that function. Some class time was provided for students to meet with their functional area consortium to share data. Students could share current observations and data with other consortium members, but were not allowed to share their recommendations for improvement. Consortia could work together to acquire information on current conditions, either from field visits or by contacting the client. During the field trip to the client’s business, students worked with their consortia to acquire data on behalf of their final project team. If additional data was needed after the field visit, the consortium designated a member to make a repeat field visit or contact the client. This avoided the possibility of several students asking the client the same question.

It was important to ensure that students within consortia shared data, but not their recommendations. To facilitate this, the grading rubric for the final sustainability report rewarded teams that made creative and useful recommendations not mentioned by the other teams. There are usually many potential solutions for a given problem, and teams were rewarded who thoroughly researched possible solutions and then developed unique and thoughtful recommendations.

**Involvement of other schools**

The topic of sustainability is intrinsically interdisciplinary. An arrangement was made with a sustainability professor in the College of Engineering to assist with complex technical issues that might arise in the consulting project teams. In practice, students encountered no major technical problems, largely as a result of the careful site selection process.

**Field trip**

A field trip to the client’s business was scheduled three weeks into the semester. The purpose of this visit was to acquire data about current conditions at the client’s business. All six functions mentioned above were audited in detail.

Prior to the visit the client was asked to have all relevant material ready, including a site map, floor plan, electric bills, water bills, trash bills, supplier information, product information, marketing material and organizational chart. The local power company should have been contacted to request a free energy audit, if this was available. Students were required to prepare checklists and audit forms, many of which were available online.

Energy consortium members were required to make a detailed list and take photographs of all appliances and equipment using electricity, and to determine whether these were Energy-Star certified. The details required included: appliance make, model number,
wattage and number of hours the device is used. The simple formula [(volts X amps X hours used) /1000 = kilowatt-hours] was used to determine energy consumption, and the students could check the local incremental cost per kilowatt-hour. The energy team also noted the appliances and equipment that used natural gas or propane and their operating costs. Finally, the team looked at the client building, noting its strengths and weaknesses regarding needs for energy.

In a similar vein, the water consortium members were asked to make a detailed list and take pictures of all appliances and equipment using water. These fell into three categories: building, operations, and landscaping. The waste/pollution consortium sifted through trashcans and dumpsters to determine what was being discarded and if the client was “closing the loop” by reducing, reusing or recycling materials wherever possible. The goal was to move towards a minimal environmental footprint and zero waste.

The purchasing/product consortium was required to find out what raw materials and supplies were being purchased and from which supplier. They then investigated how green these raw materials and supplies were. For example, were food products locally sourced, organic, and certified sustainable? Were natural products used instead of toxic chemicals for cleaning and other needs? Were disposables used? If so, were they biodegradable or compostable? If paper had to be used, was it post-consumer recycled?

The marketing consortium was tasked with identifying the current marketing mix of the business. How were they currently positioning themselves as a “green” business? To what extent had they developed their “brand”?

The organizational change management consortium determined the current organizational structure, culture and how communication was facilitated within the firm. What were the core values, mission, purpose and vision of the business, and how were these inculcated in employees? What was the state of morale, spirit of cooperation, and esprit de corps in the organization? Based on these considerations, would employees embrace a move toward sustainability, or would they resist it?

Mid-term submission reports

During the seventh week, and four weeks after the field trip, the teams were required to submit the first sections of their sustainability reports for feedback and grading. Double-spaced hard copies were required so the professor was able to provide extensive feedback if necessary. This submission began with a brief description of the business, complete with an exterior photo, interior photo, site plan, and floor plan. It then summarized the “Business Case for Sustainability” for the business, reminding the client of the benefits of “going green.” The next section was the audit of current conditions, organized by the six functional areas. This submission was typically 10-12 pages long. A week later the graded papers were returned with appropriate comments and recommendations.

Team final sustainability reports

During the eleventh week of the semester final sustainability reports were due. All teams submitted a double-spaced hard copy of about 20 pages excluding appendices. They also made in-class PowerPoint presentations.

Instructions to students stipulated that the recommendations had to be useful, practical, resourceful, and innovative. The students needed to calculate reasonable ROI’s for all proposed sustainability investments. Within each of the six functional areas, the teams were required to propose their top strategies in three categories:
1. No cost/low cost, easy immediate implementation.
2. Moderate cost, mid-term implementation.
3. Larger investment, long-term implementation.

Blended Sustainability Reports

Team reports were graded and marked up with detailed feedback. During the twelfth week team leaders were each given copies of all marked-up team reports enabling them to cooperate in producing a blended written report and PowerPoint. They were asked to take the best information and recommendations from each team report and blend these into a single high-quality report for client presentation. Typically, they split the sections among themselves. For example, one student might read over all five or six versions of the energy audit and energy recommendations and extract the best material for the final report. These were the best students in the class, and they had access to all the work that has been done to date. Work of a professional standard was expected from this blended “dream team.”

This blending exercise was a graded project for the team leaders. The other students were assigned research papers instead. These papers could have been be assigned as a group or individual project. In the semester of the Fall of 2011 the assigned research paper topic was “Emerging Trends in Sustainable Business.” (The topic may be changed for future classes.) Each week before the final class, the professor met with the blended team to assess their progress and provide additional feedback.

Making Sustainability Recommendations

Often the clients of “Eco-audits” want to become greener and are already doing many good things. The students were advised to note these efforts in the blended sustainability report, acknowledging and praising all good work prior to the audit.

The course syllabus, documents and lectures gave students a comprehensive set of instructions as to how to develop the recommendations in appropriate detail and format for the client. These included descriptions of a recommended implementation strategy, prioritization, tactical steps, organizational responsibilities, time-frames, budgets and evaluation of results. Students were advised to create a proposed “Sustainability Action Plan” Report and companion “Sustainability Action Plan” Spread Sheet for the client’s review. These follow-up materials help provide the client with an actionable implementation plan that could benefit their business and help them to achieve their sustainability goals.

Students are also reminded that their recommendations must be practical and have timely returns on investment. If they recommend a device to reduce electricity use, they must explain what it will cost, the prospective annual savings, and likely payback period. They are instructed in primary and secondary research methods to find this information and received advice from the business reference librarian about business sustainability resources. Ultimately, however, students are responsible for immersing themselves in the data on their own, independently developing appropriate problem-solving approaches, and recommending their own solutions for the client. In this sink or swim environment, most students rise very well to the occasion.

A large part of sustainability auditing is arguably common sense. For example, to fix water drips, turn appliances off when not in use, paint roofs white to reduce air conditioning use, change to more efficient light bulbs, avoid toxic chemicals, and so forth. By going through the industry-specific checklists, it is easy to find areas that need improvement. Most small business owners are too busy running their business, and putting out brush fires, to pay
sufficient attention to such opportunities. These are very useful learning points for students and clients alike.

**Client report in Fall 2011**

In Fall 2011 the class consisted of 22 students assembled in five teams and working with the same client restaurant. In summary the recommendations made to the client in the blended report are as shown in Exhibit 3:

<table>
<thead>
<tr>
<th>Exhibit 3</th>
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<tbody>
<tr>
<td>• Energy – 5 recommendations varying from appliances to door-sealing</td>
</tr>
<tr>
<td>• Water – 5 recommendations varying from faucets to cleaning practices</td>
</tr>
<tr>
<td>• Waste – 5 recommendations varying from recycling to meal portions</td>
</tr>
<tr>
<td>• Supply chain – recommendations emphasized local and sustainable sourcing</td>
</tr>
<tr>
<td>• Marketing – 5 recommendations varying from mission statement to use of the Internet</td>
</tr>
<tr>
<td>• Organizational change management – recommendations for training, employee handbooks and reward systems.</td>
</tr>
</tbody>
</table>

**OUTCOMES**

The success of this course can be judged on a more or less formal basis by the reactions of students and SBDC as well as outcomes for the client organization.

Students reported enjoying and being challenged by the course on their end-of-course assessments which showed an average on significant items in the region of 4.0 on a 1.0-5.0 (low-high) scale. This was deemed very satisfactory given that this was a very new course. Student comments included some frustrations in dealing with the high level of ambiguity inherent in a course of this nature, in which problems have to be solved as they become apparent. On the other hand, students felt they benefited from this opportunity to apply classroom knowledge to practical problem-solving in a real-world business environment. One student mentioned the value of interacting with a business in a “professional” role, preparing him for entry into the job market. Negative feedback focused on the high course workload.

The manager of the SBDC involved in this course and the client liaison reported the following.

“The sustainability audits completed by FGCU student teams shifted the mission and competitive strategy of our participating businesses. Also their internal and external systems changed---for the better. Tangible and intangible outcomes for the businesses included lower costs, increased sales, use of sustainable resources, and shifts in mindset. Student teams benefited from a hands-on small business case study in which they could add real value. This course has been a great win-win for all involved.”

The final blended student sustainability report was well-received by the management of the client restaurant. A significant proportion of the recommendations judged to be feasible were adopted in a short period of time. Shortly after the conclusion of the course the client restaurant was the first organization to win a much coveted City of Naples (Florida) green-business certification. This has been publicized in local media and become a point of competitive differentiation and pride.
Overall we judge the new course design and outcome to be a great success and considerable accomplishment by the student teams and professor.

**DISCUSSION AND CONCLUSIONS**

The hospitality industry is a very large global industry and restaurants in particular can have relatively large environmental impacts and footprints. This situation presents significant opportunities for improved energy, waste, and building management and bottom-line savings. However it is a challenge, especially at a time of recession, for smaller and older established businesses to adapt (Mills & Rudd, 2011). In Southwest Florida, hotels and restaurants are especially important for success of the tourist industry and as local employers. The region surrounding the City of Naples and Florida Gulf Coast University is replete with luxury and higher-end hotels and golf resorts.

This study was especially valuable in demonstrating how a local state university could make a very visible and well-recognized contribution to local business community outreach and development. The new service-learning course has highlighted the benefits of concentrating on the quality aspects of student experience and the development of practical skills. Future plans include repetition and continuous improvement of this course design and further linkages with the SBDC. Student feedback has been noted and more attention will be paid in future to assisting students with time and project management skills. Future research work could be beneficial to test new course readings and materials, as well as to further explore and quantify the benefits of a sustainability-oriented curriculum.

**REFERENCES**


