

# Teaching Environmental Entrepreneurship at an Urban University: Greenproofing

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## Abstract

*The authors provide a case study of their own experience teaching Environmental Entrepreneurship. For the past six years, they have been teaching about sustainability through social entrepreneurship in an interdisciplinary partnership with faculty in management, engineering, and earth science. The authors have developed a course in Environmental Entrepreneurship with a significant service-learning component. In addition, their students have formed an environmental consultancy called Greenproofing.*

Michelle Obama, addressing Time magazine's "100 Most Influential People" ceremony, exhorted, "At a time when our nation is facing unprecedented challenges, encouraging careers in public service and social innovation is more important than ever" (2009). Social entrepreneurship is a rapidly developing field that has been integrated into top MBA programs (at Harvard Business School it is one of their seven top-level programs) but is only slowly filtering down to undergraduates at urban universities. Social entrepreneurship has attracted many definitions but it begins with the classic Schumpeter description of entrepreneurs as developing new combinations of goods, services, and organizational forms in the service of a relentless drive to create or innovate. Entrepreneurship is not small incremental change but radical "creative destruction."

Entrepreneurs can act for social ends, "tapping inspiration and creativity, courage and fortitude, to seize opportunities that challenge and forever change established, but fundamentally inequitable systems. Distinct from a business entrepreneur who sees value in the creation of new markets, the social entrepreneur aims for value in the form of transformational change that will benefit disadvantaged communities and, ultimately, society at large" (Skoll Foundation 2010).

Social entrepreneurs are not interested solely in maximizing profits but also in a broader notion of social welfare. Social ventures are often (but not solely) incorporated as nonprofit 501(c)(3) organizations. These new ventures generally do not involve ordinary economic transactions where a consumer pays for the good that is provided. Rather, the social entrepreneur must find alternative revenue sources to fund the work. Social ventures must be self-sustaining to generate sufficient revenue to maintain their mission now and in the future. In order to do so, they take the best management practices from the private sector and apply them to their ventures.

Nobel Prize winner Muhammad Yunus, founder of the microfinancing Grameen Bank, might be the best-known social entrepreneur. There have been many incremental changes to the ancient practice of giving alms to the poor. But Yunus's bank represents a paradigm shift: it is fundamentally entrepreneurial. The disruptive and transformative nature of social entrepreneurship has given it affinity to new generations of Internet entrepreneurs, making social entrepreneurs regular speakers at TED (Technology Entertainment and Design) conferences. Jacqueline Novogratz runs the Acumen Fund with venture-capital principles of management and measuring results but with loftier goals of reducing global poverty. Some well-known local social ventures that serve as specific examples to our own teaching initiative and practice include Majora Carter's Sustainable South Bronx, which trains unemployed men as environmental remediation consultants earning a living wage; and Bedford-Stuyvesant Restoration Corporation (BSRS), the nation's first "community development corporation," a community-owned conduit for private and government financing to fund community ownership of billions of dollars in real estate assets.

These social ventures epitomize three types of innovation—transformational, economic and social—that are considered the hallmark of a social venture as described by Alvord, Brown, and Letts (2004):

- *Transformational*. Building local capacity by altering local norms and roles, with expectations to transform the cultural context for the better (e.g., Sustainable South Bronx by harnessing untapped social capital among underrepresented groups).
- *Economic*. Providing tools and resources to enhance productivity and transform economic circumstances (e.g., Grameen Bank using Microfinance and Acumen Fund's *patient capital*).
- *Political*. By building local movements to challenge power this approach enables marginalized communities to increase their political influence (e.g., the Bed-Stuy Restoration Corp's citizen-driven activism, which led to bipartisan support for a bill legitimizing the community development corporation and the role of local residents).

Indeed, the vibrant literature specifically supports the notion that social entrepreneurs purposefully fuse entrepreneurial inspiration, collectivist stimuli, and societal benefits and achieve complex goals under conditions of competing interests. In addition to the synthetic one, academicians and practitioners alike advocate a broadly integrative approach. Of the many possible examples (see Robinson and Lo 2005), we found Peredo and McLean's contribution particularly appealing and representative of our own—inclusive—position. In their critical review of the social entrepreneurship concept, after identifying both aspects as elemental to social entrepreneurship, they advocate a broadly integrative approach, viewing social entrepreneurship as being "exercised where some person or persons (1) aim either exclusively or in some prominent way to create social value of some kind, and pursue that goal through some combination of (2) recognizing and exploiting opportunities to create this value, (3) employing innovation, (4) tolerating risk and (5) declining to accept limitations in available resources" (2005).

Yet, despite its generative motivation and noble inspiration, social entrepreneurship is a difficult sell to a population of students

- who aspire to high-paying private-industry jobs and view their education primarily as a vehicle to that end;
- who have a preoccupation with earning higher incomes, arising from their background in lower-income communities; and
- who live in an urban environment like New York City, where Wall Street has long created a fascination with greed over green.

Just as an entrepreneur quits her job and starts her own venture, we have had to convince our students to terminate their role as passive objects of fate and start their own venture as empowered citizens capable of changing their environment by designing their own solutions.

These are key areas where a social entrepreneurship course at an urban university is distinct. Since the typical student is from a working-class background, we must work hard to convince them that it is even feasible for a college graduate to find employment at her own nonprofit venture. We must provide a wealth of case studies in demonstration. We have found that our students, many of whom are from non-English-speaking backgrounds, need help with the grant-writing process and overall communication. Many of our students alternate between different cultures and communities; they must learn to share their passions with varied audiences.

We embarked on a venture over six years ago that would yield encouraging results, supported by a grant through the Environmental Partnership Program of the National Oceanic and Atmospheric Administration (NOAA; this administration is federally responsible for water and weather related initiatives, such as fisheries, conservation, and satellites; see <http://www.noaa.gov>).

After several iterations and careful calibration of our curriculum and our activities, we have found a successful methodology to concomitantly satisfy several constraints and demands on such an ambitious curriculum. Expanding the notion of social entrepreneurship to begin including new for-profit business models; changing some of the focus away from “social business plans” to more pragmatic, promotional, and leadership activity-based exercises; and implicating the students in hands-on-activities through the rapidly evolving concept of service-learning, we are confident to have found a generalizable and scalable formula for a successful urban social entrepreneurship curriculum.

## **The Context for Greenproofing: Our Campus Based Social Venture**

On the principle that students learn more by doing than by watching, our students have formed an environmental consultancy currently specializing in green roofs, which they

decided to name Greenproofing (<http://greenproofing.org>). The organization is now six years old, so waves of students have participated in different stages of its growth.

The mission of Greenproofing is to “facilitate the provision of resources and technical assistance to environmental programs operated by existing civic, grassroots, public schools and government based organizations with environmental programs that are closely aligned with Greenproofing’s areas of interest: (1) Environmental Remediation (air and water pollution); (2) Women, Minority and Community-Based Green Entrepreneurship and Workforce Development and (3) Public School Environmental Science Education Programs.” Supervised by faculty and a project director, these projects are coordinated and managed by CCNY students in a two-year internship program.

Greenproofing is a pioneer in constructing green roofs on urban schools and helping teachers integrate science curricula with these roofs. Green roofs mitigate storm water drainage problems such as combined sewer overflow (CSO) events, help with urban air quality, and reduce the urban heat island effect. Greenproofing empowers disadvantaged communities to take proactive roles in addressing environmental problems and to benefit from the green and sustainability movement. As industry and government move toward greater environmental controls, new jobs and small businesses will be required for innovation, implementation, and maintenance of these new eco-friendly and sustainable technologies and modes of production.

Growing a student-led social venture led the transformation of passive learners into forward-thinking environmental entrepreneurs. Over six years, about thirty students from various disciplines—including economics, finance, earth science, and engineering—have engaged in research activities to create a new social venture. This exercise in skill building, critical thinking, and experiential learning in the context of sustainability and environmentalism involved the students in research about wetlands in Jamaica Bay, the hydrology of the Hudson, green roofs, and role of such roofs in storm-water management. Students were charged with developing a business plan for a social venture that would address these issues. Students, by engaging in academic exercises not emphasized in their majors, were constantly pushed to deepen and diversify their skill set. Economics students participated in scientific research, and science and engineering students engaged in economic exercises and business plan writing. Students began to view themselves as change agents, targeting one or more of the environmental and social issues uncovered in their research to start their own social ventures. Students became stakeholders rather than passive observers disheartened by seemingly insurmountable challenges.

The importance of this exposure should not be underestimated. For example, we worked with student interns over the past summer who had just earned their GED. The students were initially skeptical about careers with the city park service: their only exposure was seeing parolees making amends by cleaning up parks. They had not realized the level of professionalization and sophistication required for park management. After they toured the city’s urban forestry office with park staff and

heard presentations about how the park supports education and citywide greening efforts, they were convinced.

Greenproofing also held several community conferences and symposia to highlight the work of our undergraduate students and their mentees at local 6th–12th grade public schools and to garner local support for an enhanced citywide green agenda. In Table 1, Greenproofing’s goals and accomplishments to date are summarized in a social value innovation framework.

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**Table 1. Greenproofing Goals for Social Value Innovation**

<b>Innovation</b>	<b>Goals</b>	<b>Major Accomplishments to Date</b>
<i>Transformative</i>	<p>Develop opportunities for students from underrepresented groups in environmental and social entrepreneurship.</p> <p>Use green roofs and urban forestry to address environmental degradation in urban communities.</p>	<p>Students and out-of-school urban youth planted 600 square feet of green space.</p> <p>Contracted for green roof installation and maintenance of 10,000 square feet of green roofing on two low-income and affordable housing sites developed by the Lantern Organization (<a href="http://www.lanterngroup.org">www.lanterngroup.org</a>).</p>
<i>Economic</i>	<p>Leverage mix of private and public funding to seed environmental remediation projects performed by local small business owners and student entrepreneurs.</p>	<p>Secured over \$500,000 in funding to green public school facilities, including a Green House science laboratory.</p>
<i>Political</i>	<p>Develop college and public school students’ voices for change at community board hearings and other local political forums.</p>	<p>Engaged middle school science classes in a service-learning project presented to local community board leaders.</p> <p>Facilitated development of an environmental justice group on campus, WeACT for CCNY.</p>

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# The Curriculum: Making the Case for Social Entrepreneurship

In order for the experiences described in the previous section to be leveraged to attract urban students, they have to be made purposeful and meaningful. We have a challenge convincing students that a nonprofit venture can even be a relevant possibility for a college graduate. Therefore, we provide many case studies and examples: readings, blogs, and online videos of superstar social entrepreneurs (see Table 2).

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**Table 2. Resources on social entrepreneurship**

Name	Description
Michelle Obama	Remarks at <i>Time</i> 's "100 Most Influential People" ceremony <a href="http://www.whitehouse.gov/the_press_office/Flotus-Remarks-at-Time-100-Most-Influential-People-Awards">http://www.whitehouse.gov/the_press_office/Flotus-Remarks-at-Time-100-Most-Influential-People-Awards</a>
Mohammad Yunus	Address to the Commonwealth Club <a href="http://fora.tv/2008/01/17/Muhammad_Yunus_Creating_a_World_Without_Poverty">http://fora.tv/2008/01/17/Muhammad_Yunus_Creating_a_World_Without_Poverty</a>
Jacqueline Novogratz	Videos at TED talks <a href="http://www.ted.com/speakers/jacqueline_novogratz.html">http://www.ted.com/speakers/jacqueline_novogratz.html</a>
Social Investing	Videos at TED talks <a href="http://www.ted.com/talks/katherine_fulton_you_are_the_future_of_philanthropy.html">http://www.ted.com/talks/katherine_fulton_you_are_the_future_of_philanthropy.html</a>
Social Edge	A treasure trove! <a href="http://www.socialedge.org">http://www.socialedge.org</a>
Kiva	Citizen-based microfinance <a href="http://www.kiva.org/about">http://www.kiva.org/about</a>
Ashoka	World's leading social entrepreneurs <a href="http://www.ashoka.org">http://www.ashoka.org</a>
IRIS	Assessing environmental and social impacts <a href="http://iris-standards.org">http://iris-standards.org</a>
How to relieve poverty	Discuss: business vs. public/NGO <a href="http://www.socialedge.org/discussions/business-models/discussions/responsibility/sustainable-capitalism-in-emerging-economies">http://www.socialedge.org/discussions/business-models/discussions/responsibility/sustainable-capitalism-in-emerging-economies</a>
Ken Yeung	Video on EcoDesign and Organic Architecture <a href="http://www.youtube.com/watch?v=tYONQW78qbE">http://www.youtube.com/watch?v=tYONQW78qbE</a>
Urban Farm	Radio report from <i>Marketplace</i> <a href="http://marketplace.publicradio.org/display/web/2009/10/08/pm-detroit-market">http://marketplace.publicradio.org/display/web/2009/10/08/pm-detroit-market</a>
Urban Experiment	in Curitiba, Brazil <a href="http://www.pbs.org/frontlineworld/fellows/brazil1203/">http://www.pbs.org/frontlineworld/fellows/brazil1203/</a>
Norman Borlaug	Obituary of Agronomist and Social Enterprise developer <a href="http://online.wsj.com/article/SB10001424052970203917304574411382676924044.html">http://online.wsj.com/article/SB10001424052970203917304574411382676924044.html</a>



participate in a pioneering endeavor and learn the process of taking a green project from conceptualization to implementation.

Students were placed with four different social ventures in the Harlem and South Bronx area near our college: the West Bronx Local Development Corporation, the Local Initiatives Support Corporation (LISC), Harlem Eco-Tours, and Greenproofing itself. All of the students must attend at least one Community Board meeting; Community Boards in New York are local representative bodies made up of members that reside, work, or have some other significant interest in the community.

The West Bronx Local Development Corporation project is headed by Walter Houston. Students surveyed local businesses in the West Bronx for development of “green infrastructure” in the new Third Avenue Commercial Corridor proposal. The students analyzed their survey to identify opportunities for businesses to become sustainable and advised strategies for green and/or sustainable microconsulting in these areas. The students used existing surveys and needs statements to compile community/business assessments. They reviewed existing West Bronx Local Development Corporation and Community Board plans. They liaised with local merchant associations or advised on the formation of such. Through this process, the students understood the community planning process, the role of the West Bronx Local Development Corporation, and its relationship to private/public sector and local stakeholders. They analyzed best practices in approaching local businesses and residents and incorporating their needs and concerns into this comprehensive urban planning endeavor. This allowed them to understand the broader questions, including the socioeconomic, cultural, political, institutional barriers, of how a green microconsulting project advises on revitalization of other urban centers.

The Local Initiatives Support Corporation (LISC) green project is headed by Lisa Deller, Esq., and Ariel Behr. LISC is retrofitting and weatherizing their affordable housing sites for reduced energy consumption. Student teams collected data on energy usage in existing LISC-funded housing developments in the northern Manhattan and Bronx areas and learned about the concerns of landlords and tenants. They produced a guidebook for LISC on preassessment strategies for reducing energy consumption. The students collected energy bills and other information provided by the building owner, compiled statistics and charts on energy usage, explained or questioned any anomalies, and compiled needs assessments that documented socioeconomic, housing, and income data for the census block and even the building, if possible. From their discussions with LISC community partners, students identified strategies for educating landlords and the tenants on the benefits of weatherproofing. Students also got an in-depth look at how LISC, in its decades of work, has straddled the line between private industry and government finance.

Harlem Eco-Tours is an offshoot of Taste Harlem, started by former banking specialist Jacqueline Orange. Since this was just starting up, students placed with this group were doing the sort of initial market research for feasibility that new ventures perform. They were inventorying and mapping green products, healthy living, and fresh food

sources for Harlem residents along three major thoroughfares, comparing offerings in African-American neighborhoods with the retail and service possibilities below 96th Street. They surveyed local residents and community leaders to determine their knowledge about and interest in sustainable products. Markets for sustainable products depend on first educating consumers about the need or desirability of such products. Students learned about sustainable or “green” labeling on products, such as Fair Trade, LEED certified, or words like “organic” and “all natural.” Students understood the emerging “green divide,” where wealthier consumers in higher-status socioeconomic groups have easier access to sustainable products.

Students provided thirty hours of service over the term, learning about the venture: how it began, how it is currently structured, its mission and goals, and the challenges it faces. Students were required to work for the organization and some of this work was down in the trenches, surveying and recording data on neighborhood blocks for future feasibility studies and attending community board meetings.

Students were required to write a “white paper” on a topic arising from the service-learning placement. A white paper is partly a marketing document and partly an exercise in blue-sky thinking. Students got course credit for the learning, as emphasized in our syllabus: “NOT for just showing up at the service-learning; just service is not enough.” Students’ work was assessed based on the learning outcomes outlined in Table 4.

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**Table 4. Learning Outcomes for Environmental Entrepreneurship Course**

<b>Course Component</b>	<b>Learning Outcomes</b>
Online readings and discussions	<ul style="list-style-type: none"> <li>• differentiate between for-profit and social entrepreneurship</li> <li>• understand the managerial challenges of a social enterprise, such as the complications of measuring social returns</li> <li>• describe environmental problems facing their communities</li> </ul>
Service-learning experience	<ul style="list-style-type: none"> <li>• investigate how a particular social venture faces these issues, toggling between the micro/practical view and the macro/theoretical view of the social-entrepreneurial challenge to understand the scope of challenges facing a new venture</li> <li>• analyze how the social venture can most effectively develop, integrate and operate a green agenda into their existing organizational mode</li> </ul>
White paper (final project)	<ul style="list-style-type: none"> <li>• appraise the social venture’s successes</li> <li>• identify key challenges</li> <li>• recommend new strategies consonant with the venture’s mission that will impact its future development</li> </ul>

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Service-learning was essential in exposing students to critical issues such as policymaking, funding, and corporate social responsibility, which can shape, support, and sometimes hinder an entrepreneurial endeavor that attempts to remedy a social or environmental issue. Students were challenged to not just participate in positive environmental and social activities but to critique the organization’s approach and offer solutions. As experiential learners, students became immersed in the world of social innovators. This is critical in developing students’ entrepreneurial qualities.

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**Table 5. Service-Learning Activities and Assessments**

Service Type	Service Activities Aligned with Course Goals	Assessment
environmental remediation (e.g., clean-up, gardening, recycling events)	<ul style="list-style-type: none"> <li>• writing assignments reflecting on experiences</li> <li>• journaling on pollution found, wildlife, and other observations</li> </ul>	use models and formats emphasized in the core curriculum (e.g., styles of writing, communication, artistic expression, mapping, graphing, etc.)
Community-based research (e.g., rate of pollution/ environmental degradation; residents’ actions/responses towards environmental efforts)	<ul style="list-style-type: none"> <li>• application of scientific method in analyzing environmental issues, hypothesizing about them, and experimenting with solutions</li> </ul>	demonstrate understanding of the key concepts and methodologies in discussed in class
Community Environmental Education and Outreach	<ul style="list-style-type: none"> <li>• art and graphic assignments illustrating observations and/or depicting students’ experiences</li> </ul>	

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We assessed the changes that students made in their goals and aspirations. We administered a pretest to the students by asking them to respond to the following quote from David Bornstein’s (2007) book, *How to Change the World*: “Social Entrepreneurs identify resources where people only see problems. They view the villagers as the solution, not the passive beneficiary. They begin with the assumption of competence and unleash resources in the communities they are serving.” Then we asked the students to give an example where they successfully demonstrated one or more of these capacities; give an example where they failed to demonstrate one or more; analyze how the outcomes differed; identify what elements of their leadership style match those that are necessary for a successful social entrepreneur; and explain how they expected the course to change them.

The pretest responses were very weak, showing that although about 35 percent had some prior experience in social entrepreneurship (under a broad definition), the students were unable to analyze their experiences. After the narrative they provided mostly non-sequiturs—business jargon tossed into a word salad. One student confused

social entrepreneurship with social-networking entrepreneurship and so seemed to think that the course would teach about using Facebook to promote a business. Only two students did their own research about social entrepreneurship prior to taking the course. There was some excitement about the service-learning aspect (about a quarter of the students had prior experience with it), with students expressing disappointment in “the monotonous way that courses are run usually” or saying that they had been “blindsided by what it’s like when you leave the theory books behind and actually run a company,” so they were excited to get a taste of real life.

Most of the students found the service-learning quite valuable (rating it 1.9 on a 5-point scale where 1 was best), writing, “I felt as if I was embarking on a mission to create something new” and “I saw things on field and in offices that most students only read about in books.” The students raved about the course, saying, “it changed the way I view social problems.... I now realize that community members and residents can make great changes” and “I discovered a whole new world of companies and people that work in a less morally conflicted area.”

The same quote from Bronstein also helps to understand why the service-learning component is so important to the course, because using it means to “view the [student] ... as the solution not the passive beneficiary,” so that we, the faculty, can “unleash resources in the communities [we] ... are serving.” This same turnabout of attitude on the part of the faculty must also be communicated to the students in the course. They become members of the community and clients of community resources to get them thinking from the bottom up. They harness untapped human capital in underserved and underresourced neighborhoods.

## **Next Directions**

The following insights from the six-year evolution of our program have allowed us to articulate three specific directions with tangible deliverables for the next cycle of our activities:

1. We are expanding our notion of social entrepreneurship to include social-value-intensive for-profit ideas. To continue attracting students—and consequently patient-capital investors—to high social-value-productive ventures in this post-recessionary capital accumulation crisis, we need to reconcile the dissonance between for-profit and not-for-profit.
2. We are realizing that the notion of the “business plan” is increasingly inadequate. Students will be called upon to interact with public institutions for funding due to the rapidly expanding economic presence of government as it is trying to stabilize and re-chart aspects of our technological development. Students have to learn how to articulate their attractive ideas for an audience beyond the traditional financial-capital investor.

3. We are recognizing that learning how to conceptualize, design, and implement social-value-creating ventures requires hands-on experience. Beyond the formal academic grounding, social entrepreneurship is a field experience. We have promoted links with local nonprofit and social-justice groups to provide students with practical service-learning experiences. Our students immediately apply in our communities what they learn in our classrooms. These successful social entrepreneurs provide models and mentors.

## **Lessons**

Our course joins social entrepreneurship with environmentalism/sustainability using the key technology of service-learning. This is not an easy or simple course to teach, but the students loved it and the rewards seem concomitant with the costs.

In an urban setting, teaching students from underrepresented groups, service-learning can be a powerful tool in “greening” a curriculum and exploring topics of sustainability in the context of any standard subject, be it social science, humanities, literature, and so forth. We offer the following reasoning for why and how this model for a service-learning environmental curriculum might be effectively applied on other campuses:

- Urban campuses can collaborate with social ventures with new or existing environmentally focused projects that can be the basis for a service-learning project. Faculty can enlist campus-based resources such as service-learning, community affairs, or volunteerism departments for assistance.
- There are regional and national organizations (see Table 6) that offer training, resources, and technical assistance to faculty and campuses that are interested in integrating service-learning on their campuses. These link to a plethora of social and environmental ventures and organizations that could serve as partners on a service-learning project.
- The students’ work at the social venture can be as simple or as complex as the faculty and service partner can manage. Faculty can connect students’ fieldwork to the course material in a series of reflections or writings that describe students’ experiences in the context of the core curriculum.
- By selecting a service-learning project within close proximity to the campus—not only for convenience during the semester—faculty can facilitate networking and collaboration with the social venture on post-semester environmental activities.

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**Table 6. Service-learning Resources**

<b>Service Organizations</b>	<b>Mission/ Focus</b>	<b>Web site</b>
Campus Compact	Dedicated to promoting community service in higher education	<a href="http://www.compact.org">http://www.compact.org</a>
Corporation for National and Community Service	Public-private partnership that engages Americans of all ages in service	<a href="http://www.nationalservice.gov">http://www.nationalservice.gov</a>
Youth Service America	Improves communities by increasing the number and the diversity of young people (ages 5–25) serving in substantive roles	<a href="http://www.ysa.org">http://www.ysa.org</a>

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Someone teaching this course at another university would need a network of service-learning partners. Since environmental entrepreneurship is currently so fashionable, finding partners should not be too difficult; but these partners must have the capacity to take on a half-dozen undergraduates with a variety of skill levels and motivation. Our partners had specific tasks, many of which could be freely scheduled by small groups of students (e.g., surveys of business owners). These service-learning partners need to get some actual benefit; the size of the actual benefit is proportional to the planning done before the class starts. In one case, the upper management of a service-learning partner used the influx of students to pressure middle managers to rethink their goals and strategies.

Depending on the educational institution, students might not initially react well to service-learning—ours were horrified! The expectations of the course need to be clearly stated and then some fraction of the students will decide not to take the course. Our case used friends in the dean’s office to ease the administrative difficulties.

Much of the beginning of the course was taken up by practical examples rather than theoretical discussions. It would take a second subsequent course to really get into the meatier complexities of theory; this course was more of a “how-to” training course.

## **Conclusion**

We believe that this model can be successfully applied in other universities. Our location at an urban university provides new rewards and challenges for teaching social and environmental entrepreneurship. The most prominent reward is attracting a more diverse group of entrepreneurs and environmentalists; this is important, since traditionally environmentalists have tended to come from upper socioeconomic groups. Students begin regarding themselves as change agents, capable of starting their own social ventures that are informed by their unique backgrounds and can make a positive

difference in the world. Once students are stakeholders, they are no longer just passive observers disheartened by seemingly insurmountable problems; they don't have to just mourn the polar bears but can actually do something about global climate change.

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